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# Flourishing through Communicative Language Learning: An Exploration of University Learners' Basic Needs, Well-Doing, and Well-Being

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Flourishing through Communicative Language Learning: An Exploration of University  
Learners' Basic Needs, Well-Doing, and Well-Being

A dissertation submitted in partial fulfillment  
of the requirements for the degree of  
Doctor of Philosophy in Curriculum and Instruction

by

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## Abstract

In the last 25 years, world language education (i.e., “foreign” or “second” language education) in the United States has seen a meaningful turn toward pedagogical approaches emphasizing communication, contextualization, and culture. This has coincided with the blossoming of recent theoretical perspectives and empirical research centered on language learners’ emotions, beliefs, and well-being. Two frameworks, self-determination theory (SDT) and positive psychology, are leading this exploration. Although these two perspectives have enhanced the discussion around language learning, each has its gaps; positive psychology research and its recommendations for practice do not often agree on what constitutes well-being and flourishing, while SDT, which contributes a cross-cultural empirical framework, often lacks pedagogical recommendations for how to actualize theory into practice. For this reason, this study sought to further the discussion around well-being in language education by employing the robust and established concept of *flourishing* offered by the Eudaimonic Activity Model (Sheldon & Martela, 2019), which posits that flourishing is not just about feeling well but also engaging in certain ways of living. In other words, flourishing entails well-doing and well-being.

A mixed methods research design was adopted to explore the characteristics of university world language education which help learners to flourish. This involved testing a quantitative hypothesis using structural equation modeling based on online survey responses from a large sample of university language learners ( $N = 466$ ), as well as follow-up interviews with thirteen ( $N = 13$ ) survey respondents to determine specific environmental conditions conducive to flourishing. A synthesis of the quantitative and qualitative findings indicated that communicative language learning environments, within both formal academic settings and outside of class, were more conducive to flourishing than noncommunicative environments. Four pedagogical themes

in support of flourishing arose, which included prioritizing effective, authentic language comprehension and communication, encouraging discussion around relevant and critical themes, integrating service to others into the curriculum, and investing in students' *language journeys*. Results from the study support recommendations from the field of world language education that the language acquisition experience is particularly suitable for supporting learners' human development and well-being.

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## **Dedication**

To our son Elliot who makes life so much more meaningful.

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## Preface

I would have never known I would be a teacher, let alone a German teacher or a teacher educator. At the end of my undergraduate studies, I had developed a strong, working proficiency in German alongside a love and appreciation for philosophy, especially philosophy of mind and Ancient Greek philosophy, and as graduation approached, fully in line with the stereotype of a humanities major, I had no idea how what I had learned could be useful to the world, nor what I could possibly do after receiving my degree. By a stroke of luck, I discovered a one-year Master of Arts in Teaching degree at the University of Arkansas which would at least put my limited skills to good use, despite never having taught anyone anything ever before in my life, and as an introvert, it seemed like a great way to become more comfortable in social situations.

Through this intensive program I felt a sense of purpose in my work for the first time in my academic career. Near the end of the program, my field supervisor told me that I was truly a natural-born teacher. A position opened up at a high school in Little Rock, so I applied and ended up getting the job. Fresh out of teacher candidate training, I was armed with the best instructional strategies, education technology skills, and knowledge of backwards curriculum design and felt fully prepared *Schüler Deutsch als Fremdsprache zu unterrichten* (to teach students German as a foreign language).

I was not particularly effective that first year. Students had fun and played games, learned new vocabulary, and learned a little about German-speaking countries. I used some German in class, but not *too* much, especially considering they were *just* elementary learners. Despite this, I was having a hard time connecting with the students. They were not improving in their ability to use German communicatively, and, at the beginning of the next year with intermediate-level students, my lessons were often falling flat. Slowly, and through gentle pedagogical nudges from

a colleague, I began to change nearly everything about my practice. I started using much more German in class, infusing all aspects of instruction with choice, building target language (TL) in the class from my students' interests and experiences and, most importantly, I became more flexible and human around them. I began to notice how, in some classes, a community began to form and that students truly cared for and looked out for each other. Looking back, my teaching was not perfect, but it was absolutely good enough to be proud of. I have grown considerably as an educator since then, both in teaching languages and future teachers.

Upon beginning my doctoral studies, someone had recommended the book *Helping Children Succeed*. The author argued that children, especially those subjected to economic violence, underrepresentation, and discrimination, need schools which make them feel capable, autonomous, respected, and part of a loving school community. The author argued that children can flourish in schools like this, but too often receive the opposite—control, punishment, and disconnection—which ironically undermine the very outcomes that are hoped for. The author's claims were based on research conducted through *self-determination theory* (Ryan & Deci, 2017), specifically the concept of basic psychological needs, namely *autonomy*, *competence*, and *relatedness*—the feelings previously described. The ideas presented through self-determination theory resonated deeply with my own philosophy toward life and teaching: that students are human beings who learn best when the conditions are right. Although other perspectives would argue “to each their own” or “everything is relative,” self-determination theory gave a somewhat contrasting answer. Findings from self-determination theory-informed research proposed that certain conditions exist that are particularly suitable for people—all people—to live to their potential.

This immediately clicked with me for several reasons. For students, it provides them with meaningful say and choice in their school experience, which is beneficial for their learning and well-being. As a result of this, students feel free, impactful, and in control of their learning and respected and loved by their teacher and peers. For educators, it necessitates critical reflection on their inherent power, relinquishment of control, the development of a deep trust in their students' natures, and a redesign of curricula that will provide learners with endorsable structure and genuine agency. Further, it is not just that learning comes more naturally when students like each other, or when the teacher pretends to care; the teacher must genuinely love and respect all students, care and know about who they are, what drives them, and where they are headed, and foster this sense of solidarity and connectedness between all the students in class. Any educational environments which disregard these precepts are not only limiting students' learning, but they are also denying children the means to become more in touch with their humanity.

Now, as a father, my rationale for continuing this work has expanded and shifted. I no longer exclusively consider how I am organizing a need-supportive learning environment for the pre-service teachers in my classes, or to what extent they will do the same for the young learners in their future classrooms. Now I am also concerned about how our own son will experience school. I am concerned that his future classrooms will deem his perspectives and interests to be nice, yet inconsequential to the course objectives. I am concerned that he will not have a say in how the school operates. I am concerned that what he learns in school will be confined to a room in a building and not be integrated into his community. I am concerned that his knowledge will be assessed through pencil-filled bubbles and not how personally meaningful it was to him nor how it had a positive impact on others. I am concerned he will spend considerable time with teachers who do not intervene when social injustice appears in school and not teach through such

issues. I am concerned that respect, care, curiosity, and love will not be the guiding principles of his school. Most of all, I am concerned that he will grow accustomed to being disempowered in an educational setting where his achievement is valued more than his social, emotional, and human development.

The evidence which self-determination theory has brought forth makes a strong case for what actually works in schools, or can—at the very least—point confidently in the right direction. It is absolutely clear that there are incremental, manageable changes that can be made to all learning environments by all educators that will not only boost learning and achievement, but also support students' human natures. There are simple things that educators can do that will make a significant difference in students' experiences in school.

I want to be clear that theory is only important to me insofar as it works. By “works,” I mean the extent to which theory can empirically explain, with precision and consistency, the complex phenomena surrounding us while being easily leveraged to enact positive change. Self-determination theory, in my experience so far, checks all of these boxes. While this study explores the concept of flourishing within the experiences of university students learning a new language, it is my hope that the argument proposed here and the empirical evidence supporting it will someday make a positive difference in how schools and classrooms are organized. I believe the findings have strong, humanistic implications for students in any educational context.

# CHAPTER ONE

## INTRODUCTION

### Background to the Study

Foreign language learning in the United States has seen considerable shifts in purpose and approaches (Richards & Rogers, 2001; Sterniak, 2008). Americans have historically turned to learning a new language to become closer to their family and culture, to boost work prospects, to communicate with speakers of the language, for travel purposes, or to better understand other cultures (Lead with Languages, n.d.; Rivers & Brecht, 2018), among many others. At the federal level, two centuries of American policies have advocated for the study of languages in order to strengthen the country's economy (ACTFL, 2019), national security (Koning, 2009), and global presence (Brecht & Rivers, 2000), to colonize non-native speakers of English to preserve a "national identity" (Adams, 1995; Suina, 2014), and for the purpose of making the "national population more generally competent and ... in the sounder and more sympathetic understanding of foreign cultures" (Bullard, 1979, p. 1).

As of 2020, a selection of the primary objectives of the International and Foreign Language Education office within the United States Department of Education include to "advance national security," "contribute to developing and globally competent workforce," and to "support teaching and research on critical world regions, languages, and issues" (2020, n.p.). The American Council on the Teaching of Foreign Languages (ACTFL) describes how language is critical to future world leaders, success in a global economy, and can support learners' cognitive functioning and higher academic achievement (ACTFL, n.d.). Despite the various motivations for learning another language, the United States remains a highly monolingual

country (Zeigler & Camarota, 2018) with less than one-quarter of elementary and secondary students learning a new language in school (Devlin, 2018).

Approaches to language teaching have also changed considerably. The primary shift has been away from teaching language as a technical science or list of rules and toward recognizing language as a means of active communication (Shrum & Glisan, 2016). In contrast to a more modern perspective, one of the earliest approaches to language teaching was the Grammar-Translation method, which “focused on translation of printed texts, learning of grammatical rules, and memorization of bilingual word lists” (Shrum & Glisan, 2016) with the purpose of reading literature and developing mental discipline and intellect. Speaking and listening were considered unessential outcomes (Richards & Rodgers, 2001). Later, the Audio-lingual method channeled the behaviorist “stimulus-response” approach through a focus on language dialogues and drills and, similar to Grammar-Translation, required largely decontextualized language use. Further methods included the Direct Method and the Natural Approach which, although reaching their peak nearly a century apart (Richards & Rodgers, 2001), strongly emphasized target language (TL) immersion, an inductive approach to grammar, relevant vocabulary, and authentic communication. The 1970s focused attention on language learners’ emotions and identities, resulting in eclectic approaches such as Suggestopedia, Community Language Learning, the Silent Way, and the Total Physical Response (TPR) method, which is one of the few still popular today (Shrum & Glisan, 2016).

Beginning in the 1980s, the national organization for foreign (or “world”) language (WL) education in the United States, the American Council on the Teaching of Foreign Languages, has stood as the leading advocate for a more contextualized and communicative approach to language teaching in the United States. In 1986, ACTFL released their first version of the

*Proficiency Guidelines*, which was further updated in 1999, 2001, and 2012, signaling a turn toward real-world communicative competence as the essential learning outcome of interest. Language proficiency refers to “the ability to use language in real world settings in a spontaneous interaction and non-rehearsed context and in a manner acceptable and appropriate to native speakers of the language” through reading, writing, speaking, and listening (ACTFL, 2012, p. 4).

In 1996, the *Standards for Foreign Language Learning in the 21<sup>st</sup> Century* were published and revised in 2014, to what is now known as the *World-Readiness Standards for Language Learning* (WRSLL). These standards set forth five goals for what language learners should know and be able to do, often referred to as the “5 C’s”: Communication, Cultures, Connections, Comparisons, and Communities. The WRSLL stated that language students must be prepared to use the target language (TL) of instruction (the “foreign” language) in three modes: for active *interpersonal* communication, for the *interpretation* of heard or written language, and for *presenting* information to others. This communication should be contextualized through exploring and relating cultural perspectives, practices, and products, connecting language and culture to other disciplines and diverse perspectives, comparing language and culture, and connecting language to learners’ communities and their lifelong learning.

Grounded in the three modes of interpersonal, interpretive, and presentational communication, ACTFL and the National Council of State Supervisors for Languages (NCSSFL) collaborated to create the *Can-Do Statements*, which guide learners to “identify a set learning goals and chart their progress towards language and intercultural proficiency” (ACTFL, 2017, p. 1). The *Can-Do Statements* provided language educators and students with performance

indicators for the three modes of communication and intercultural proficiency for Novice through Distinguished proficiency levels. Recently, Glisan and Donato (2017a), based on work from Ball and Forzani (2009) and in collaboration with ACTFL and other researchers, introduced the *High-Leverage Teaching Practices* (HLTPs) for language instruction. The HLTPs are not best practices, but macrostrategies “designed to assist teachers in learning *how* to enact specific practices deemed essential to world language teaching by deconstructing them into various instructional moves” (Glisan & Donato, 2017b, p. 50). The HLTPs, taken together, recommend for language educators to facilitate a discourse community bolstered by target language comprehensibility and authentic texts with a focus on culture, contextualized grammar, and language performance.

Other initiatives such as the Seal of Biliteracy, Lead with Languages, and the Leadership Initiative for Language Learning (LILL) have advocated not only for the study of languages and celebration of bilingualism, but also for the adoption of authentic, student-centered language classrooms aimed at developing learners’ target language proficiency. Recently, there has also been increasing focus on integrating social justice in world language education (ACTFL, 2020), propelled forward by Glynn, Wesely, and Wassel’s (2018) book *Words and Actions: Teaching Languages Through the Lens of Social Justice*.

### **Statement of the Problem**

Despite the strong, evidence-based standards and recommendations for language pedagogy from ACTFL over the last few decades, the adoption of a contextualized, proficiency-oriented approach to language teaching has grown during that time, albeit very slowly (Hlas, 2018; Phillips & Abbott, 2011; Toth & Moranski, 2018). Many language educators still have difficulty producing high levels of comprehensible input (i.e., understandable messages) for all

students during instruction (Ceo-DiFrancesco, 2013; Crouse, 2012; Krashen, 1982; Krashen & Bland, 2014; Pufahl & Rhodes, 2011), decontextualized drills focused on language form (i.e., grammar) are still common (Wong & VanPatten, 2003), and world language textbooks continue to include many non-communicative tasks and activities (Shrum & Glisan, 2016). Toth and Moranski (2018) write that despite educators' acknowledgement that the purpose of language education is meaningful negotiation of meaning in the TL, "After 50 years we have still not 'solved' instructed second language acquisition (ISLA) with a means of faithfully and consistently implementing recognized best practices across K-16 contexts" (p. 74).

While educators' high-level TL competency is vital to translating these principles into action, a lack of teacher language proficiency cannot fully explain this gap in practice, as even language educators with advanced proficiency can struggle when compared to those with lower proficiency (Kissau & Algozzine, 2017; Russell & Davidson Devall, 2016). To this end, a number of factors have been proposed which may account for this discrepancy between evidence- and theory-driven recommendations from the field and what commonly happens in the language classroom. Teachers may lack an understanding of their students or the school context (Kissau & Algozzine, 2017), face restricting pressures within their school or institution (Toth & Moranski, 2018), abandon research-recommended core practices after failed attempts to use them in class (Johnson & Golombek, 2016), or maintain discrepant beliefs about how language is acquired and should be taught (Donato & Davin, 2017; VanPatten, 2015).

University language departments experience these issues as well. VanPatten (2015) argues that, in many postsecondary language departments in the United States, particularly at research universities, second language acquisition is not an area in which many faculty members share expertise. Acknowledging ACTFL's work since the 1980s to promote a focus on

proficiency in language education, VanPatten (2015) contends that the campaign has not fared well at the university level, because it underestimated “the lack of basic knowledge about language and language acquisition among the professoriate” (p. 9). From this dearth of expertise, outdated beliefs about the nature of language, language teaching, and language acquisition have been perpetuated and passed on, such as believing that language is a list of rules and that grammar knowledge precedes communication. These misplaced beliefs have had consequences for how world language courses are organized and what types of materials are used in class, which narrowly include:

- a scope and sequence for grammar and vocabulary expected of all first-year and second-year materials;
- presentation plus practice of the grammar and vocabulary, especially “oral” practice;
- testing of knowledge of language as opposed to communicative ability;
- an underlying belief that students must “master” the material in the textbooks to be successful (VanPatten, 2015, p. 10).

Such non-communicative approaches to language teaching severely limit the extent to which students are able to explore the critical themes central to 21<sup>st</sup> century language teaching, including the relationships and connections between culture, language, community, and other disciplines in school recommended through the WRSLL. It also limits the capacity for language curricula to engage with critical essential questions and global themes (Clementi & Terrill, 2013). Beyond this, classrooms adopting a decontextualized, non-communicative approach ironically act as a barrier to developing students’ proficiency in the TL (Vyn, Wesely, & Neubauer, 2019), their cultural competence (Van Houten & Shelton, 2018), and their attunement

to action for social justice (Randolph & Johnson, 2017). Toth and Moranski (2018) suggest that professional development and teacher education programs should place less emphasis on sharing disconnected methodologies and one-off lessons, which may leave language educators ill-prepared to adjust them spontaneously “within the dynamic sociocognitive tapestry that defines the learning environment” (p. 83). Instead, far greater focus should be given to conveying the research- and theory-driven *principles* of language pedagogy, particularly the crucial need for authentic, meaningful communication and the co-construction of knowledge in the TL.

To this end, this study argues that adopting the fundamental concept of *basic psychological needs* of self-determination theory (SDT) as core principles of support within world language education can bring about positive linguistic and well-being outcomes for language learners. By integrating the satisfaction of the basic needs for autonomy (volition), competence (mastery), relatedness (belonging), and beneficence (prosocial impact) into one’s teaching, as well as activities of “well-doing” which support these needs (Sheldon, 2016; 2018), educators will be creating a learning environment where students may *flourish* through their development of language proficiency. Grounded in empirical research through SDT (Noels et al., 2019; Ryan & Deci, 2017), positive psychology (Dewaele, Chen, Padilla, & Lake, 2019), and eudaimonic flourishing (Huta, 2013; Martela & Sheldon, 2019; Sheldon, 2016), it is proposed that modifying the goals of language education toward language learners’ *flourishing* is both an efficacious and humanistic approach to fostering students’ language proficiency, language impact, and well-being.

### **Purpose of the Study**

The purpose of this mixed methods study is to explore the experiences of university world language learners in order to identify the characteristics of world language education

which support student flourishing. Specifically, the study seeks to investigate how flourishing arises in students within the context of world language education. Flourishing is conceptualized in this study as resulting both from “doing” and “feeling” well (Martela & Sheldon, 2019), comprising engagement in certain ways of “well-doing” (eudaimonic activities), the satisfactions of autonomy, competence, relatedness, and beneficence (basic needs satisfaction), and positive emotional states and meaningfulness (subjective well-being). To this end, the study seeks to determine what language educators can change about their language learning environment to support students in their capacity to flourish.

The further goal of this study is to provide evidence to language educators, school administrations, curriculum designers, and educational policymakers that certain orientations toward language learning designs are not only conducive to learners’ psychological health and empowerment (i.e., flourishing), but may also support the development of their language proficiency. Given the interpersonal, critical, and impactful nature of acquiring a new language, there is growing evidence that organized environments for proficiency-oriented language education are conducive to supporting sociality, connectedness, emotional health, and well-being in students (Dewaele, Chen, Padilla, & Lake, 2019). This approach entails exposing students to considerable amounts of comprehensible, compelling input (Krashen, 1982; Krashen & Bland, 2014) contextualized through communication and connections to culture and community (Glisan & Donato, 2017a) in a classroom characterized by 90%+ target language use (Crouse, 2012).

Additionally, the purpose of this study is to document the characteristics of curricula, instructional strategies, and environmental conditions in university world language courses which students perceive to support their flourishing through engagement in eudaimonic activities (i.e., “well-doing”), the satisfaction of their basic psychological needs for autonomy,

competence, relatedness, and beneficence, and subjective well-being. Following Noels and colleagues' (Noels et al., 2019) call for more SDT-informed interventions for language education, the study seeks to provide more concrete examples of how language educators can modify their language courses and programs to promote student flourishing and satisfy their basic psychological needs. Although not fully guided by positive psychology, this study also takes up recent calls from the burgeoning field (Dewaele, Chen, Padilla, & Lake, 2019; MacIntyre et al., 2019) for more intervention studies in world-, foreign-, and second-language classrooms "using a wide variety of approaches, that seeks ways to boost learners' linguistic skills as well as their well-being" (p. 10).

### **Research Questions**

A hierarchy of research questions and hypotheses guide this mixed methods study. The study incorporates a convergent parallel mixed methods design through which quantitative and qualitative data were collected and analyzed separately (Creswell, 2014). Results from each of the parts were compared to each other, synthesized, and interpreted in light of the findings of each phase. Significant emphasis was put on the analysis of the qualitative interview data (quan + QUAL) due to the exploratory design of the qualitative phase. Following suggestions from Plano Clark and Badiee (2010), the mixed-methods design is organized around an overarching mixed methods research question, which emphasizes "the overall integrated nature of the study as opposed to breaking questions into separate components" (p. 293). In service to the overarching research question, the study offers a testable quantitative hypothesis and two qualitative research questions. The questions and hypothesis guiding this study include:

### ***Overarching Mixed Methods Research Question***

What are the characteristics of university world language education which foster student flourishing?

### ***Quantitative Hypothesis***

*H1:* Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class.

### ***Qualitative Research Questions***

1. What are the characteristics of university world language learning environments that are conducive to learners' basic psychological needs satisfaction?
2. What are the characteristics of university world language learning environments that foster learners' engagement in eudaimonic activities?

The quantitative hypothesis will be tested through the use of structural equation modeling (SEM), particularly confirmatory latent factor modeling, based on survey responses from a large sample of university students learning a world language ( $N = 466$ ). The qualitative research questions will be explored through interviews with a small sample of respondents to the quantitative component ( $N = 13$ ) and analyzed through a preliminary round of deductive, *a priori* coding followed by an inductive analysis of emergent themes. The overarching mixed methods research question will then be considered in light of a comparison and synthesis of the findings from the quantitative and qualitative components of the study.

### ***Significance of the Study***

Although well-being and flourishing are fundamental concepts within self-determination theory (SDT) and positive psychology, they have been poorly and inconsistently operationalized in research related to language learning. This has paved the way for dramatic variations in how

well-being is defined and the extent to which flourishing is acknowledged. Furthermore, practical recommendations for encouraging student well-being and flourishing are, while still beneficial to students, equally diverse; some seem to be directed at fostering positive emotions and others at “living” and “doing” well through learning a new language. To this end, this study contributes a sturdy steppingstone to future research in this area by providing a more objective and philosophically grounded definition of what constitutes human flourishing in world language education. Additionally, this study contributes to SDT a list of much-needed context-specific recommendations for educational practice, most notably for second language education and through a qualitative approach.

The findings from this study will directly benefit practicing language educators and language programs. Given that SDT and positive psychology hail themselves as practical, “boots on the ground” theories, the findings from this study can contribute flexible core strategies designed to support each or a combination of students’ basic psychological needs for autonomy, competence, relatedness, and beneficence and activities for eudaimonic engagement. Language educators, informed by this study’s review of the literature, findings, and recommendations for practice, can begin to make efficacious modifications to their curricula, their repertoire of instructional strategies, and their interactional style with and between language learners. Finally, this study represents the first exploration of the candidate basic need of beneficence (i.e., sense of prosocial impact) within the field of education (Martela & Ryan, 2015; 2020).

### **Limitations**

The study has a number of limitations. The quantitative component relies heavily on self-reported measures of psychological states, which may reflect response bias and inaccuracy. Further, issues related to the measurement of subjective vitality in the quantitative model may

have influenced the extent to which the hypothesized model fit the data; however, the impact is likely mild at most.

No language teaching was observed for the qualitative phase of the study. For this reason, the analysis relies exclusively on participants' first-hand reports of their experiences in world language classes, which often spanned multiple years. This may introduce bias into participants' recollections of certain events. Because the study explores the experiences of university world language learners, the findings may not be fully generalizable to other languages or education contexts, such as elementary, secondary, or language training schools. Additionally, this study investigates a primarily WEIRD population (i.e., Western, educated, industrialized, rich and democratic) who represent only a fraction of the world's population (Henrich, Heine, & Norenzyan, 2010).

### **Delimitations**

Participant sampling was purposefully confined to undergraduate students learning a second language at one southeastern university in the United States. The study does not analyze the lived experiences of elementary and secondary students learning a language, nor those of world language educators of any level. In the quantitative phase, only a small selection of variables relevant to the purpose of the study were included (e.g., basic needs satisfaction and subjective well-being). This did not include linguistic antecedents or outcomes of basic needs satisfaction or vitality, such as assessing proficiency or evaluating the pedagogical qualities of participants' language courses. While these subgroups and measures are worthy of future examination, their inclusion lies outside the scope of this study.

Finally, the research questions and quantitative hypothesis explore the characteristics of world language courses which are *conducive* to flourishing, but not those that are explicitly

*detrimental* to it. While it can be argued that environments not especially conducive to flourishing are, at the same time, actively thwarting it, this is not one of the assumptions of the study. In SDT, the satisfaction of needs is related yet intrinsically distinct from their frustration (Chen et al., 2015). In this way, the study explores only what supports flourishing and not what directly leads to ill-being in language learning.

### **Overview of the Study**

This mixed methods study comprises six chapters. The first chapter introduces the background to the study, the purpose of the study, and the guiding research questions and quantitative hypothesis. The second chapter provides a thorough review of the literature relevant to the study's research questions and hypothesis. The third chapter presents the study's methodology, which begins with an overview of the mixed methods research design and is followed by an explanation of the procedures and analysis of the first quantitative phase and the second qualitative phase of the study. Chapter four presents the results from the quantitative phase of the study and chapter five presents the results from the qualitative phase as well as the mixed methods analysis and results. The sixth and final chapter discusses the findings, their pedagogical and theoretical implications, and recommendations for future research.

## CHAPTER TWO

### REVIEW OF LITERATURE

#### **Introduction**

This study explores the overarching question, *What are the characteristics of university world language education which foster student flourishing?* To accurately address this question, a review of literature has been designed which is divided into two major sections. The first section introduces the primary theoretical pillar of this study, self-determination theory (SDT), and explores the role of the theory's fundamental concept, basic psychological needs, in terms of their implications for education and, more specifically, world or second language teaching and learning. Through this explanation of SDT, the study's conceptualization of flourishing will be introduced, which is informed by the Eudaimonic Activity Model (EAM) whose unifying element is the satisfaction of basic needs. The second half of the chapter explores more broadly how second and world language education has been leveraged for learners' well-being and flourishing. The section includes a review of pertinent psychological research in language learning and ends with an exploration the blossoming field of positive psychology, which has contributed considerably to the paths to and benefits of flourishing in language learning.

In sum, the two sections together examine what constitutes flourishing and what research and scholarship in the field of language teaching and learning have investigated regarding this avenue. This review of literature included, but was not limited to, the use of a combination of relevant, yet varied search terms, such as "well-being" "language learning," "language education," "self-determination theory," "flourishing," and "eudaimonia". Results from the search terms were explored through a comprehensive database search engine from the researcher's institution, research networking and publishing websites (e.g., Google Scholar and

ResearchGate), and through literature requests from the researcher's colleagues and interlibrary loan system. This resulted in a thorough and exhaustive review of the research and scholarship pertinent to the study's overarching research question, qualitative research questions, and quantitative hypothesis.

## **Self-Determination Theory and Flourishing in Education**

### ***Introduction***

Self-determination theory (SDT) is now recognized as one of the leading theories in the field of applied psychology. Originating in the 1970s as a theory of motivation primarily concerned with the antecedents and outcomes of intrinsic motivation (Deci, 1971), SDT has evolved into a comprehensive empirical theory of human motivation, personality, and wellness applied across a multitude of domains and social contexts (Ryan & Deci, 2017). SDT's origin within intrinsic motivation research, according to Richard Ryan and Edward Deci (2019), the founders of the theory, was "an important part of a Copernican turn or reorientation of focus within the field of human motivation" (p. 5). Prior behaviorist approaches to behavior were centered exclusively on the role of external sources of motivation (e.g., reinforcement and punishment) and recognized individuals to be essentially passive components in their actions. Contrary to this view, SDT acknowledged human beings as active agents in their behavior who "assimilate, coordinate, and regulate inputs from both external (especially social and cultural) and internal (drives, emotions, needs) environments" (Ryan & Deci, 2019, p. 5).

Intrinsic motivation, while still holding a vital place within the cognitive evaluation theory (CET), one of the subtheories (or "mini-theories") of SDT, "supplied an entry point, rather than a terminus, for developing a broader view of the active integrative nature of self" (2019, p. 5). Further work over the decades discovered that a few specific psychological states

consistently supported the formation of intrinsic motivation, more internalized, autonomous forms of motivation, and well-being. Later termed *basic psychological needs* (Ryan & Deci, 2000), the satisfaction of these needs of autonomy, competence, and relatedness were shown to reinforce and sustain positive functioning and enable flourishing, while their frustration would not only thwart positive functioning, but bring about ill-being (Earl, Taylor, Meijen, & Passfield, 2017). By acknowledging empirically-derived, cross-cultural nutrients that generate well-being and optimal functioning in all people, SDT posits a proactive human nature drawn toward environments rich with supports for autonomy, competence, and relatedness (Ryan & Niemiec, 2009).

Furthermore, following its “brick by brick” method for refining the theory, SDT has relied strongly on quantitative approaches to analysis, particularly the use of psychometric statistical modeling with culturally, geographically, and socioeconomically diverse participant samples, to aid in replicability and generalizability. As expected, considerable focus in SDT research has been directed toward how schools and classrooms provide healthy motivational atmospheres that satisfy students’ basic needs. The following sections will provide a brief overview of SDT, an explanation of its mini-theories with particular emphasis on basic psychological needs theory (BPNT) in the school context, and an exploration of its critical approach to the purpose of education and human flourishing.

### ***Overview of SDT***

Self-determination theory (SDT) is an organismic theory primarily concerned with the supporting and thwarting effects of environmental conditions on the innate human capacity to experience psychological growth, well-being, and engagement. Ryan and Deci (2017) frame SDT as both a practical, critical, and clinical theory. It is practical in that it is apt to identify

contexts which enhance or undermine positive functioning; critical “insofar as it examines and compares social contexts in terms of their adequacy in supporting versus impairing human thriving” (p. 4); and clinical in that the theory can “find methods by which to tap the wellspring of energies that are intrinsic to human nature and to avoid the pitfalls of fostering motivation for change through external control” (p. 22). SDT differs from other theories in that it is psychological rather than behavioral, by which it considers behaviors to be functions of human motives and perceptions. Because a good theory should be able to explain and inform positive social practices (Woolfolk, 2019), SDT’s attention to psychological processes is sound and effective, because “it is at the psychological level that change can often be most readily leveraged” (Ryan & Deci, 2017, p. 7), bolstering its clinicality and practicality claims.

SDT rejects a tabula rasa notion of childhood, instead proposing that all people are born with certain processes and attributes which are manifested through curiosity, seeking out challenges, intrinsically motivated behaviors, and instinctive sociality. Despite the assimilative, integrating structure drawn toward flourishing with which all children are born, SDT argues that “our manifest human nature is, to a large degree, experience dependent—its forms of expression are contingent on the conditions of support versus thwarting...of these basic needs” (Ryan & Deci, 2017, p. 9). In this light, SDT views positive functioning characterized by autonomous, impactful actions and feelings of care and connectedness to be products of supportive social and physical environments. Moreover, defiance, impoverished behavioral functioning, psychopathy, and isolation (i.e., symptoms of psychological languishing) arise from the influences of thwarting environments. This illustrates the theory’s inherent criticality; its empirically based universality claims contribute to the objective examination of pervasive social contexts which impede an individual’s innate capacity to flourish. The theory extends this critical focus into

educational environments by evaluating “curricula, teaching strategies, educational leadership styles, and policies based on the extent to which they support or thwart learners’ and teachers’ basic psychological needs” (Ryan & Deci, 2020, p. 9).

### ***Mini-Theories of SDT***

SDT comprises six “mini-theories” which represent its major theoretical propositions, particularly its universality claims: cognitive evaluation theory, organismic integration theory, causality orientations theory, basic psychological needs theory, goal contents theory, and relationships motivation theory. The mini-theories were introduced and refined primarily through the research of Richard Ryan and Edward Deci in collaboration with numerous international researchers in psychology and other domains (Vansteenkiste, Niemiec, & Soenens, 2010). Only three of the pertinent mini-theories will be introduced, and each will be explained in terms of their implications for teaching and learning.

**Cognitive evaluation theory (CET).** The first major theoretical development of SDT, *cognitive evaluation theory* (CET), describes the processes by which social environments support or hinder the development of more autonomous, internalized forms of motivation and the well-being and enhanced domain-specific performance associated with it (Deci & Ryan, 1980; Ryan & Deci, 2000). CET is wary of external pressures and controls such as rewards, punishments, evaluations, surveillance, and deadlines because of the thwarting effects they have on autonomous feelings and intrinsic motivation.

Applied to education, CET is critical of any classroom or school factors which hinder a child’s natural curiosity and engagement with activities which interest them. Extrinsic rewards of all contingencies (i.e., engagement-, completion-, and performance-contingent), including tangible rewards, which are employed in schools to spur learning, have been shown to

significantly undermine autonomy and intrinsic motivation (Deci, Koestner, & Ryan, 1999). Ironically, these natural propensities “represent perhaps the greatest resource an educator can tap” (Ryan & Deci, 2013, p. 192). To this end, SDT is critical of extrinsic controls such as grades, performance goals, and high-stakes tests (Ryan & Deci, 2020), because they transfer a learner’s perceived locus of causality for their engagement in class from within to an external source.

**Organismic integration theory (OIT).** The second mini-theory, organismic integration theory (OIT), extends CET to include a continuum of motivational types—external, introjected, identified, and integrated—ranging from more external (controlled) to the more internalized and integrated and culminating in intrinsic motivation (Ryan & Deci, 2017). OIT posits that human beings are naturally inclined to assimilate social norms and practices, even ones that are externally motivated and not particularly enjoyable to the person. Students’ autonomous motivation in school has been linked to higher school achievement (Taylor et al., 2014), greater conceptual learning (Grolnick & Ryan, 1987), and enhanced engagement (Froiland & Worrell, 2016).

In schools, autonomous, or intrinsic, motivation is most apparent in the early years where curricula are more likely built on students’ exploration, curiosity, and interest. As children progress, they often experience increasingly more pressures and demands in the form of grades, high-stakes tests, social pressures, and prescribed curricula. While some may suggest that children naturally lose their intrinsic motivation and interest as they get older, SDT would argue that one must look to the social environment which may be actively thwarting students’ intrinsic tendencies, well-being, and innate curiosity (Ryan & Deci, 2017). Berg and Corpus (2013) support this position in a study which explored the correlation between age and intrinsic

motivation between traditional and alternative forms of schooling (e.g., homeschooling and democratic schools). Although the correlation between age and intrinsic motivation was negative for students in traditional school settings, children in the alternative settings did not experience this decline. While the study was not designed to determine why this happened, the authors assumed, in line with SDT, that it could be explained by the amount of autonomy and agency students are afforded in alternative settings, particularly in schools informed by the principles of democratic education. A metaanalysis by Scherrer and Preckel (2019) also found similar decreases in students' intrinsic motivation over time across three continents.

### ***Basic Psychological Needs Theory (BPNT)***

The third mini-theory of SDT, basic psychological needs theory (BPNT), lends itself as the primary theoretical pillar of the current study. BPNT posits that the satisfaction of the basic psychological needs for autonomy (volition), competence (effectiveness), and relatedness (care and belonging), are highly interdependent, objective prerequisites of human flourishing within any one of life's domains (Vansteenkiste, Ryan, & Soenens, 2020). Additionally, SDT posits that the frustration of these needs will be associated with poor functioning and ill-being. Consider two distinct scenarios illustrating this theory. One person may feel a general sense of wellness arising from experiences at work, at home, and in their country that embody freedom, voice, mastery, belongingness, and connectedness to others. The psychological health of another may suffer due to endless experiences of control, surveillance, failure, distrust, and discrimination within their social interactions, workplace, or economic system. Furthermore, in line with SDT's objectivity claims, the satisfaction and frustration of the needs will occur in supportive or thwarting environments regardless of the value one places on them, the knowledge one has of them, or the desire one has to attain their satisfaction or frustration (Ryan & Deci, 2017). Finally,

basic psychological needs are highly correlated and “mutually implicated” (Ryan & Deci, 2017, p. 250). For this reason, an individual’s basic needs are often satisfied simultaneously.

*Autonomy* refers to “the need to self-regulate one’s experiences and actions” (2017, p. 10) and is associated with feelings of volition, freedom, and acting in congruence with one’s internalized values. Autonomous behaviors are truly self-endorsed and not influenced by external forces. The development of the need for autonomy has been largely informed by Heider (1958) and DeCharms’ (1968) conceptions of the internal perceived locus of causality (PLOC), referring to the perception that one’s actions arise from within, as opposed to an external PLOC.

Autonomy should not be mistaken for independence; they differ in that one can act both in correspondence with and reliance on others while acting in agreement with their authentic selves. The need for autonomy is fulfilled in environments conducive to freedom and curiosity and thwarted under internal and external pressures of control and surveillance. Students feel autonomous in school when their teachers take their perspectives, provide rationale, and relinquish control in class (Reeve, 2016).

The need for *competence* is similar to the concept of self-efficacy within socio-cognitive theory (Bandura, 1997) and refers to feelings of mastery and capability. Distilling the essence of competence, Ryan and Deci (2017) write how “people need to feel able to operate effectively within their important life contexts” (p. 11). Individuals experience fulfillment of their need for competence when their behaviors meet their intended outcomes and when they receive authentic, informative feedback in response to their behaviors. Feelings of competence are thwarted in situations in which one feels that their actions were ineffectively enacted, the tasks they experience are too easy or too difficult, or that the feedback they receive is non-informative. In education, students can feel a sense of competence when they feel as if they are growing in their

learning, when they receive authentic, supportive feedback from their teachers and peers, and when they experience that their work in school has a meaningful impact. Educators can support students' satisfaction of competence "by offering them an optimal challenge to strive for within a failure-tolerant environment" (Reeve, 2016, p. 140). These suggestions echo recommendations for fostering self-efficacy, which include promoting experiences of mastery and positive emotions while providing modeling and encouraging (Bandura, 1997). Competence also shares similarities with *ability beliefs* within expectancy-value theory (Eccles & Wigfield, 2002).

The third basic psychological need, *relatedness*, is affiliated with experiences of belongingness, care, mutual concern, reciprocity, and social connectedness (Baumeister & Leary, 1995; Reeve, 2016). The human need to build relationships with others is not unique to SDT and can be readily seen within Maslow's (1970) hierarchy and Bowlby's attachment theory (Bretherton, 1992). Central to SDT is the position that all people need to care for others and feel cared for. Relatedness is not a "one-way street;" Ryan and Deci (2017) write that relatedness "is also about belonging and feeling significant among others. Thus, equally important to relatedness is experiencing oneself as giving or contributing to others" (p. 11). The need for relatedness is thwarted in environments of distrust, isolation, and discrimination, such as in the workplace, in relationships, or within varying cultural, political, and economic systems. In education, relatedness can be supported by involving students in a community of social interaction (La Guardia & Patrick, 2008; Reeve, 2016).

### ***Beneficence: A Candidate Need***

A recent series of studies organized by Frank Martela and colleagues (Martela & Riekk, 2018; Martela & Ryan, 2015; 2016; Martela, Ryan, & Steger, 2018) tested the viability of a new, proposed basic psychological need related to prosociality: that of *beneficence*, or "a subjective

sense of having a positive prosocial impact on others” (Martela & Ryan, 2015, p. 2). The feeling which beneficence represents, namely a sense of prosocial impact, is an integral part of this study’s conceptualization of flourishing. As will be explained in upcoming sections, flourishing entails behaving in certain ways that bring about needs satisfaction (i.e., “well-doing”), which include acting autonomously, engaging in service to others, growing personally, and connecting deeply with oneself and others. Although beneficence has not yet “passed the test” to be a basic psychological need due to its frustration not leading to ill-being (Martela & Ryan, 2020), the studies provide evidence that the satisfaction of beneficence is “empirically separable” from the satisfaction of the other three basic psychological needs of autonomy, competence, and relatedness in predicting positive psychological outcomes. In other words, one’s feelings of benevolence arising from altruistic behaviors contribute something innate, constructive, and unique to their wellness or other positive outcomes.

Although much evolutionary psychology has characterized the human race as a competitive, animalistic “hostile force of nature” (Buss, 1991, p. 472), SDT contrasts this conception by focusing on the “cohesive, willingly cooperative, innovative, and trustworthy interpersonal and group functioning” (Ryan & Deci, 2017, p. 622) undergirding human fitness. Additionally, SDT’s positive, integrative view of human nature argues that the “dark side” of humanity, such as aggressive behaviors, violence, discrimination, and exclusion, are never truly fulfilling acts, as they arise most often under controlling environments in which basic needs are not just unmet, but actively thwarted (Ryan & Hawley, 2016). Ryan and Deci (2017) write that “humans are endowed with a variety of tools for caring about others, including abilities for empathy, judgements of fairness, and distinguishing between kindness and cruelty” (p. 622),

from which it is argued that one of the essential ingredients of human flourishing is engaging in service to others (Martela & Ryan, 2016).

Empirical findings lend support to this claim; an abundance of research has demonstrated the correlational, and sometimes causal, associations between well-being (and/or happiness) and prosocial behaviors, such as donating one's money (Dunn, Aknin, & Norton, 2008), donating one's time (e.g., volunteering) (Wheeler, Gorey, & Greenblatt, 1998), enacting benevolence in small, day-to-day actions (Nelson, Layous, Cole, & Lyubomirsky, 2016), civic engagement (Wray-Lake, DeHaan, Shubert, & Ryan, 2017), and to the extent employees feel their work makes a difference in the lives of others (Moynihan, DeLeire, and Enami, 2015). These relationships have held true between diverse cultures (Aknin et al., 2013; Aknin, Whillans, Norton, & Dunn, 2019), including islanders in the South Pacific with little contact with Western cultures (Aknin, Broesch, Hamlin, & Van de Vondervoort, 2015), socioeconomic class (Aknin, Whillans, Norton, & Dunn, 2019), and age (Hepach, Vaish, & Tomasello, 2012) “despite the lay conceptions that children are inherently selfish” (Aknin, Hamlin, & Dunn, 2013, p. 1). Children as young as twenty months old can demonstrate a strong propensity to help unknown others in need, even in the absence of rewards or verbal praise, yet are significantly less likely to help in the future after previous prosocial actions are rewarded (Warneken & Tomasello, 2008). Warneken (2015) postulated that “early helping is neither a mere side effect of other social skills nor services as a signal to simply draw more attention and resources of the child. Rather, I suggest that early helping behaviors are genuinely prosocial and serve an evolutionary function in humans” (p. 4).

In this series of studies exploring the candidate need of beneficence (Martela & Riecki, 2018; Martela & Ryan, 2015; 2016; Martela, Ryan, & Steger, 2018), all four needs—autonomy,

competence, relatedness, and beneficence—exhibited consistent, significant, and independent associations with theoretically relevant positive measures of well-being and life/work meaningfulness; that is, in predicting the subjective experience of well-being, an individual’s feelings of volition, effectiveness, belongingness, and prosociality all emerged as vital components in its estimation. In line with non-SDT research on prosociality, the satisfaction of the proposed need for beneficence arose as an essential explanation of why individuals in various contexts feel psychologically well.

In the first article of the series, Martela and Ryan (2015) sought to explore the relationship between basic psychological needs—autonomy, competence, relatedness—the candidate need “beneficence”, and well-being. In order to measure the satisfaction of beneficence, the first study created a short questionnaire, the Beneficence Satisfaction Scale, made up of face valid items such as “I feel that my actions have a positive impact on the people around me” and “I have been able to improve the welfare of other people.” Results from the studies provide strong support for the importance of prosociality in creating and maintaining well-being, particularly through the mediating role of basic needs satisfaction in both general, situational, and day-to-day situations. Similar findings were found in a series of studies by Martela, Ryan, and Steger (2018) but with measures of life meaningfulness instead of well-being, in which the four psychological need satisfactions were independent and significant predictors of life meaningfulness. This was largely replicated with work meaningfulness in samples of adults in Finland, India, and the United States (Martela & Riekkii, 2018).

A further study by Martela and Ryan (2016) sought to provide causal evidence of the relationship between prosocial behavior and well-being through the satisfaction of the basic psychological needs, even when individuals do not have contact with the recipients of their

prosociality. Participants included university students ( $N = 76$ ) who were asked to play a computer-based word game and complete a short survey. Half of the participants were assigned to an experimental condition, the prosocial group, in which they were told that their correct responses in the game would automatically donate 10 grains of rice to the United Nations World Food Program, while those in the control group were told that only their points would increase upon correct in-game responses. Students in the prosocial group experienced more beneficence, vitality, positive affect, meaningfulness, and less ego-depletion measured by performance on a post-game task. The effects were mediated by the satisfaction of autonomy and competence.

Taken together, this synthesis of empirical research provides substantial evidence that benevolence is a psychological universal which underlies human flourishing. Additionally, the findings support research by Aknin, Whillans, Norton, and Dunn (2019), Weinstein and Ryan (2010), and Wray-Lake, DeHaan, Shubert, and Ryan (2017) that prosocial behavior is most likely to lead to flourishing when basic needs are also satisfied, specifically when people autonomously engage in impactful prosocial behaviors that allow them to feel close to others. The studies add to the research in prosociality and happiness by incorporating an SDT perspective acknowledging a cross-cultural, universal human nature inclined toward the fulfillment of specific psychological needs.

### ***Supporting Basic Needs in an Educational Setting***

Much of the research regarding basic psychological needs satisfaction (BPNT)—autonomy, competence, relatedness, and beneficence—has been carried out in the contexts of schools and learning. Turning to the pedagogical implications of BPNT, a number of effective need-supportive teaching strategies, often referred to as *autonomy-supportive* teaching practices, have been identified (Niemic & Ryan, 2009; Reeve, 2016; Ryan & Deci, 2013). Autonomy

supportive teaching practices remain the most studied because the consistent action of taking into account students' perspectives naturally elicits feelings of care and connectedness (relatedness) and impactfulness and effectance (competence) (Reeve, 2016; Ryan & Deci, 2020). These macrostrategies include, among many others, listening to students, incorporating students' input, being aware of and acknowledging students' emotions, needs, perspectives, interests, and experiences, piquing students' curiosities, providing rationales for and utility of activities, being flexible and open-minded, providing time for independent work, welcoming criticism, and providing students with choices and options (Assor, Kaplan, and Roth, 2002; Reeve & Jang, 2006; Reeve, Jang, Carrell, Jeon, & Barch, 2004). Wallace, Sung, and Williams (2014) began with a selection of these and, through observations of 4<sup>th</sup> through 8<sup>th</sup> grade classrooms, determined a list of autonomy-supportive microstrategies for each across numerous classroom management practices. Their findings revealed a number of autonomy-supportive teacher talk and microstrategies, a selection of which include designing collaborative activities for students, anticipating student challenges, being flexible with how students complete tasks, and recognizing students' personal circumstances. Autonomy-supportive teacher talk includes practices such as promoting students' independent thinking (e.g., "Now let me ask you this..." [2014, p. 38]), remaining adaptive (e.g., "I like what this group is doing..." [2014, p. 38]), and providing meaningful choice (e.g., "You are going to decide" [2014, p. 38]).

Rogat, Witham, and Chinn (2014) observed 7<sup>th</sup> grade science teachers and identified a number of teacher practices and student actions which embodied autonomy support. Students had choice on how to go about formatting and deciding on how they would complete a task, how they would form student groups, and which student from their group would present their findings. Autonomy support was also manifested through contextualizing a thematic unit around

a larger essential question or real-world problem. Course content was also made relevant to students' lives and evolved from students' perspectives and examples. The authors also identified promoting active listening from the teacher and between students, providing rationale for class activities and content, recognizing students' progress and contributions to class learning, setting high expectations, promoting interaction and discussion, and eliciting students' thinking and elaboration.

Teachers who are supportive of students' basic needs "first and foremost consider their students' frame of reference in designing and motivating learning tasks" and "minimize the sense of coercion, evaluative pressure, and control, and they maximize a sense of choice and volitional engagement" (Ryan and Deci, 2013, p. 199). There is evidence that autonomy-supportive teachers tend to be more open to new experiences, agreeable, knowledgeable about intrinsic motivation, and oriented toward personal growth (Reeve, Jang, & Jang, 2018). Organizing a learning atmosphere of choice is strongly associated with students' intrinsic motivation (Patall, Cooper, and Robinson, 2008), agentic engagement (Patall et al., 2019), and their curiosity (Schutte & Malouff, 2019). Despite the efficacy of choice, simply providing students with choices in class does not mean they will feel autonomous; what is most integral to autonomy is genuine volition and personal endorsement of one's actions. Students presented with a number of indistinguishable, meaningless, or controlled options from which to choose may feel considerably less autonomous than personally endorsing a relevant option suggested by their teacher (Ryan & Deci, 2020).

The need for *competence* can be supported through setting clear expectations and guidelines for activities (Farkas & Grolnick, 2010; Vansteenkiste et al., 2012), through help and appropriate scaffolding (Jang, Reeve, & Deci, 2010), and positive feedback (Mouratidis,

Vansteenkiste, Lens, & Sideridis, 2008). Students' needs for *relatedness* can be fulfilled when a student feels "that their teacher genuinely likes, respects, and values him or her" (Niemic & Ryan, 2009, p. 139). Teachers' behaviors supportive of relatedness can include engaging in friendly and individualized communication with students and promoting community and cohesiveness through collaboration and teamwork (Sparks, Dimmock, Whipp, Lonsdale, & Jackson, 2015). Day-to-day interactions with and between students should embody care, warmth, interest, and interpersonal support to foster relatedness (Sparks, Dimmock, Lonsdale, & Jackson, 2016).

Haerens et al. (2013) identified teaching behaviors in physical education representing the satisfaction of autonomy, structure (i.e., competence), and relatedness. Autonomy support comprised providing choice, opportunities for independent practice, asking questions, and paying attention to students' contributions in class. Competence support consisted of "giving clear verbal instructions, demonstrating activities, and providing an overview of the lesson" (p. 10). Teachers supported students' relatedness satisfaction through empathy, enthusiasm, eagerness, effort, energy, inquiry, and listening. Additionally, Assor, Kaplan, and Roth (2002) found that autonomy-enhancing teacher behaviors (e.g., providing choice, fostering understanding and interest, and allowing criticism) were associated with Israeli students' positive affect and engagement, while autonomy-suppressing behaviors (e.g., suppressing criticism, forcing meaningless activities, and intruding) were associated with negative feelings and behavioral and cognitive disengagement.

The basic need support students perceive from their teachers can predict the extent to which their needs for autonomy, competence, and relatedness are satisfied, as well as other educational outcomes such as engagement, well-being, and achievement. In a study by Black and

Deci (2000), university students in organic chemistry courses who perceived their instructors to be autonomy supportive experienced increased autonomous motivation, greater competence satisfaction, lower levels of stress, and enhanced course achievement during their course. Similar findings have been demonstrated with American high school students and have additionally been associated with intentions to continue in school as opposed to dropping out (Hardre & Reeve, 2003). The satisfaction of competence, relatedness, and autonomous forms of motivation have been linked to university students' continuation of their world language studies (Davis, 2020).

A relatively new concept of interest to SDT in education are the various forms of engagement—behavioral, emotional, cognitive, and agentic—which are often a positive indicator of basic need satisfaction (Reeve, 2012). Engagement has been found to mediate the relationship between motivation and achievement (Reeve & Tseng, 2011). In a recent study with university students in Peru (Matos, Reeve, Hererra, & Claux, 2018), not only did students' perceived need support from their teachers predict their future engagement, but their agentic engagement (e.g., “students' intentional, proactive, and constructive contribution into the flow of instruction” [Reeve, 2012, p. 161]) further predicted their teachers' autonomy-supportive teaching. These findings suggest that students' proactive, agentic engagement can bring about changes for the better in how a teacher organizes their instruction and interactions with students (Patall et al., 2019). More controlling educators, however, may identify students' agentic engagement as defiance (Wiesniewski et al., 2018).

### ***Basic Needs and Well-Being***

Research has consistently supported the hypothesized association between basic need satisfaction and well-being in both between- and within-person (over time) conditions (Martela & Ryan, 2015; Ryan, Bernstein, & Brown, 2010). In other words, an individual's wellness is

sustained insofar as the person feels autonomous, competent, and connected to others in their lives or in specific contexts. In a series of cross-cultural studies involving late adolescents and young adults across four countries (Peru, the United States, Belgium, and China) (Chen et al., 2015), the satisfaction of autonomy, competence, and relatedness were all unique contributors in explaining participants' general well-being in life. The frustration of each need were independent predictors of ill-being. Another study examined this same model but with college students from eight diverse countries and found the same result: basic need satisfaction consistently predicts well-being over and above demographic factors and personal traits (Church et al., 2013).

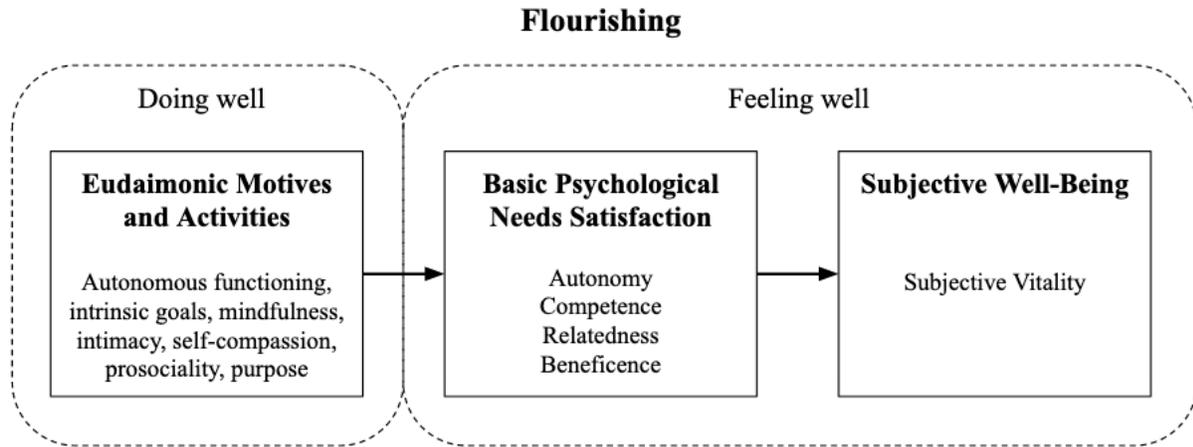
The same model of need satisfaction and well-being has also been documented with low-pay factory employees and their well-being and job satisfaction (Illardi, Leone, Kasser, & Ryan, 1993), within coaches' supportive versus controlling behaviors and athletes' positive affect, vitality, depression, stress, and maladaptive behaviors (Bartholomew, Ntoumanis, Ryan, Bosch, & Thøgersen-Ntoumani, 2011), and in the daily experiences of residents of an elderly care facility (Kasser & Ryan, 1999), among many other contexts. The satisfaction of basic needs is indicative of vitality (Ryan & Deci, 2008), life meaningfulness and work meaningfulness (Martela & Riekkii, 2018). Finally, a metaanalysis by Yu, Levesque-Bristol, and Maeda (2018) found a moderate ( $r = .46$ ) correlation between autonomy and subjective well-being across East Asian countries and the United States.

### ***Flourishing***

Central to basic psychological needs theory (BPNT) is the premise that the satisfaction of basic psychological needs is fundamental to well-being and flourishing. These two nebulous concepts related to positive human functioning are often used without providing a clear distinction between them. Without this, identifying environmental antecedents in the language

classroom which bring about flourishing in students would be difficult and unreliable. First, a note: in light of their minor differences, the terms *thriving*, *well-being*, *wellness*, *full-functioning*, and *flourishing* are largely used interchangeably in SDT literature (see Ryan, Curren, & Deci, 2013). Because this mixed-methods study employs SDT as its primary theoretical framework, these terms will continue to be set as equals, and *flourishing* will be used to denote this construct.

This study's conception of flourishing is informed by the Eudaimonic Activity Model (EAM) proposed by Sheldon (2016; 2018) and explored further in light of SDT with Martela (Martela & Sheldon, 2019). Figure 1 depicts the model. Eudaimonia, first described by Aristotle (2019), refers to a way of living that is virtuous, meaningful, rational, and exemplary (Sheldon, 2018). Ryan, Huta, and Deci (2008) conceived of eudaimonia to refer to a "way of living that is focused on what is intrinsically worthwhile to human beings" (p. 147). Although eudaimonia is often described affectively in terms of well-being or eudaimonic happiness, Aristotle's original conception considered it not to be "a positive *feeling or state of mind*, ...; rather, eudaimonia refers to *activity*, specifically, activities that are known (or shown) to be rational, virtuous, ethical, or otherwise commendable" (Sheldon, 2018, p. 120). Well-being, Sheldon (2018) argues, is a subjective, affective quality that is felt, while eudaimonia is "something that is *done*, not felt" (p. 121). To this end, the Eudaimonic Activity Model distinguishes between the *doing well* and *feeling well* components of flourishing.



**Figure 1.** Eudaimonic Activity Model (EAM) (adapted from Martela & Sheldon, 2019)

The “doing well” aspect of flourishing entails behaviors which are eudaimonic in nature rather than hedonic; that is, certain activities and motives are eudaimonic, or “associated with using and developing the best in oneself, in accordance with one’s true self and one’s deeper principles” (Huta, 2013, n.p.). The same has been done for hedonic activities and motives, which are “pursuits associated with pleasure and enjoyment, and the absence of pain and discomfort” (n.p.). Many conceptions of what constitutes a eudaimonic way of living have been proposed. Aristotle’s (2019) original notion included practices such as “courage, generosity, wisdom, and being fair and just in relation to others” (Ryan, Huta, & Deci, 2008, p. 144). Ryan, Curren, and Deci (2013) characterize flourishing by autonomous functioning, mindfulness, and pursuing and attaining intrinsic goals, which could include “community service (helping others), personal growth (e.g., learning, experiencing new things), and intimacy (connecting deeply and meaningfully with others)” (p. 67). Huta’s (2013) description of a eudaimonic way of being includes engaging fully and striving for something higher, such as the greater good, acting in line with one’s own values, identity, and emotions, immersing oneself in and valuing the process, contemplating one’s behaviors, and accepting reality and others as they are. Ryan and Martela (2016) state that eudaimonic living is characterized by embodying “intrinsic goals, autonomy,

mindfulness, and benevolence” (p. 24). Sheldon’s (2018) summary of eudaimonic practices includes morality, intrinsic valuation, wisdom, purpose, self-compassion, ethics, pro-sociality, and mindfulness, which he contends are innately supportive of basic needs satisfaction and happiness.

In the Eudaimonic Activity Model, “feeling well” comprises two components: the satisfaction of basic psychological needs and subjective well-being (SWB). Basic psychological needs satisfaction, fundamental to SDT, refers to the fulfillment of one’s feelings of autonomy, competence, relatedness, and beneficence. Basic needs satisfaction is not dependent on certain activities or motives but entails *how* one’s environment is experienced. Martela and Sheldon (2019), using relatedness as an example, explain that “it is not only about how many minutes a person objectively spends with other people, but about whether a person *experiences* that there are mutually caring relationships in his or her life” (p. 465). The second part of the *feeling well* component, subjective well-being (SWB), is defined by Martela and Sheldon (2019) “as a category of well-being that includes general and context-free feelings and evaluations of life as good or bad, positive or negative” (p. 464). Subjective well-being is not simply a measure of positive emotion; Su, Tay, and Diener (2014) explain how it “can be conceived as an internal barometer of ‘how life is going’” (p. 254) and is indicative of quality of life. Huta’s (2013) conception of eudaimonia as a way of feeling includes feelings of meaning, elevation, awe, connection, aliveness, fulfillment, and competence.

The EAM model of flourishing finds a middle ground between an exclusively objectivist view of well-being—that there is an objective, ideal good life, and subjective feelings have nothing to do with it—and views that incorporate both eudaimonic and hedonic concepts of well-being. Because of this, flourishing in the EAM includes a *universal* (or human-essential) notion

of feeling well (i.e., basic psychological needs satisfaction) arising from *objective* ways of being and acting, or well-doing (i.e., eudaimonic motives and activities), both of which influence a more *subjective* notion of feeling well (i.e., SWB) (Martela & Sheldon, 2019). Ryan, Curren, and Deci (2013) write:

Rather than defining happiness as simply having good feelings, the eudaemonist conception of well-being or flourishing rests on the proposition that what is most subjectively satisfying over the course of a life is activity that develops and expresses one's most reflectively valued and well-integrated human potentialities. According to this view, pleasure accompanies activities that fulfill human intellectual, social, and productive potentials in good and admirable ways, even though pleasure is not the aim of such activities (p. 58).

The recognition and measurement of flourishing is not confined to the general life domain (Ryan, Curren, & Deci, 2013). Individuals can flourish in one specific context such as work or school as well as on a day-to-day basis (Ryan, Bernstein, & Brown, 2010) or in specific situations (Weinstein, Hodgins, & Ryan, 2010). In support of the current study, flourishing in language learning can be explored within one course unit, one's language studies, or how one's language learning influences the extent to which one flourishes in their life.

To summarize, the EAM model contributes something unique to the recent resurgence of interest in human flourishing by positing that there are specific practices and motives that are more conducive to basic psychological needs satisfaction, subjective well-being, and overall flourishing. Sheldon (2018) argues that the model is cyclical, in that acting in eudaimonic ways will be innately satisfying and enhance subjective well-being, both of which will reinforce eudaimonic ways of living. Applying this model to world language education, learners may be more likely to flourish given an environment where they feel well (SWB), autonomous, competent, connected to others, and feel that they have impacted the welfare of others (basic psychological needs satisfaction), particularly through language-related activities characterized

by autonomy, intrinsic goals, purpose, benevolence, and mindfulness (eudaimonic activities and motives).

### ***Flourishing in Education***

As stated in the introduction, SDT's notion of the role of schools is that they are places for flourishing and the development of the whole child, from which learning, achievement, and other educational outcomes are byproducts of students' healthy functioning (Ryan & Deci, 2017). Despite this clearly stated view, little educational research in SDT has adopted this interpretation and, instead, studies continue to narrowly explore the role of students' basic need satisfaction in terms of student engagement, persistence, and achievement (Ryan & Deci, 2020). While these are undoubtedly important goals, it should be clearly stated that SDT research in education does not fully capture the theory's rather radical notion that the primary purpose of schools is students' human development, empowerment, and flourishing.

The "feeling well" aspects of the Eudaimonic Activity Model—the relationship between basic psychological needs satisfaction and subjective well-being—has been examined in many studies, but not often with consideration of the flourishing qualities in the EAM and how these positive states emerged. One study from Tian, Chen, and Huebner (2014) found that Chinese adolescent students' autonomy, competence, and relatedness satisfaction longitudinally predicted their school satisfaction and subjective well-being. Teachers' autonomy support has also been associated with students' engagement, as well as fewer symptoms of anxiety and depression (Yu, Li, Wang, and Zhang, 2016). Giving support for someone else's basic psychological needs can help individuals who feel isolated or oppressed. A study by Legate, Ryan, and Weinstein (2012) found that lesbian, gay, and bisexual students who felt that their school and other proximal

contexts were supportive of their autonomy were more likely to be “out,” to have higher self-esteem, and less anger and depression.

### ***Summary of Self-Determination Theory and Education***

The word theory can evoke feelings of detachment, irrelevancy, and prescription. SDT, however, rebukes these characteristics and stands as a humanistic framework for supporting the natural propensities toward freedom, connectedness, and flourishing all learners share. By positing a selection of universal psychological nutrients that act as a predictable pathway toward psychological well-being and flourishing, SDT can suggest educational interventions and classroom conditions that support all students’ flourishing while critiquing controlling and authoritarian structures that oppress their innate capacities. The theory also claims that the best characteristics of learners (the “bright side” of humanity) arise within need-supportive environments and are suppressed under thwarting conditions (Ryan & Hawley, 2016). The incorporation of the Eudaimonic Activity Model in this study, informed by SDT, contributes a grounded, empirically driven conception of what constitutes human flourishing, which has been considered in the context of education and, in subsequent sections, the area of language acquisition and formal language education.

### **Flourishing in Language Learning**

#### ***Motivation in Language Learning***

Although research into language learning informed by self-determination theory can first be seen in the 1990s, works exploring the shared constructs of intrinsic and extrinsic motivation for language learning originated in the mid-20<sup>th</sup> century. Gardner and Lambert’s (1959) work with Anglophone learners of French pushed back on the notion that achievement in language learning was primarily determined by an individual’s linguistic aptitude. Instead, they argued

that language learners' attitudes, namely motivation "characterized by a willingness to be like valued members of the language community" (p. 271), in addition to language aptitude, was also a significant, meaningful factor in why students succeed in language learning. This *integrative* form of motivation, "where the aim in language study is to learn more about the language group" (p. 267), would later be identified as a more internalized, self-determined form of extrinsic motivation rather than the more extrinsic *instrumental* motivation (Noels, Clément, & Pelletier, 2001; Noels, 2001), "where the reasons reflect the more utilitarian value of linguistic achievement" (p. 267). Gardner (1985) suggested that the relationships between more self-determined-integrative and less self-determined-instrumental were complex associations and should not be equated as others have argued (Jakobovits, 1970). To this end, Gardner classified both integrative and instrumental motives for language learning as extrinsic, "in that they indicate that the language is being learned in order to satisfy some goals not simply because of an intrinsic interest in the language itself" (Gardner, 1985, p. 12).

Gardner's further work explored the "broader concept of the integrative motive" (Dornyei 2001, p. 16), comprised of integrativeness, attitudes toward the learning situation, and motivation, to which Clement added linguistic self-confidence (Clément et al., 1994). Integrativeness comprises the learner's integrative orientation toward language learning, interest in world languages, and attitudes toward the L2 community. Attitudes toward the learning situation include the learner's evaluation of their L2 teacher and course. Motivation includes one's desire to learn the L2, their motivational intensity, and their attitudes toward learning the L2.

Dornyei (1994) furthered the trend away from an exclusively sociocultural perspective on language motivation toward an approach that included a stronger focus on the learning situation.

His educational model included three levels—the language level, the learner level, and the learning situation level. While the language level represented the integrative/instrumental distinction, the learner level considers the learners’ self-confidence in the TL and their need for achievement. The learning situation level considers motivational components related to the course, the teacher, and the peer group. This includes how interesting, relevant, and satisfying the course is to the learner, how controlling versus autonomy-supportive the teacher is, and how cohesive, competitive, or cooperative the learning community is. Similarly, Williams and Burden’s (1997) motivational framework is categorized into internal and external factors. The internal factors include familiar constructs such as intrinsic interest, perceived value of learning activities, attitudes toward language learning, and feelings of agency, mastery, self-concept, confidence, and anxiety. External factors in motivation include the interactions with significant others (e.g., parents, teachers, and peers), the learning environment, and the broader sociocultural context.

This shift from the sociocultural and social psychological approaches to motivation in applied linguistics toward a more pedagogical approach of motivation in action resulted in number of classroom-level interventions. Most notably, the “ten commandments for motivating language learners” synthesized by Dornyei and Csizer (1998; see also Dornyei, 2001)

recommends for educators to:

1. Set a personal example with your own behaviour.
2. Create a pleasant, relaxed atmosphere in the classroom.
3. Present the tasks properly.
4. Develop a good relationship with the learners.
5. Increase the learners’ linguistic self-confidence.

6. Make the language classes interesting.
7. Promote learning autonomy.
8. Personalize the learning process.
9. Increase the learners' goal-orientedness.
10. Familiarize learners with the target language culture (Dornyei & Csizer, 1998, p. 215).

Dornyei (2001) further outlined four components of the motivational teaching practice: creating the basic motivational conditions, generating initial motivation, maintaining and protecting motivation, and encouraging positive retrospective self-evaluation. Guilloteaux and Dornyei (2008) used these components to create a language classroom observation protocol which put particular emphasis on the teacher's discourse style (e.g., promoting autonomy, cooperation, and relevance), participation structure (e.g., group and pair work), activity design (e.g., competition, challenge, and creativity), and learner behaviors (e.g., volunteering, engagement, and attention). Based on their findings, the authors argued that the way language teachers organize the classroom atmosphere and instruction was a significant influence on students' motivation and achievement in language learning.

### ***Early SDT Research in Language Learning***

Early self-determination theory research in language learning and teaching arrived in the midst of the social psychological "Canadian" approach to language motivation. Noels and her colleagues carried out a series of studies in Canada (Noels, Clement, & Pelletier, 1999; 2001; Noels, Pelletier, Clément, & Vallerand, 2000; Noels, 2001) exploring the antecedents, outcomes, and interrelationships of the motivational orientations of SDT's taxonomy (i.e., continuum of amotivation, extrinsic, and intrinsic) and basic psychological needs with those of Gardner (1985) and Clément and Kruidenier (1983). Their first study (Noels, Clément, & Pelletier, 1999)

investigated these variables within the experiences of Anglophone Canadians learning French. Their analysis explored the correlations between the forms of motivation in the SDT taxonomy—amotivation, external regulation, introjected regulation, identified regulation, and intrinsic motivation—with related educational variables denoting perceptions of their teachers and psychological and behavioral outcomes. Results showed that the more autonomous, self-determined forms of motivation—identified and intrinsic—were positively associated with motivational intensity, intentions to continue language learning, self-evaluation, and their final grade in their French program. Students motivated in this way tended to feel that their teachers and learning environment were less controlling. Contrasting this, amotivation was associated with a controlling learning environment, more anxiety, less motivational intensity, self-evaluation, and diminished intentions to continue language learning.

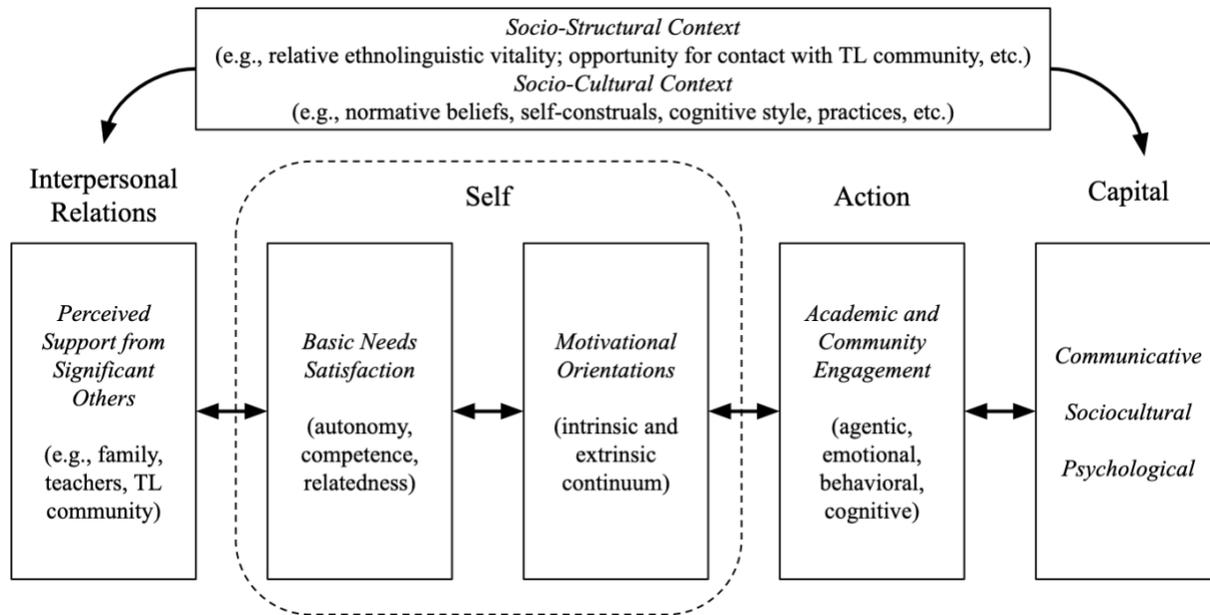
Findings from their follow-up studies (Noels, Clément, & Pelletier, 2001; Noels, Pelletier, Clément, & Vallerand, 2000) showed how more internalized, self-determined forms of motivation—intrinsic and identified regulation—and integrative motivation were associated with language students' feelings of perceived competence and freedom of choice, while amotivation shared a significant negative association. In the final study of this series, Noels (2001) tested the overall hypothesized model at the time of language learning, showing how teacher control negatively predicted autonomy, informative feedback predicted competence, and how feelings of autonomy and competence were indicative of more self-determined forms of motivation. Wu (2003) replicated and extended this investigation to include factors from the immediate language learning environment that support autonomy and competence.

These early investigations of language learning through the lens of self-determination theory painted a unique picture of the power of structuring the language learning environment to

support students' healthy psychological states and learning outcomes. They also began to incorporate the satisfaction of basic psychological needs—autonomy and competence—as mediators between teacher behaviors and students' motivation for learning and learning outcomes. Classrooms in which teachers avoid controls, pressures, and surveillance and, instead, provide constructive, informative feedback and freedom of choice help students to feel autonomous and competent. From this, feelings of autonomy and competence during language learning foster more internalized forms of motivation; that is, students feel more motivated to learn language because they are inherently satisfied by it (i.e., intrinsic motivation), it is congruent with their identity (i.e., integrated regulation), or because it is of personal importance to them (i.e., identified regulation).

### ***Noels' Model of Motivation in Language Learning***

Since these early studies, research in SDT and language learning has developed to include a number of new interrelated constructs that can better explain the motivational process of learning a language. Noels and colleagues (Noels, 2001; Noels et al., 2016; 2019) created a heuristic model to represent this multidirectional process. The model, seen in Figure 2, illustrates how internal psychological states at the *individual level* (i.e., basic needs satisfaction and motivational orientations) can be nurtured by the environment, such as teachers, family members, or the target language community, which can further lead to outcomes such as engagement, communicative and sociocultural capital, and well-being. The model also takes into consideration how broad *structural and sociocultural forces* may impact all parts of the process, such as to what an extent one has access to the target language community, or how some cultural values may shape one's perceptions of whether their learning environment is supportive or controlling.



**Figure 2.** Noels' (Noels et al., 2016) heuristic model of the motivational process in L2 learning

As shown by the directional arrows, reciprocal relationships can exist between constructs. Consider how, at the self-level, the more one feels their basic psychological needs are satisfied in their language learning, the more exciting and personally relevant their motives for learning become, which can reciprocally enhance their feelings for autonomy, competence, and relatedness. At the action and capital components, one can see how increased academic and community engagement can lead to greater communicative outcomes and a fuller sense of well-being in students, which may incite further engagement in and outside of class. Finally, because of the breadth and complexity of the heuristic model, research in this area from the past twenty years frequently tests only parts of sections of the model across various cross-cultural contexts.

Numerous studies have provided evidence in support of the model. At the individual self-level, Hiromori (2003) found that competence and relatedness satisfaction led to high school students' increased intrinsic and identified motivation, but autonomy did not arise as a significant predictor. The author suggested "targeting each learner's perceptions of competence and the

development of each type of motivation could be a good strategy for effectively enhancing his/her self-determined forms of motivation (i.e., intrinsic motivation) in school settings” (p. 174). The positive relationship between basic needs satisfaction and more self-determined forms of motivation has been identified in a number of contexts, including with American high school (Davis, 2018) and postsecondary (Davis, 2020) language learners, Japanese elementary students learning English (Carreira, 2012; Carreira, Ozaki, & Maeda, 2013), and Turkish adult learners of English (Dincer, Yesilyurt, & Noels, 2019), with some qualitative confirmatory support with secondary students in Switzerland (Printer, 2019). These cross-cultural findings provide support for SDT’s claims that basic needs are universally beneficial (Ryan & Deci, 2017).

Basic needs satisfaction has also predicted intentions to continue in language study (Davis, 2020; Fathali & Okada, 2016). As the model depicts, all aspects of the motivational process can be influenced by both one’s own psychological states and the external environment, such as the classroom. Longitudinal findings from Oga-Baldwin et al. (2017) found that an engaging language learning environment, arising from need-supportive teaching and the satisfaction of students’ basic psychological needs, may be an effective means cultivating students’ healthy autonomous motivation for language learning. Dincer, Yesilyurt, and Noels (2019) found similar results, in which an autonomy-supportive classroom environment directly predicted adult Turkish EFL students’ classroom engagement (behavioral, emotional, cognitive, and agentic engagement) and indirectly through the satisfaction of their basic psychological needs. Extending this to include outcomes representing capital, their other work found that agentic and emotional engagement were positively associated with language course achievement, while increased cognitive engagement was negatively associated with absenteeism (Dincer, Yesilyurt, Noels, and Vargas Lascano, 2019).

One study by Noels (2005) turned its focus to the differences in motivational orientations, as well as their perceived basic needs satisfaction and other related outcomes, between heritage and non-heritage learners of German. Supporting the model, intrinsic and more self-determined forms of motivation were positively associated with basic needs satisfaction. Further results showed how heritage learners reported greater perceived competence and relatedness, as well as more German language use, contact with German speakers, and identified regulation motivation. Noels attributed these differences between heritage and non-heritage learners to sociocultural forces. For example, “heritage language learners ... were more likely to be oriented to learn German because it is important to their identity and because they wish to integrate into the German community. These learners were also more likely to claim that they were competent and to evaluate themselves as skilled in German” (2005, p. 302).

### ***Basic Psychological Needs Satisfaction in Language Learning***

The current study focuses particular interest on three aspects of this heuristic motivational model: student activities resulting from the language learning environment (i.e., well-doing), basic psychological needs satisfaction, and psychological capital (i.e., [subjective] well-being and flourishing). These three aspects roughly represent the three components of the Eudaimonic Activity Model. Basic psychological needs satisfaction is undoubtedly the most essential ingredient for enabling learner flourishing. The satisfaction of the three basic psychological needs of SDT—autonomy, competence, and relatedness—act as the mediator between environmental support and perceived well-being. The supports language learners experience in their classroom environment, such as teaching strategies, curricular themes, approaches to teaching, and student-instructor and intra-student interactions, assist in satisfying students’ needs for autonomy, competence, and relatedness, which are indicative of well-being and flourishing.

Noels, Chafee, Lou, and Dincer (2016) argue, however, that specific need-supportive strategies are not a “magic bullet” for enhancing students’ needs and classroom engagement. Instead, the process “might better be conceived of in terms of a gestalt-like impression rather than as a summation of a number of specific strategies” (p. 23), providing further evidence for not dismissing the influence of teachers’ mannerisms, non-linguistic behaviors, and communicative styles on students’ needs, motivation, and engagement.

The following sections document a list of changes to the language learning environment which may support the satisfaction of language learners’ basic psychological needs for autonomy, competence, relatedness, and beneficence. The list was created from reviewing SDT research in language learning between 1999 and 2020. Recommendations include both hypothesized teacher and student activities in the language classroom, as well as environmental changes for which there is empirical evidence. Many hypothesized activities have come from general need-supportive strategies from the SDT literature (Reeve & Jang, 2006), while others have been deduced from theory or experience to fit the L2 learning context (Muñoz & Ramirez, 2015). In addition to the three basic needs of autonomy, competence, and relatedness, the candidate need for beneficence has also been included in this review.

**Autonomy support.** To support the satisfaction of students’ need for *autonomy* during language learning, evidence suggests that educators should promote choice and personal relevance in every aspect of the learning environment. General practices for promoting autonomy may include giving students the opportunity to choose the content and activities with which they engage based on their interests and abilities (Wu, 2003; Davis & Bowles, 2018; Dincer, Yesilyurt, & Takkac, 2012), setting aside time for reflection (Shelton-Strong & Mynard, 2018), prioritizing course-related freedom (Dincer, 2014), applying diverse learning activities

(Dincer, 2014), and releasing control (Noels, 2001). Similarly, Oga-Baldwin and Nakata (2014) suggest providing structure while avoiding rigidity to support autonomy, which may be particularly appropriate for students in non-Western educational contexts, who can “experience autonomy-support in foreign language classes as a combination of clarity, direction, and emotional support” (Oga-Baldwin & Nakata, 2017, p. 10; see also Noels, 2013). Yarwood, Lorentzen, Wallingford, and Wongsarnpigoon (2019) suggest creating a low-stakes, casual, and conversational environment where students may practice using the language with peers or their teachers to support feelings of autonomy (see also Shelton-Strong, 2020).

In an autonomy-supportive communicative classroom, educators can provide students with choice in their language performance outcomes (Wu, 2003) and what they say in the target language (TL) (Jones, Llacer-Arrastia, & Newbill, 2009) such as talking about things in the TL that are personally important to students (Davis, 2018). This might be facilitated through the promotion of student contribution to storytelling in the TL (Printer, 2019) while giving students the room to think about what they want to say and encouraging peer discussion (McEown, Noels, & Saumure, 2014). Oga-Baldwin and Nakata (2014) also suggest that experiential learning may help to support students’ autonomy. Davis and Bowles (2018) further hypothesize that a TL-rich classroom based on compelling input (Krashen & Bland, 2014) would support not only students’ autonomy, but also their competence and relatedness.

**Competence support.** To support feelings of *competence* in the communicative language classroom, language educators should organize learning objectives to promote effective TL communication and comprehension (Davis, 2018; Jones, Llacer-Arrastia, & Newbill, 2009; McEown, Noels, & Saumure, 2014; Printer, 2019). This can be encouraged by students talking about their own perspectives, beliefs, and topics relevant to their identities (Jones, Llacer-

Arrastia, & Newbill, 2009) in an environment where they feel safe, confident, and able to take risks (Dincer, Yesilyurt, & Takkac, 2012; Jones, Llacer-Arrastia, & Newbill, 2009; Printer, 2019). Instantaneous comprehension and reactions in the TL may be particularly supportive of competence (Davis, 2018; Jones, Llacer-Arrastia, & Newbill, 2009). Teachers should also provide appropriate, meaningful feedback (Dincer, 2014; McEown, Noels, & Saumure, 2014; Noels, 2013), share background knowledge and skills required for tasks (Wu, 2003) and give informative praise and encouragement (Noels, 2001; Yarwood, Lorentzen, Wallingford, & Wongsarnpigoon, 2019) while still challenging all learners optimally (Jones, Llacer-Arrastia, & Newbill, 2009). Specific changes to the curriculum which may support competence include incorporating rehearsed performances and TL songs which feature repetition (Oga-Baldwin & Nakata, 2014), authentic language experiences such as field trips, exchange programs, and contact with native TL speakers (Davis & Bowles, 2018), and simply producing significant amounts of TL input for students (Oga-Baldwin & Nakata, 2014).

**Relatedness support.** In education, the need for *relatedness* “is deeply associated with a student feeling that the teacher genuinely likes, respects, and values him or her” (Niemiec & Ryan, 2009, p. 139). To foster relatedness in the communicative language classroom, educators should create activities in which students can learn about and discuss each other’s interests, hobbies, and perspectives in the TL through creative exercises (Jones, Llacer-Arrastia, & Newbill, 2009), debate (Davis, 2018), or learner-directed storytelling (Printer, 2019). Noels (2005) suggests that authentic, interpersonal involvement with members of the TL community could satisfy some students’ needs for relatedness, which could include intercultural exchanges and interactions with teachers who are native speakers (Oga-Baldwin & Nakata, 2014; see also Davis, 2020). Fukuda, Sakata, and Takeuchi (2011) suggest incorporating student-teacher

dialogue journals through which students can reflect, pose questions to, and converse with their teacher in the TL. Their follow-up study (Fukuda, Sakata, & Pope, 2015) found that peer advising may also satisfy relatedness. All of these strategies help build shared experiences in the class, which builds community (Printer, 2019) and generates feelings of empathy, affection, and inclusion (Noels, 2013). Although only hypothesized, Davis and Bowles (2018) propose that the tenets of culturally responsive pedagogy (Gay, 201), such as “teaching to and through cultural diversity” (Gay, 2013, p. 52), may also foster a sense of community and belongingness in class.

**Beneficence support.** Because the candidate need of *beneficence*, or the sense of prosocial impact, has undergone limited empirical study in SDT, recommendations for nurturing this need in the classroom are limited. Davis (2020) hypothesized that feelings of beneficence could be supported through integrated service-learning opportunities in the language classroom (Bettencourt, 2015). Additionally, although not directly associated with beneficence, students voluntarily continuing their language studies at the postsecondary level were strongly motivated to learn a second language to help other people (Davis, 2020).

### ***SDT and Flourishing in Language Learning***

Although considerable research has shown the influence of students’ basic psychological needs satisfaction on their well-being, little language-related SDT research has approached this area. The connections between needs satisfaction, self-determined motivation, engagement, and psychological outcomes such as well-being and flourishing in language education have been posited in some SDT-related articles, but no empirical evidence has yet been presented (Davis & Bowles, 2018; Dincer, 2014; McEown, Noels, & Saumure, 2014; McEown & Oga-Baldwin, 2019; Noels, Chaffee, et al. 2016; Noels, Lou, et al., 2019). This is reflected in SDT’s heavy focus on outcomes related to autonomous and controlled motivation, engagement, performance,

and achievement (Ryan & Deci, 2020). It may also be that well-being is considered a natural, expected outcome of healthy motivation and engagement in learning. In this way, it could be argued that simply providing pedagogical supports for needs, autonomous motivation, and engagement is how one constructs an environment for flourishing in language classrooms; however, as evidenced by the EAM, flourishing comprises more than just these parts. For these reasons, SDT scholarship has not yet provided a discernable picture of what well-being and flourishing looks like in the L2 classroom and how to support them; however, an adjacent area of study, positive psychology, has already begun to elucidate this path.

### ***Positive Psychology and Language Learning***

Positive psychology, loosely defined, is the study of how human strengths and positive emotions can be leveraged to support well-being and flourishing. Seligman and Csikszentmihalyi (2000), considered two of the field's founders, position positive psychology as the exploration of subjective experiences (e.g., well-being, hope, flow, and happiness), individual traits (e.g., love, courage, perseverance, and mindfulness), and institutions (e.g., responsibility, altruism, civility, and tolerance). A positive psychology approach to language acquisition may help in bridging that gap between students' needs, their well-being, and expected linguistic outcomes in educational settings. As mentioned previously, both positive psychology and SDT employ rigorous empirical methods aimed at leveraging positive, humanistic change in individuals. Applying this to the area of second language acquisition education, Dewaele et al. (2019) explain how studies in positive psychology and second language learning share “a desire for the findings to lead to improved educational practices allowing teachers to optimize the emotional climate in their FL classrooms in order to foster linguistic progress and well-being” (Dewaele et al., 2019, p. 6). This dual goal—proficiency outcomes and well-being—addresses the terminating “outcomes” of

the heuristic model of the SDT motivational process (Noels et al., 2016), namely enhanced linguistic (i.e., language proficiency) and non-linguistic (i.e., well-being) outcomes, of which there exists a dearth of research.

The purpose and direction of the intersection of positive psychology and second language acquisition may best be explained by introducing its guiding principles. MacIntyre, Gregersen, and Mercer (2019) characterize positive psychology as a metatheory which “examines a diverse collection of theories and approaches to research within an overarching frame that reflects shared values” (p. 267). The authors introduce a number of core values which illustrate the theory’s relevance to second language learning and teaching, a few of which will be described here.

First, the authors argue that positive psychology “asserts that well-being and related concerns are as worthy of study as trauma and its companions” (MacIntyre, Gregersen, and Mercer, 2019, p. 267). To this end, language educators should look to support positive emotional outcomes for students, and not leverage a theory’s implications for practice only for the sake of reducing negative experiences, which Dewaele et al. (2019) argue has been an exclusive focus in general psychology. The identification and reduction of language anxiety has been a substantial area of L2 research (Horwitz, 2001).

Second, in resonance with the innatist assumptions of SDT (Ryan & Deci 2017; 2019), positive psychology rejects a deficit-based approach to language teaching and, in turn, seeks to capitalize on learners’ innate capacities to be communicative, social, and curious (Oxford, 2016).

Third, positive psychology is critical of schools in that they do not often prioritize the qualities parents seek for their children: happiness, confidence, fulfillment, kindness, and love, among others (Seligman, 2012). Language, more so than most areas of study, is tightly bound with and plays a crucial role in fostering these qualities, as the acquisition of language

necessitates explorations of self, identity, and culture. This resonates deeply with self-determination theory's critical eye toward the role of schools. Finally, in line with an increasing focus of world language curricula on global issues and social justice (Glynn, Wesely, & Wassell, 2018), positive psychology seeks to foster "competences that help promote well-being, not only in the individual but within their communities" (MacIntyre, Gregersen, and Mercer, 2019, p. 268). While SDT's conceptualization of eudaimonic well-being includes the notion of contributing to the greater good (Martela & Sheldon, 2019; Ryan, Curren, & Deci, 2013), prosocial impact has only recently been investigated through the SDT framework (Martela & Ryan, 2015; 2019; Ryan & Martela, 2016; Weinstein & Ryan, 2010), and little to no recommendations for educational practice, let alone language education, have been suggested. This is an area in which the practical and methodologically-adaptable positive psychology is especially useful.

One of the clearest and most thorough explorations of the role of well-being in language learning comes from Rebecca Oxford (2016) in her chapter envisioning the EMPATHICS framework for language learning. EMPATHICS is an acronym "outlining important psychological forces that help learners achieve high well-being and progress rapidly, develop proficiency, and relish the language learning experience" (p. 10). The framework once again reflects the twofold outcomes of providing an emotionally and humanistically nurturing language learning environment: language proficiency and flourishing. The acronym comprises nine dimensions based on each letter: Emotions and empathy; Meaning and motivation; Perseverance (including resilience, hope, and optimism); Agency and autonomy; Time; Hardiness and habits of mind; Intelligences; Character strengths; and Self-factors (including self-efficacy, self-concept, self-esteem, and self-verification). The model hypothesizes that language learners with

high well-being feel and behave in positive congruence with the psychological factors listed above. To highlight a few of these actions and feelings, language learners with high well-being would “recognize their emotions, manage them effectively and show empathy for others ... embody agency and autonomy ... [or] possess self-efficacy, positive self-concepts and high self-esteem, and use self-verification positively” (2016, p. 69). The EMPATHICS framework is particularly beneficial because it sets forth a list of hypothesized language learner attributes indicative of flourishing while relying on existing and highly testable theories and concepts from within and outside of SLA. Oxford’s (2016) framework is partially based on Seligman’s (2018) PERMA framework comprising “Positive Emotion, Engagement, Relationship, Meaning, and Accomplishment” (p. 1).

The following sections will explore the evidence connecting psychological phenomena akin to autonomy, competence, and relatedness with the foundations of flourishing as well as linguistic outcomes. Language teachers have the agency to positively influence students’ psychological states, including their emotions, through how they organize their instruction, interactions, and curriculum in their language course (MacIntyre & Gregersen, 2012). Following Peterson’s (2006) declaration that positive psychology “is not a spectator sport” (p. 25), particular attention will be paid to classroom interventions, intra-peer and student-teacher interactions, and curricular attributes which may contribute to language students’ flourishing through the satisfaction of basic psychological needs and subjective well-being.

### ***Positive Psychology and Flourishing***

Although well-being is central to positive psychology, there is expected disagreement and discrepancies in how it is operationalized in its research in second language acquisition. Conceptions of well-being within positive psychology research in language learning range from

positive emotions such as happiness and enjoyment (Dewaele & MacIntyre, 2014) to the experience of flow (Czimmerman & Piniel, 2016) to the well-being and mindfulness arising from “doing good” through social action (Bouvet, Cosmini, Palaktsoglou, & Vanzo, 2017).

Qualitative responses from Dewaele and MacIntyre (2014) showed that multilinguals’ foreign language enjoyment was supported both through specific situations and the general language classroom environment. Activities fostered foreign language enjoyment when they made students feel like active learners, when they had choice in the class, and when what they were talking about in the TL was relevant to their interests. The environment supported foreign language enjoyment when teachers were “positive, humorous, happy, well-organised, respectful of students” (p. 264), and willing to laugh and provide praise. Out-of-classroom language learning experiences are also a significant source of well-being and proficiency development. Ross and Rivers (2018) found that ESL university students’ out-of-class L2 selves provided a unique contribution to students’ well-being (and frustration) beyond their university English studies. Students’ language enjoyment arose from out-of-class situations where communication was effective, authentic, unstructured, and meaningfully integrated into social connections.

Gregersen’s (2016) work suggests that language interventions incorporating gratitude, altruism, music, laughter, and even pets can support students’ positive emotions, which the author likens to well-being. Tudini and Strambi (2017) recommend that language educators foster commonality and the building of rapport between learners and native speakers to support learner well-being, both in in-class and online settings. The authors suggest that the important feelings of affiliation and belongingness can be encouraged by integrating activities such as self-presentation and the interpersonal exploration of personal and cultural similarities. This may best be summarized by Barcelos and Coelho’s (2016) argument that love is central to positive

emotions in the language classroom, which are “enacted and enhanced through humanizing practices, rapport, micromoments of positive resonance and emotional belonging” (p. 141). The authors synthesize recommendations from the field into a list of daily classroom practices, all of which can be closely related to need-supportive language teaching practices and Oxford’s (2016) EMPATHICS model:

- Create opportunities for students to share interests and positive memories, joys, dreams and hopes, and express and encourage optimism in each other.
- Do physical activities together. Encourage students to talk while walking, taking hikes together, juggling, singing songs with gestures and other physical activities that encourage sharing.
- Share jokes, humour and opportunities to laugh at the same time.
- Maintain rituals that bond the class as a group.
- Watch movies and videos and then talk about experiences of shared admiration and elevation (2016, p. 151).

The social and impactful nature of TL singing can also be an effective means of developing proficiency in a new language, wellness, and psychological health. Kennedy and Miceli (2017) explored this phenomenon within the experiences of Italian learners and native Italian speakers in a choir program in Australia. Their qualitative findings showed how the language learners “exhibited characteristics of wellbeing consistent with the various dimensions of Seligman’s PERMA model” (p. 155) as a result of their choir interactions, specifically positive emotions arising from feelings of accomplishment related to their TL and musical growth, teamwork, and the impact of sharing their music with the public. The authors suggest that the social nature of choir was key in enabling students’ wellness. The Italian learners’

interactions with native speakers put them out of their comfort zone yet within an environment with a “prevailing atmosphere of play, inclusiveness, and solidarity” (p. 156). Additionally, the close proximity and flexible grouping arrangements led to feelings of psychological closeness and the development of intercultural competence. Murphey (2014) drew similar conclusions, finding that singing in the L2 classroom could foster positive affect, feelings of social impact, and social cohesiveness and bonding in and out of the classroom, which closely represent the basic psychological needs for beneficence, competence, and relatedness.

Perhaps the strongest representation of the Eudaimonic Activity Model in SLA research can be seen in a study from Bouvet et al. (2017) exploring the positive impacts of community language placements in Australia. The program, *Language in Action*, “provides opportunities for third-year language students to be involved in community-based projects in culturally and linguistically diverse settings” (p. 160). The authors explain how the program is informed by positive psychology, specifically in how it supports community relationships, compassion, well-being, and life meaningfulness. Additionally, the program considers language learning to be grounded in action and thoroughly student-centered, in line with Tochon’s (2014) Deep Approach to World Languages and Cultures, whose interdisciplinary approach promotes critical thinking, democratic principles, and an “increased sensitivity to our environment and society” (Bouvet et al., 2017, p. 164) while simultaneously developing students’ language and cultural proficiencies.

The study focused on the experiences of students learning Italian within aged-care placements in Australia. Although the participating students were already highly motivated for community engagement and developing their language proficiency, their analysis of students’ qualitative responses demonstrated the significant personal and linguistic rewards of their

placements. Students felt more confident in communicating in the TL as a result of their interactions with their partners, particularly because of their immersive exposure to the language and being able to practice what they had learned in class. Their TL was also used in an unpredictable, real-life context through which they had to apply their linguistic skills to meet challenges and solve problems. Students also felt a sense of belonging to the community due to their authentic engagement in social gatherings, meetings, and planning events. Finally, in support of the Eudaimonic Activity Model (EAM), results showed how “engaging in altruistic actions contributed to their happiness and wellbeing by eliciting positive emotions and a sense of meaning” (2017, p. 171). The benefits from helping were strongest when the students could see the positive impact they had on their community partner.

These findings from Bouvet et al. (2017) and others closely depict student flourishing in language learning, especially in terms of how flourishing is conceptualized in the current study. Additionally, the students’ engagement in their learning placements embodies both the *feeling well* and *doing well* components of eudaimonic flourishing. The language students in the study were engaged in activities characterized by “intrinsic goals, autonomy, mindfulness, and benevolence” (Ryan & Martela, 2016, p. 24), (*eudaimonic activities*), namely authentic, prosocial engagement with others. These eudaimonic activities fostered feelings of autonomy, self-confidence, and belongingness (*basic psychological needs*) as well as positive emotions, self-worth, well-being, and a sense of purpose (*subjective well-being*). Finally, changing one’s practice to support flourishing in language learners is not exclusively managed with students who have attained intermediate or advanced levels of proficiency; even younger students with low, yet developing proficiency can engage in purposeful actions, such as supporting vulnerable others in their community through the TL (Lavery, 2019).

### ***Summary of Flourishing in Language Learning***

The concept of flourishing in language learning remains a fuzzy picture of which many overlapping, yet sometime conflicting perspectives in the literature can be found. Because self-determination theory, positive psychology, and other conceptual frameworks contribute differing perspectives on what constitutes well-being and/or flourishing, there exists significant variation in the interventions, strategies, and approaches to language teaching that are recommended. Beyond this, the direct study of language learners' positive affect and well-being remains a relatively new area of exploration in language learning research (MacIntyre, Gregersen, & Mercer, 2019). While this study is guided by a specific understanding of what constitutes learner flourishing, the Eudaimonic Activity Model comprises three broad components—eudaimonic activities, basic needs satisfaction, and subjective well-being—which can be readily identified within cognitive, self-determination theory, and positive psychology approaches to language teaching and learning research.

An exclusively SDT perspective asserts that there are both subjective and objective components to human flourishing (Ryan & Deci, 2017), which Martela and Sheldon (2019) extend to encompass *feeling well* and *doing well*. Basic psychological needs satisfaction acts as the focal point and mediator between one's eudaimonic well-doing and their subjective well-being. SDT research in language learning, however, does not make this distinction nor explores the characteristics of flourishing. In turn, well-being is one of two outcomes of capital (psychological and linguistic) arising from healthy engagement, autonomous motivation, basic needs satisfaction, the language learning environment, and sociocultural forces. Despite being essential in Noels' model, most SDT studies in language learning tend to analyze other

components of the model instead—particularly motivation, engagement, and language achievement, and how these are encouraged and sustained through the organization of the language classroom. This gap is also apparent in general SDT research in education. Given the essential role of basic needs satisfaction in flourishing, the hearty documentation of need-supportive interventions in the second language classroom provides a solid base for further work.

A positive psychology perspective recognizes well-being as being associated with or arising from certain psychological states or attributes in the language learner (e.g., grit, hope, optimism, courage, empathy). These may be fostered and sustained through the language learning environment. One can find many similarities and connections between the language teaching practices recommended by positive psychology and SDT research, but positive psychology has documented a much clearer and deeper understanding of how need-supportive strategies are integrated into language instruction and curriculum to elicit student well-being and flourishing. In this way, the classroom interventions suggested through positive psychology research in language learning help fill the much-needed pedagogical gap of what exactly language educators can do to support language learners' basic psychological needs.

Despite much disagreement and vagueness between conceptions of flourishing in language learning, they do converge in a few ways. First, most would agree that certain language learning interventions and subsequent language learner actions will support healthy psychological states and attributes which are indicative of well-being and flourishing. While both frameworks, SDT and positive psychology, value the role of subjective positive feelings such as happiness, hope, and joy, the extent to which positive psychology is aligned with objective measures of wellness such as basic needs and eudaimonic activities is somewhat undefined. One can clearly see the influential role of language learners' volition (*autonomy*), self-efficacy,

mastery, and impact (*competence*), care, love, and connectedness (*relatedness*), and kindness, empathy, and altruism (*beneficence*) in positive psychology frameworks for well-being.

Additionally, many of the well-being-enhancing interventions for language teaching suggested through this area of research resonate strongly with eudaimonic activities and the strategies for satisfying language learners' basic psychological needs, while other activities seem to only help language learners feel momentarily happy or joyful (Gregersen, 2016). In sum, both self-determination theory and positive psychology provide unique and valuable understandings of how language educators may organize their language acquisition environment to aim for learner flourishing.

## CHAPTER III

### METHODS

#### Overview

This mixed methods study explores the characteristics of university world language courses which cultivate language learners' basic psychological needs and eudaimonic flourishing. The research questions and quantitative hypothesis which guide the study are informed by the Eudaimonic Activity Model (EAM), which is built upon self-determination theory (SDT). Based on an examination of the relevant literature, the following methodology has been proposed to fully address the research questions.

#### Research Questions

##### *Overarching Mixed-Methods Research Question*

What are the characteristics of university world language education which foster student flourishing?

##### *Quantitative Hypothesis:*

*H1:* Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class.

##### *Qualitative Research Questions*

1. What are the characteristics of university world language learning environments that are conducive to learners' basic psychological needs satisfaction?
2. What are the characteristics of university world language learning environments that foster learners' engagement in eudaimonic activities?

## Research Design

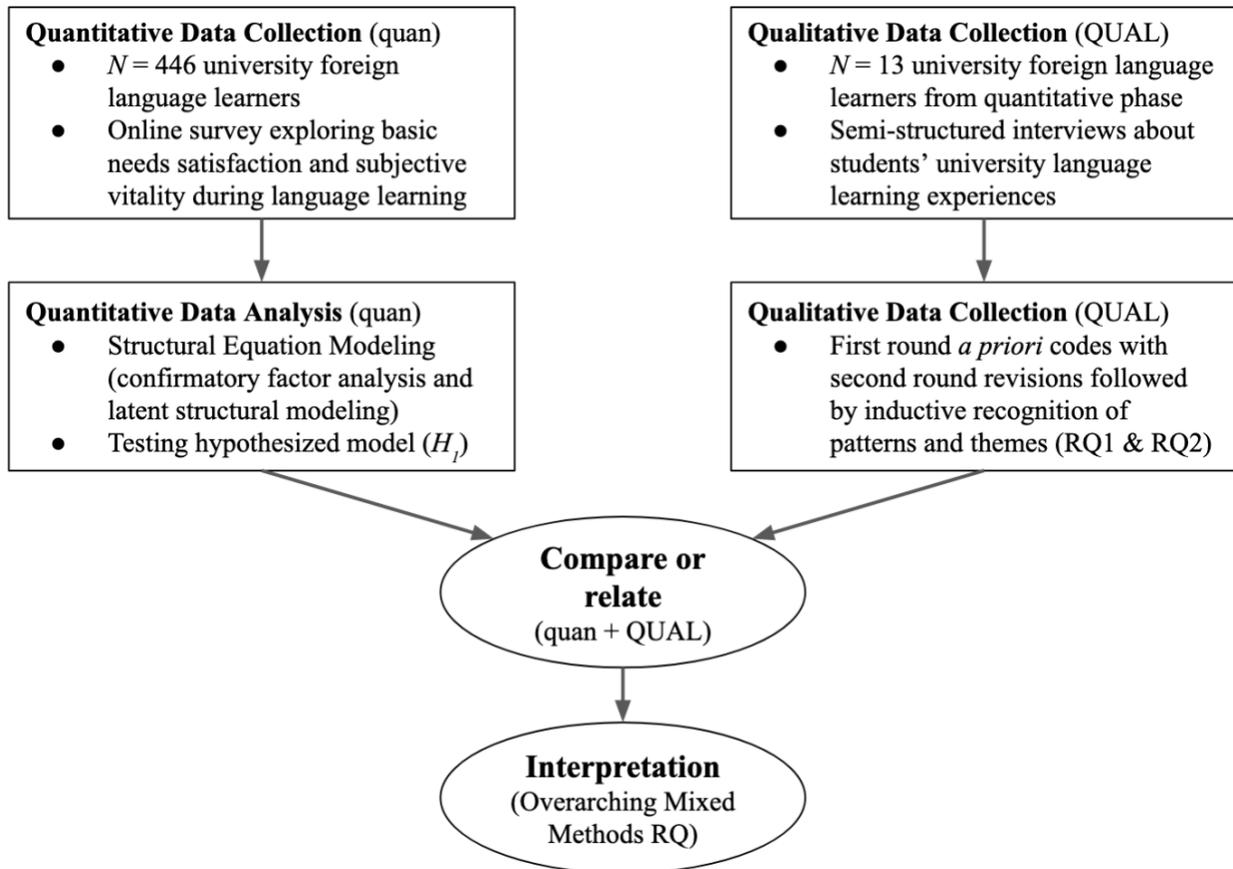
This study adopted a mixed methods research design, which “involves combining or integration of qualitative and quantitative research and data in a research study” (Creswell, 2014, p. 14). Creswell and Plano Clark (2018) define mixed methods research by outlining its core characteristics. A research employing a mixed methods approach:

- Collects and analyzes both qualitative and quantitative data rigorously in response to research question and hypotheses,
- Integrates (or mixes or combines) the two forms of data and their results,
- Organizes these procedures into specific research designs that provide the logic and procedures for conducting the study, and
- Frames these procedures within theory and philosophy. (p. 5)

A mixed methods design was selected for this study because a single line of inquiry was not appropriate for the fulfilling the study’s objectives. An exclusively quantitative or qualitative approach would not be able to fully address the overarching research question. A convergent parallel mixed methods design was selected which includes quantitative and qualitative phases through which data will be collected and analyzed separately (Creswell, 2014). Results from each of the two phases were compared, synthesized, and interpreted in light of each phase’s findings. Significant emphasis was put on the analysis of the qualitative interview data (quan + QUAL) due to the exploratory design of the qualitative phase.

The quantitative component, given the use of structural equation modeling with a large participant sample, allows for generalization and resonates with the universality claims of SDT. The qualitative component, however, contributes uniquely to the study’s objectives by

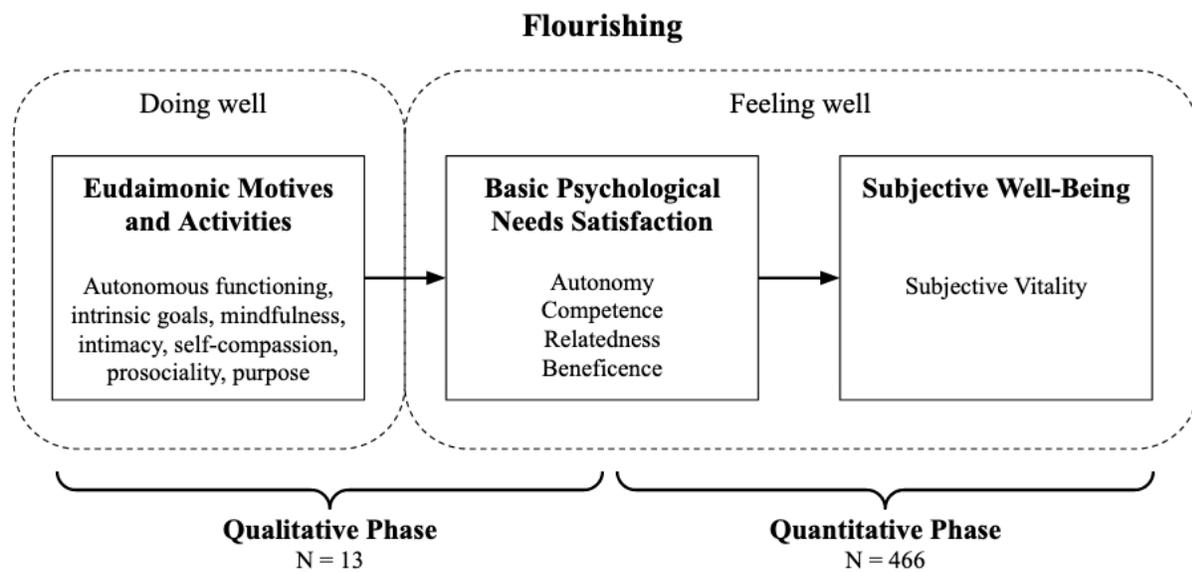
identifying the complex circumstances through which students’ language learning aligns with the EAM’s model for flourishing. In sum, “the combination of quantitative and qualitative data provides a more complete understanding of the research problem than either approach by itself” (Creswell and Plano Clark, 2018, p. 8). Figure 3 illustrates how mixed methods informs the study’s design.



**Figure 3.** Convergent parallel mixed methods design

While the quantitative and qualitative data were not collected simultaneously, the experiences to which participants’ responses in both phases refer are largely situated within the world language courses in which they were enrolled in the Fall 2019 semester. The results were analyzed separately, yet more emphasis was placed on the qualitative findings; the nature of the semi-structured interviews from the qualitative phase allowed for a more individualized

exploration of the first two components within the EAM (*eudaimonic activities* and *basic psychological needs satisfaction*) within a small group of purposefully-selected participants, while the quantitative component tested the direct association between the latter two components (*basic psychological needs satisfaction* and *subjective well-being*) with a large participant sample for generalizability. After the analysis of both components, the findings were compared, related, and interpreted in light of the study’s overarching mixed methods research question: *What are the characteristics of university world language education which foster student flourishing?* Specifically, the findings were able to synthesize a clearer image of how flourishing may or may not be encouraged in university world language classes by deductively examining all three components of the EAM with basic psychological needs as a focal point between both phases. Figure 4 illustrates each of the phases addresses the construct of flourishing in language education.



**Figure 4.** Alignment of study’s phases with EAM model for flourishing

The selection of a mixed methods approach is also grounded in the study’s theoretical framework and significance. Research in self-determination theory tends to employ quantitative

methods which place “emphasis on explicit hypotheses, operational definitions, observational methods, and statistical inferences, as central and meaningful to its [the theory’s] epistemological strategy” (Ryan & Deci, 2017, p. 5). Despite this, there has been a recent call for the inclusion of qualitative approaches that “help in identifying concrete manifestations and themes underlying experiences of need satisfaction and frustration in diverse life domains, developmental periods, and cultures” (Vansteenkiste, Ryan, & Soenens, 2020, p. 6)

### **Research Context**

The context of this study is situated within undergraduate language courses offered through the world languages department at a large, land-grant public university in the southeastern United States. The institution had an enrollment of over 25,000 undergraduate, graduate, and law students during the Spring 2020 semester. Of the enrolled students, approximately three-fourths identified as white, a small majority of students identified as female, and just over half were state residents followed by out-of-state and international students.

The university’s department of world languages offers courses in eleven languages—Arabic, Chinese, Classics, French, German, Italian, Japanese, Spanish—including three less commonly taught languages: Portuguese, Russian, and Swahili. The mission statement of the department emphasizes the cultivation of global citizenship resulting from a deep understanding of culture arising from proficiency in another language. The department offers undergraduate, masters, and doctoral degrees in language, literature, and cultural studies, interdisciplinary studies programs, and study abroad opportunities.

### **Quantitative Phase**

The quantitative phase of the study contributes to addressing the overarching mixed methods research question (*What are the characteristics of university world language education*

which foster student flourishing?) by testing a quantitative hypothesis: *H1*: Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class. This phase of the study included a questionnaire about participants' demographic information, their current language course and its relationship to their major or minor, and their perceptions of their basic psychological needs satisfaction and subjective vitality during their world language course.

### ***Participants***

Participants in the quantitative component of the study included a large sample of 466 undergraduate students enrolled in one or more world language courses during the Fall 2019 academic semester at their institution. Email addresses of students who met the criteria were obtained through the university's Office of the Registrar, from which 2,367 email addresses were received. The criteria for potential participants was that they were undergraduates enrolled in one or more world language courses during the Fall 2019 semester. The collection of 466 complete responses represents a 19.7% response rate.

Participants' ages ranged from 18 to 74 ( $M = 20.8$ ,  $SD = 5.1$ ). Of the 466 participants, 108 identified as male (23.2%), 354 identified as female (76.0%), and 4 identified as transgender, gender non-conforming, or other (0.9%). The large majority of participants identified as white/Caucasian (82.0%), followed by Latinx (6.2%), Asian (4.9%), African American (3.2%), Native American (1.5%), Pacific Islander (0.2%), and other unlisted identifications (1.9%). The language courses and levels in which participants were enrolled at the time of data collection can be seen in Table 1.

Table 1.  
*Participants' language courses and levels (quantitative phase)*

	<i>N</i>	<i>%</i>
Language		
Arabic	14	3.0%
Chinese	33	7.1%
Classics	11	2.4%
French	66	14.2%
German	50	10.7%
Italian	29	6.2%
Japanese	31	6.7%
Portuguese	2	0.4%
Russian	4	0.9%
Spanish	215	46.1%
Swahili	7	1.5%
Other	4	0.9%
Language Course Level		
Elementary I	110	23.6%
Elementary II	60	12.9%
Intermediate I	99	21.2%
Intermediate II	43	9.2%
Higher than Intermediate II (Advanced)	154	33.0%

*Note.* *N* = 466.

Almost half of the respondents were studying Spanish (46.1%) followed by French (14.2%), German (10.7%), Chinese (7.1%), Japanese (6.7%), Italian (6.2%), and a number of other languages (9.0%). The language courses in which participants were enrolled were evenly distributed across Elementary (36.5%), Intermediate (30.4%), and Advanced levels (33.0%).

### ***Materials***

Participants completed one online survey during the first three weeks of December 2019 (Appendix A). The online survey included items which collected responses regarding participants' demographic information (i.e., gender identity, racial/ethnic identity, and age), their language course information (i.e., language and level), their perceived basic psychological needs satisfaction during their world language course (autonomy, competence, relatedness, and beneficence), and their subjective vitality during their language course.

**Language course information.** Items in this section asked participants about the language course in which they were enrolled and the relationship between that language and their major or minor. The eleven language options (i.e., Arabic, Chinese, Classics, French, German, Italian, Japanese, Portuguese, Russian, Spanish, and Swahili) were followed by an option for “other.” Further items asked participants about their current course level (i.e., Elementary I or II, Intermediate I or II, or higher than Intermediate II [Advanced]), approximately how many students were enrolled in their course, and if the language they were learning was either their major, minor, or neither.

**Basic psychological needs satisfaction.** To assess students’ satisfaction of the basic psychological needs for autonomy, competence, and relatedness in their world languages course, the satisfaction items from the Basic Need Satisfaction and Frustration Scales were selected (Chen et al., 2015). The scale has exhibited strong factor loadings and internal consistency in previous research (Chen et al., 2015; Liga et al., 2020; Martela & Ryan, 2015; 2020). The scale includes four items each for autonomy (“I feel a sense of choice and freedom in the things I undertake”), competence (“I feel capable at what I do”), and relatedness (“I feel connected with people who care for me, and for whom I care”). All items were preceded by the stem, “*Recently in my world language course, ...*” and were rated on a scale of 1 (“strongly disagree”) to 7 (“strongly agree”).

**Beneficence satisfaction.** The experience of beneficence satisfaction in their world language course, or the “subjective sense of having a positive prosocial impact on others” (Martela & Ryan, 2015, p. 2) was measured through the Beneficence Satisfaction Scale (Martela & Ryan, 2015). The scale includes four face-valid items (e.g., “I feel that my actions have a positive impact on the people around me”) and has consistently demonstrated convergent

validity, strong factor loadings, and good internal consistency in previous studies (Martela & Riecki, 2018; Martela & Ryan, 2015; 2020). All items were preceded by the stem, “*Recently in my world language course, ...*” and were rated on a scale of 1 (“not at all true”) to 7 (“very true”).

**Vitality.** The experience of subjective vitality, referring to “the self-conscious experience of energy and aliveness” (Delgado-Lobete et al., 2020, p. 2) and an essential indicator of well-being (Huta, 2016; Ryan, Huta, & Deci, 2008), was measured through the Subjective Vitality Scale (Ryan & Frederick, 1997; Bostic, Rubio, & Hood, 2000). Vitality represents a significant portion of subjective well-being, which comprises both affective (e.g., happiness) and cognitive (e.g., satisfaction with life) components (Diener, 2000). Two forms of the scale are provided: the individual difference level version measuring individuals’ ongoing characteristics, and the state level version which measures one’s current, contemporary state of subjective vitality. This questionnaire adopted the individual difference level version of the scale in order to accurately assess participants’ ongoing experiences of vitality during their world language course.

The scale lists seven items measuring subjective vitality (e.g., “I have energy and spirit”). All but one item was included in the questionnaire because of their ability to be transferred from use in the general life domain to a domain-specific context (i.e., at the classroom level). The fifth item, “I look forward to each new day,” was not included in the questionnaire due to its inherent inapplicability to the university classroom context. This resulted in six items which were preceded by the stem, “*Recently in my world language course, ...*” and were rated on a scale of 1 (“not at all true”) to 7 (“very true”).

### ***Data Collection Procedure***

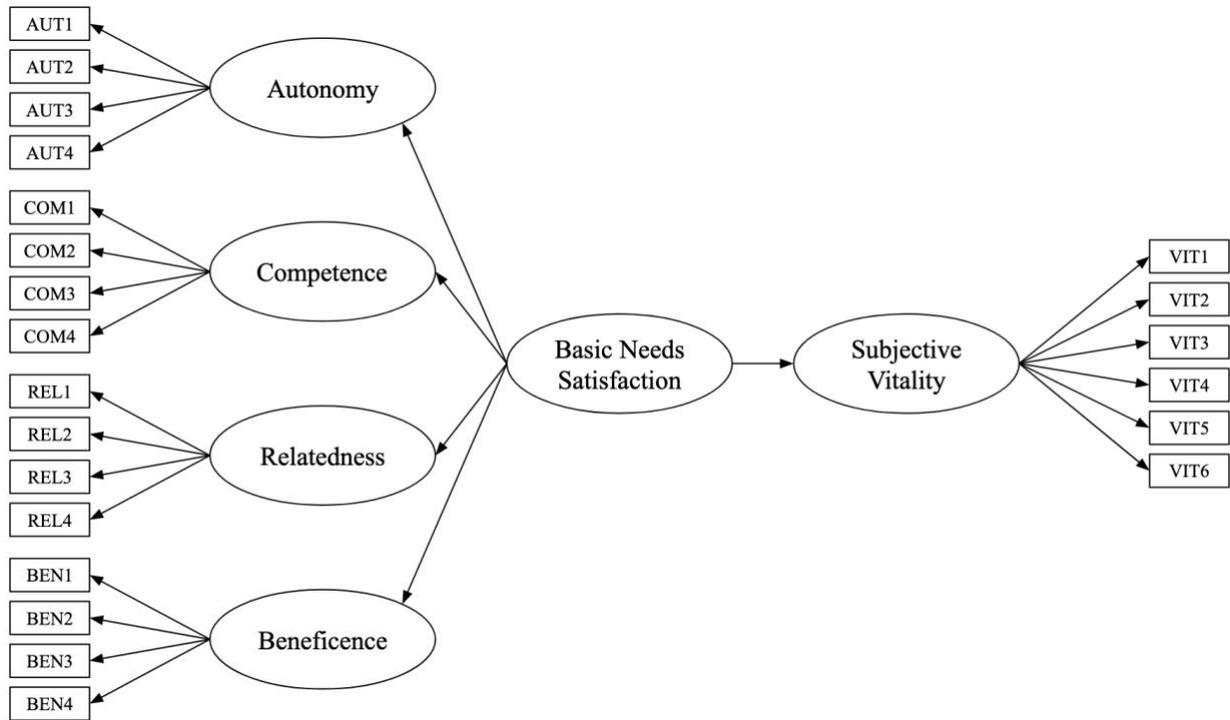
Exempt approval from the university's IRB office was obtained prior to collecting data (Appendix G). The online survey was sent to potential participants' email addresses ( $N = 2,367$ ) through Qualtrics, an online survey platform, during the first week of December 2019 (Appendix D). A follow-up reminder email was sent one week later. The survey remained open for three weeks. Participants were notified that completion of the instrument would indicate permission to use the information provided anonymously and confidentially for research purposes. Participants who submitted a complete survey were entered into a drawing for one of three gift cards to a popular online retailer. The three winners were notified and received their gift card one month after the close of the survey.

### ***Quantitative Analysis***

Structural equation modeling (SEM) was utilized to analyze the quantitative data in this mixed-methods study. The general purpose of SEM is to test a theory or other hypothesized framework. This is done by selecting variables which accurately represent the constructs within the theory and proposing an *a priori* (preceding observation) model hypothesizing the predictive relationships between them. In the quantitative component of this study, the constructs of interest include the two *feeling well* elements of the Eudaimonic Activity Model (Martela & Sheldon, 2019): basic needs satisfaction and subjective well-being (SWB).

These elements comprise five first-order latent factors—autonomy satisfaction, competence satisfaction, relatedness satisfaction, beneficence satisfaction, subjective vitality—each of which comprise a number of Likert items as individual indicators. In addition to the first-order factors, one second-order factor—basic psychological needs satisfaction—uses the four first-order need satisfaction factors as indicators. Figure 5 depicts the hypothesized model. SPSS

version 26 was used for data cleaning and computing descriptive statistics and correlation matrices. Mplus version 7.31 was used for all SEM analyses (Appendix E).



**Figure 5.** Hypothesized model for testing  $H_1$

**Likert items as factor indicators.** There has been disagreement and inconsistency in recommendations for how Likert items should be treated in SEM. Historically, Likert items have been treated as continuous variables, while more recent approaches have recommended analyzing them as ordinal (categorical) data. This is of note because continuous and categorical data exclude the use of certain estimators within SEM, from which differing indices of model fit can be produced. Kline (2016) suggests that estimators appropriate for continuous variables (i.e., variants of maximum likelihood) “are not the best choice when the indicators are Likert-scale items with a relatively small number of categories (e.g., five or fewer) or response distributions are severely asymmetrical” (p. 323). Based on this, he recommends the use of weighted least

squares (WLS) estimator, specifically the robust mean- and variance-adjusted WLS (WLSMV), for indicators using Likert items.

Byrne (2012), however, expresses that Likert items representing categorical data can be treated as continuous through ML estimation when there are a large number of scale choices for the instruments. Pituch and Stevens (2016) recommend WLS estimators for scales with less than four choices, while Byrne (2012) used the WLSMV estimator for latent factors comprising items with four scale choices. Recent research in self-determination theory (SDT) employing SEM has complemented Byrne's (2012) approach and used ML estimators, particularly robust versions (Satorra & Bentler, 1994; Yuan & Bentler, 1998), when using similar five- and seven-point Likert scales measuring basic psychological needs and other psychological constructs through CFA and structural models.

Due to minimal non-normality, as well as the large number of scale points for the items (more than 4), the MLM estimator was selected for further all SEM analyses, following the nuanced recommendations from the field (Byrne, 2012; Kline, 2016; Pituch & Stevens, 2016). The MLM estimator offered through Mplus "estimates with standard errors and a mean-adjusted chi-square test statistic that are robust to non-normality" (Muthén & Muthén, 2017, p. 667). This test statistic is known as the Satorra-Bentler scaled chi-square (Satorra & Bentler, 1994), which applies a scaling correction factor in consideration of kurtosis (Kline, 2016).

**Assessing model fit.** The quantitative phase of the study tests a hypothesis by using SEM. In SEM, evaluating how well a proposed model fits the data is multifaceted and not the result of explicit significance testing. Instead, researchers employing SEM should examine a number of data points instead of one single measure. The most common means of assessing how well the model fits the data are indices of model fit, which are reported in the results for each

model. Following recommendations from Kline (2016), this study reports four fit indices for each model:

1. **Scaled  $\chi^2$** : The scaled Satorra-Bentler chi-square (SBS- $\chi^2$ ) including degrees of freedom (in parentheses) and significance. A non-significant test statistic indicates good model fit; however, larger sample sizes ( $N > 300$ ) (Kline, 2016) may inflate  $\chi^2$  resulting in the rejection of exact fit.
2. **Root Mean Square Error of Approximation) RMSEA**: with 90% confidence interval in brackets. RMSEA is “an absolute fit index scaled as a badness-of-fit statistic where a value of zero indicates the best result” (Kline, 2016, p. 273). RMSEA values below 0.05 indicate “close fit” and values between 0.05 and 0.08 indicate “adequate fit” (Pituch & Stevens, 2016, p. 654).
3. **Comparative Fit Index (CFI)**: The Bentler CFI value “is an incremental fit index that is also a goodness-of-fit statistic. Its values range from 0 to 1.0 where 1.0 is the best result” (Kline, 2016, p. 276). CFI values above 0.90 indicate adequate fit (Kline, 2016; Pituch & Stephens, 2016).
4. **Standardized Root Mean Square Residual (SRMR)**: Like RMSEA, SRMR is a badness-of-fit indicator in which a value of 0 represents perfect fit. SRMR values of 0.05 or less indicate “good fit” while values between 0.05 and 0.10 indicate “acceptable fit” (Pituch & Stevens, 2016, p. 654). Hu and Bentler (1999) suggest a rule in which an SRMR value below 0.08 in combination with CFI  $> 0.95$  indicates adequate fit.

Making a determination about the adequacy of the model cannot solely be done through model fit indices—the model’s parameter estimates must also make sense. For this study, models

with results including multiple indicators of good or adequate fit (e.g.,  $\chi^2$ , RMSEA, CFI, SRMR) as well as parameter estimates of the expected polarity and significance will provide evidence in support of the quantitative hypothesis (*H1*): Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class.

### **Qualitative Phase**

The qualitative phase of the study involved follow-up interviews with a small number of participants from the quantitative phase. The purpose of the qualitative phase was to explore more deeply the experiences of university world language learners within the Eudaimonic Activity Model framework informed by SDT. More specifically, the purpose of the qualitative component was to identify certain instructional antecedents to students' basic psychological needs satisfaction and its eudaimonic antecedents. In order to address the overarching mixed methods research question (*What are the characteristics of university world language education which foster student flourishing?*), the qualitative phase was guided by the following research questions:

1. What are the characteristics of university world language learning environments that are conducive to learners' basic psychological needs satisfaction?
2. What are the characteristics of university world language learning environments that foster learners' engagement in eudaimonic activities?

### ***Participants***

Participants in the qualitative phase included a purposeful selection of 13 participants from the quantitative phase of the study. The sampling strategy for the qualitative phase was guided by purposive sampling, which involved the deliberate selection of specific individuals

“because of their unique ability to answer the study’s research questions” (Ravitch & Carl, 2016, p. 128). A sample of participants with a representative range of languages and course levels was intended to gain a broader understanding of the role of basic needs satisfaction and its eudaimonic antecedents in postsecondary foreign language education. Of the 466 participants from the quantitative phase, 192 noted they would be interested in being interviewed about their language learning experiences. Groups comprising approximately thirty students with representative samples of language and levels were contacted at a time about the opportunity for a follow-up interview. Similar groups continued to be contacted until a sufficient number of interviews were scheduled ( $N = 13$ ). Pseudonyms were created for the participants (see Table 2).

Table 2.  
*Participants in the qualitative phase*

<i>Name</i>	<i>Interview format</i>	<i>Gender and racial/ethnic identity</i>	<i>Language, course level, and relationship to degree major or minor</i>
Cody	Zoom	M, Asian	Japanese (Elem./Neither)
Cora	In-person	F, Latinx	Spanish (Adv./Maj.)
Courtney	Zoom	F, White	French (Elem./Neither)
Daniela	In-person	F, White	Spanish (Adv./Maj.) & Italian (Int./Min.)
Hannah	Zoom	F, White	Spanish (Int./Neither)
Liam	In-person	M, White	French (Adv./Min.)
Mark	In-person	M, White	Spanish (Int./Neither)
Melissa	Zoom	F, Biracial	Japanese (Adv./Neither)
Michael	In-person	M, White	Italian (Elem./Min.)
Nicole	Zoom	F, White	German (Int./Min.)
Paige	In-person	F, White	French (Elem./Min.)
Summer	Zoom	F, White	Spanish (Adv./Maj.)
Tess	Zoom	F, White	Spanish (Adv./Min.)

*Note.* Names are pseudonyms. F = female; M = male; Maj. = major; Min. = minor; Neither - neither major nor minor; Elem. = elementary; Int. = intermediate; Adv. = advanced.

Of the 13 participants in the qualitative phase, nine identified as female and four as male. Ten of the interviewees self-identified as white, one as Latinx, one as Asian, and one as biracial. Participants’ languages studied included Spanish, French, Italian, Japanese, and German and represented a mix of elementary, intermediate, and advanced course levels. Of the 14 language

study programs represented, three of them were majors for the participants, six of them were minors, and five were neither a major nor a minor.

Students' rationales for beginning to learn a new language varied widely. Five of the students (Daniela, Michael, Summer, and Cody) were studying the language because it was connected to their ancestry or family, in particular Cora, a heritage speaker of Spanish. Others were drawn to the language due to their interest in the music, art, or media created by cultural groups who speak the language (Liam, Cody, Melissa) or simply chose the language course at random (Nicole), while the rest of the participants chose to continue the language studies they had already begun at the high school level (Mark, Hannah, Paige, Melissa, Summer, Tess, and Courtney). Students' motivations and goals for learning the languages were also diverse. The major motivations represented by the students included enrolling in a language course in order to learn to speak the language (all participants), because the language would be useful to them or their career (Daniela, Mark, Hannah, Michael, Liam, Cora, Melissa, Summer, and Tess), because it would directly support them in their goal to help others in their future or current work (Daniela, Mark, Hannah, Melissa, and Tess), because they found it to be a fun and enjoyable undertaking (Daniela, Michael, Liam, Nicole, and Cody), and to become closer to their family or cultural history (Daniela, Michael, Cora, and Cody).

### ***Materials***

Interviews were guided by a semi-structured interview protocol (Appendix B). Semi-structured interviews entail the use of instruments which "organize and guide the interview but can also include specific, tailored follow-up questions within and across interviews" (Ravitch & Carl, 2016, p. 154). The interview protocol included questions about students' current and prior language courses and levels, their reasons for learning a new language, and their expectations

and impressions from the courses. Two questions sought to understand their levels of comprehensibility of the target language produced by their instructor and their peers, and another explored the balance students experienced between how much of the target language in class was produced by students as opposed to their instructor. The second half of the protocol sought to identify certain instances where students felt their needs for autonomy, competence, relatedness, and beneficence were satisfied, as well as times where students felt they were flourishing.

### ***Data Collection Procedure***

Exempt approval from the university's IRB office was obtained prior to participant recruitment and interviews (Appendix H). Due to campus closures resulting from the COVID-19 pandemic, approximately half of the interviews were conducted over Zoom, while the rest were conducted in-person on the university's campus. The interviews took place within a one-month period of time during the Spring 2020 academic semester (Appendix D). All participants in this phase read and signed a consent form before the interview began (Appendix C). The duration of each interview was approximately 30 to 40 minutes. Each participant was interviewed once. The audio from each interview was recorded, transcribed, verified, and loaded into Dedoose (version 8.3.17), a web-based software package for qualitative data analysis.

### ***Qualitative Analysis***

The interview data in the qualitative phase was analyzed through a mixture of deductive and inductive approaches, in which the application *a priori* and revised codes led to the inductive emergence of themes in the data. This approach is similar to typological analysis (Hatch, 2002), an analytic strategy that involves dividing the data into categories and then exploring patterns, relationships, or themes within them. In typological analysis, the original codes—or “categories”—should be based on some predetermined typologies, such as theory, philosophical

assumptions, or previous empirical findings (Given, 2008). While it may seem that such a heavily theory-driven method will “blind the researcher to other important dimensions in the data” (Hatch, 2002, p. 161), the approach employed in the qualitative phase of this study relies strongly on the emergence of themes and relationships within and between codes.

In the qualitative phase, the first round *a priori* codes chosen for initially categorizing the data were informed by the Eudaimonic Activity Model (EAM) and self-determination theory (SDT). These first cycle codes included the first two components of the EAM: *eudaimonic activities* and *basic psychological needs satisfaction*. Eudaimonic activities refer to behaviors characterized by “doing well,” which were represented by four subcodes: autonomous functioning, mindfulness, intimacy, and service to others. Basic needs satisfaction represented one of the “feeling well” components of flourishing and included the three basic needs of SDT—autonomy, competence, and relatedness—and the candidate need of beneficence (i.e., perceived prosocial impact). Table 3 defines these two categories and their codes so that they can be accurately identified within the interview data. The definitions for each typology originated from the relevant literature (Huta, 2013; Martela & Sheldon, 2019; Ryan, Curren, & Deci, 2013; Ryan & Deci, 2017; Ryan, Huta, & Deci, 2008; Ryan & Martela, 2016; Sheldon, 2018).

Table 3.  
*Codes and their definitions for qualitative data analysis*

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**Eudaimonic activities and motives**

- **Autonomous functioning:** pursuing and attaining intrinsic goals; acting in line with one’s values, identity, and emotions; personal growth
- **Mindfulness:** being present in the moment to what is happening internally and externally; valuing the process; observant toward experience
- **Intimacy:** connecting deeply and meaningfully with others; self-compassion
- **Service to others:** helping; prosociality; benevolence

**Basic psychological needs satisfaction**

- **Autonomy:** volitional, congruent, integrated, and self-endorsed
  - **Competence:** a sense of mastery and effectiveness
  - **Relatedness:** socially connected; belongingness; care and reciprocity
  - **Beneficence:** a prosocial impact on others; contribution to society
-

Following recommendations from Saldana (2013), the qualitative phase remained open to the multiple revisions to the *a priori*, theory-driven set of categories and codes. Saldaña (2013) states that “rarely will anyone get coding right the first time” (p. 10) and recommends cycles of code revision. Data excerpts which represent one or more of these theoretical items were coded using Dedoose (Appendix F).

While reading and coding the data, writing analytic memos, and engaging in dialogue with others, some themes emerged. Hatch (2002) explains that patterns are regularities which may be based on or include similarity or differences, frequency, sequence, correspondence, or causation. Relationships are links between data characterized by categorization, rationale, and cause and effect, and themes are “integrating concepts” which “run through all or most of the pertinent data” (Hatch, 2002, p. 156). After patterns, relationships, or themes were selected or hypothesized, the data was re-read with them in mind. Data-driven decisions were made if the patterns were supported by the participants’ voices. This was also done through searching for nonexamples of the hypothesized patterns throughout the dataset.

Validity was ensured during qualitative analysis through the inclusion of multiple cycles of coding, analytic and reflective memos, and dialogic engagement with colleagues. Multiple cycles of coding ensured that the codes and findings are sound and that there is significant evidence in support for both and little to no evidence in disagreement. Analytic memos were written throughout data collection, coding, and the formation of themes and findings to foster “researcher reflexivity on the data corpus” (Saldaña, 2013, p. 42). Shared dialogue with colleagues also helped subject the researcher’s interpretations of the data to critical scrutiny from others (Ravitch & Carl, 2016).

Finally, simple conclusion statements of generalization were written for each major pattern found in the data. From this, data excerpts which accurately supported these findings were selected and emphasized in the results. The use of participants' voices which clearly and powerfully represented the research findings is beneficial for the reader.

### **Summary of Methods**

A mixed methods design fully supports the objectives of the study. The use of exclusively quantitative or qualitative approaches to analysis would not be able to effectively address the overarching research question, *What are the characteristics of university world language education which foster student flourishing?* To this end, the proposed methodology included both a quantitative and qualitative component. The quantitative phase tested the hypothesis ( $H_1$ ) that the satisfaction of foreign language learners' basic needs has a direct effect on their subjective vitality in their learning through the use of structural equation modeling with a large representative sample of undergraduate language learners. The qualitative phase explored the antecedents to language learners' basic needs satisfaction and flourishing, specifically through the identification of specific eudaimonic practices in which students are involved as a result of their language learning. The following chapters present the results from both phases and then compare and relate them in order to respond to the study's overarching mixed methods research question.

## CHAPTER FOUR

### RESULTS FROM THE QUANTITATIVE PHASE

#### **Introduction**

The quantitative phase of the study seeks to address the overarching mixed methods research question (*What are the characteristics of university world language education which foster student flourishing?*) by testing a quantitative hypothesis: *H1*: Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class. Structural equation modeling (SEM) was used to test this hypothesis.

#### **Preliminary Results**

Descriptive statistics were run and analyzed for each item. Means, standard deviations, and values of skewness and kurtosis for each item and scale are shown in Table 4. To evaluate univariate normality, the values for skewness and kurtosis, normal probability plots (P-P), and frequency histograms with a normal curve were examined for each item. Although there are no official cutoffs, a conservative interpretation of strong skewness and kurtosis is when the values exceed +/- 2.0 (Pituch & Stevens, 2016).

The five scales comprising 22 items received responses on a 7 point scale. Most of the items shared similar means and standard deviations. The large majority of items exhibited acceptable normality.

Table 4.

*Means and standard deviations of scale items*

<i>Scale and items</i>	<i>M</i>	<i>SD</i>	<i>Skew</i>	<i>Kurt</i>
<b>Autonomy satisfaction</b>				
AUT1: I feel a sense of choice and freedom in the things I undertake.	5.21	1.49	-0.82	0.01
AUT2: I feel that my decisions reflect what I really want.	5.34	1.39	-1.00	0.84
AUT3: I feel my choices express who I really am.	5.37	1.27	-0.99	1.00
AUT4: I feel I have been doing what really interests me.	5.26	1.58	-1.00	0.39
<b>Competence satisfaction</b>				
COM1: I feel confident that I can do things well.	5.14	1.56	-1.04	0.41
COM2: I feel capable at what I do.	5.22	1.52	-1.21	0.95
COM3: I feel competent to achieve my goals.	5.52	1.39	-1.23	1.40
COM4: I feel I can successfully complete difficult tasks.	5.24	1.52	-1.10	0.68
<b>Relatedness satisfaction</b>				
REL1: I feel that the people I care about also care about me.	5.50	1.22	-1.00	1.34
REL2: I feel connected with people who care for me, and for whom I care.	5.37	1.39	-1.08	1.13
REL3: I feel close and connected with other people who are important to me.	5.42	1.23	-0.89	0.81
REL4: I experience a warm feeling with the people I spend time with.	5.31	1.36	-0.96	0.83
<b>Beneficence satisfaction</b>				
BEN1: I feel that my actions have a positive impact on the people around me.	5.37	1.11	-0.84	1.35
BEN2: The things I do contribute to the betterment of society.	4.98	1.36	-0.61	0.46
BEN3: I have been able to improve the welfare of other people.	4.65	1.40	-0.41	0.07
BEN4: My influence in the lives of other people has been positive.	5.33	1.17	-0.93	1.63
<b>Subjective vitality</b>				
VIT1: I feel alive and vital.	4.62	1.52	-0.55	-0.38
VIT2: I don't feel very energetic ( <i>reversed</i> )	4.09	1.75	-0.05	-1.15
VIT3: I feel so alive I just want to burst.	3.38	1.61	0.25	-0.69
VIT4: I have energy and spirit.	4.75	1.56	-0.58	-0.36
VIT5: I feel alert and awake.	4.24	1.68	-0.26	-0.99
VIT6: I feel energized.	4.38	1.61	-0.38	-0.74

*Note.*  $N = 466$ .  $M$  = mean;  $SD$  = standard deviation;  $Skew$  = skewness;  $Kurt$  = kurtosis.

The prevalence of negative skewness values indicated a low to medium ceiling effect for many items. This was also apparent upon examining the histograms. Additionally, some items (COM3, REL1, REL2, BEN1) exhibited minimal leptokurtic distributions and one item (VIT2) was flagged as platykurtic but, after examining the histogram, clearly depicted a bimodal

distribution. Item VIT2 was the only negatively-worded item on the survey which may have confused respondents, as other studies using the Subjective Vitality Scale have found with this specific item (Castillo, Tomas, & Balaguer, 2017; Kawabata, Yamazaki, Guo, & Chatzisarantis, 2016).

Table 5  
*Correlations and descriptive statistics*

	1.	2.	3.	4.	5.	<i>M</i>	<i>SD</i>
1. Autonomy	-					5.30	1.19
2. Competence	.77	-				5.28	1.35
3. Relatedness	.70	.62	-			5.40	1.11
4. Beneficence	.71	.59	.76	-		5.08	1.04
5. Subjective vitality	.65	.59	.57	.54	-	4.24	1.39

*Note.* *N* = 466. All correlations significant  $p < .001$ .

Table 5 presents the correlations and descriptive statistics for the composite factors. As expected, participants' basic psychological needs satisfaction and subjective vitality were strongly and positively correlated.

### **Basic Needs Satisfaction: CFA Measurement Model**

A confirmatory factor analysis (CFA) was conducted to test the first hypothesized measurement model. The model poses an *a priori* hypothesis that the responses to the 16 satisfaction items of the Basic Psychological Needs Satisfaction and Frustration Scale (BPNSFS) and the Beneficence Satisfaction Scale can be explained by the four separate factors they are intended to measure: the satisfactions of autonomy, competence, relatedness, and beneficence.

Results from the four-factor CFA indicated that the model fit the data well,  $SBS-\chi^2(98) = 213.919$ , RMSEA [90% CI] = 0.050 [0.041–0.060], CFI = 0.965, SRMR = 0.030. Factor loadings were strong for all four needs: autonomy (0.727–0.791), competence (0.853–0.887), relatedness (0.763–0.833), and beneficence (0.732–0.790).

The addition of the hypothesized higher-order latent factor of basic psychological needs resulted in adequate model fit,  $SBS-\chi^2(101) = 266.909$ , RMSEA [90% CI] = 0.059 [0.051–0.068], CFI = .950, SRMR = 0.052. The four first-order factors shared strong loadings with the second-order factor of basic psychological needs satisfaction: autonomy (0.964), competence (0.829), relatedness (0.882), and beneficence (0.896). Results from the two CFAs suggest that the hypothesized higher-order structure of basic psychological needs satisfaction fits the data adequately.

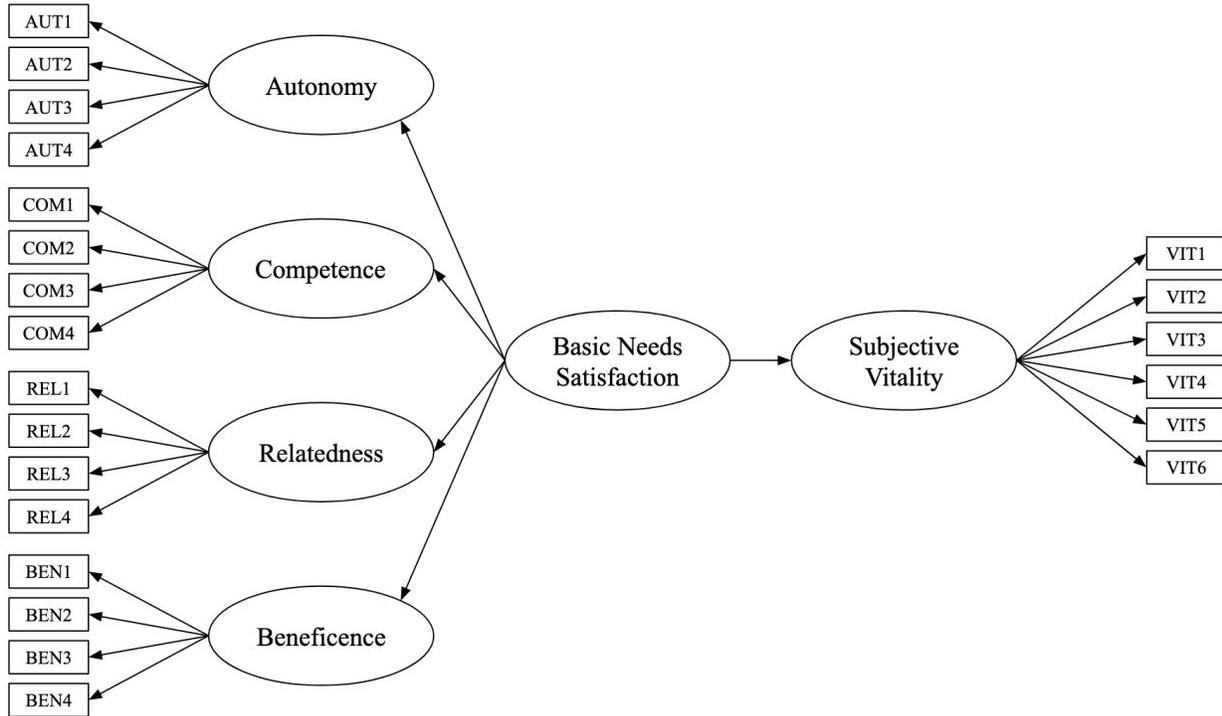
### **Subjective Vitality: CFA Measurement Model**

A CFA was conducted to test the hypothesized measurement model for subjective vitality. The model poses an a priori hypothesis that the responses to the 6 included items of the Subjective Vitality Scale can be explained by a single factor, subjective vitality. Results from the CFA indicated somewhat conflicting measures of model fit,  $SBS-\chi^2(9) = 51.915$ , RMSEA [90% CI] = 0.101 [0.075–0.129], CFI = 0.978, SRMR = 0.021. The high RMSEA index in contrast with favorable values for CFI and SRMR indicated good data-model fit. Models with few degrees of freedom may experience inflated RMSEA values (Kenny, Kaniskan, & McCoach, 2015). All six items shared strong loadings with the latent factor. Item VIT6 (“I feel energized”) shared the strongest loading with the latent factor (0.896), while the negatively worded item VIT2 (“I don’t feel very energetic”) shared the least strong loading (0.750). The findings suggest that the hypothesized structure for subjective vitality fits the data adequately.

### **Hypothesis Testing: Full Latent Structural Model**

The full latent structural model tested the hypothesized relationships between the latent factors representing basic psychological needs and subjective vitality (see Figure 6). More specifically, this latent structural analysis tested the hypothesis from the quantitative component

of this mixed-methods study: *H1: Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class.*



**Figure 6.** Hypothesized full latent structural model.

The latent structural analysis indicated that the model fit the data adequately, SBS- $\chi^2(204) = 481.952$ , RMSEA [90% CI] = 0.054 [0.048–0.060], CFI = 0.951, SRMR = 0.045.

Table 6 depicts the parameter estimates for the hypothesized model. Indicator loadings for each factor were positive, strong, and significant.

Table 6.  
*Parameter estimates for full latent structural model*

	<i>Unstd.</i>	<i>S.E.</i>	<i>Std.</i>	<i>Residuals</i>
Autonomy				
AUT1	1.000	0.000	0.753	0.433
AUT2	0.967	0.059	0.782	0.389
AUT3	0.889	0.061	0.788	0.379
AUT4	1.034	0.062	0.739	0.454
Competence				
COM1	1.000	0.000	0.885	0.216
COM2	0.940	0.036	0.850	0.277
COM3	0.876	0.036	0.871	0.241
COM4	0.939	0.044	0.849	0.278
Relatedness				
REL1	1.000	0.000	0.769	0.409
REL2	1.231	0.075	0.833	0.306
REL3	1.081	0.074	0.828	0.315
REL4	1.132	0.080	0.786	0.382
Beneficence				
BEN1	1.000	0.000	0.789	0.377
BEN2	1.158	0.073	0.744	0.446
BEN3	1.170	0.085	0.731	0.466
BEN4	1.043	0.063	0.781	0.390
Subjective Vitality				
VIT1	1.000	0.000	0.892	0.204
VIT2	0.956	0.055	0.742	0.450
VIT3	0.914	0.042	0.772	0.404
VIT4	1.023	0.032	0.890	0.208
VIT5	0.951	0.041	0.767	0.412
VIT6	1.057	0.032	0.890	0.208
Basic Needs Satisfaction				
Autonomy	1.000	0.000	0.974	0.050
Competence	1.058	0.065	0.842	0.292
Relatedness	0.748	0.063	0.871	0.241
Beneficence	0.704	0.057	0.882	0.222
Direct Effects				
Basic Needs Satisfaction → Subjective Vitality	0.921	0.066	0.745	-

*Note.* All parameter estimates significant at  $p < .001$ . The factor loading of the first indicator for each factor has been fixed to 1.

Testing for significance involves dividing the unstandardized parameter estimate by its standard error and testing the resulting  $z$  statistic; values greater than 3.30 indicate significance at  $p < .001$  (Byrne, 2012). Basic psychological needs satisfaction shared a direct effect on

subjective vitality,  $\beta = 0.745$ ,  $SE = 0.028$ ,  $p < .001$ . These results from the final full latent structural model support the study's quantitative hypothesis ( $H_1$ ): Basic psychological needs satisfaction during one's world language class will have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class.

### **Exploring Modification Indices**

For exploratory purposes, modification indices were requested despite adequate model fit for the full latent structural model. Recommendations with the highest modification index values were related to relatedness and beneficence satisfaction, specifically the addition of direct paths between them and covariances between their residuals. This was also reflected in the particularly strong correlation between relatedness and beneficence satisfaction composites,  $r(466) = 0.76$ ,  $p < .001$ . Additionally, the modification indices recommended adding a path from item BEN1 ("I feel that my actions have a positive impact on the people around me") to the latent factor of relatedness satisfaction.

This suggests that students in an educational setting may feel they are having a positive impact on the people around them through building relationships with peers, caring for and being cared for by other students, and feeling connected to people in their class. Despite evidence for the empirical separability of relatedness and beneficence (Martela & Ryan, 2016; Martela, 2018 May), there may be some overlap between these satisfactions, particularly in an educational setting where the "people around me" are peers with which students spend considerable time.

### **Summary of Quantitative Findings**

Results from the SEM analyses support the research hypothesis that *basic psychological needs satisfaction during one's world language class have a direct effect on one's experience of vitality (i.e., subjective well-being) during the class*. The direct effect of basic psychological

needs satisfaction on subjective vitality (i.e., subjective well-being) was positive and significant. Additionally, results from the confirmatory factor analyses (CFA) demonstrated that all of the latent variables represented the participants' responses adequately.

The results provide evidence that supports the two *feeling well* components of the Eudaimonic Activity Model; the satisfaction of world language learners' basic psychological needs in their foreign language courses, comprising autonomy, competence, relatedness, and beneficence satisfactions, is strongly associated with their subjective well-being in class (represented by subjective vitality). While this latent structural model cannot prove causality, there is theoretical and empirical support for a causal relationship between basic needs satisfaction and well-being (Ryan & Deci, 2017).

## CHAPTER FIVE

### RESULTS FROM THE QUALITATIVE PHASE

#### Introduction

This mixed-method study sought to answer the overarching question, *What are the characteristics of world language classrooms which foster student flourishing?* The qualitative phase of the study entailed the exploration of two research questions:

1. What are the characteristics of university world language learning environments that are conducive to learners' basic psychological needs satisfaction?
2. What are the characteristics of university world language learning environments that foster learners' engagement in eudaimonic activities?

Analysis for the qualitative phase began through a deductive examination of the interview data using *a priori* codes. The codes represented the components of eudaimonic activities and the four basic psychological needs. Following suggestions from Saldaña (2013), the first cycle set of codes was revised to replace one code and add two new ones (Table 7). One of the codes for the eudaimonic activities category, mindfulness, was not found in the students' descriptions of their language learning experiences. In its place, "personal growth" was added, which was previously one aspect of the code definition for "autonomous functioning" that was found to be rather salient and uniquely different from its original code. For this reason, "personal growth" was added to the second cycle coding list. Furthermore, it became clear through the first cycle of coding that many of the students' language experiences could be categorized as either being communicative or noncommunicative; that is, some of the environments or situations they described clearly encouraged target language (TL) communication across the three communicate modes—interpersonal, interpretive, and presentational—while others (i.e., noncommunicative)

did not and were focused more on language form and grammar. To this end, a new category was added (“type of language environment”) which included two codes: communicative and noncommunicative.

Table 7.  
*Categories and codes for qualitative data analysis*

<i>First cycle codes (a priori)</i>	<i>Second cycle codes (revised)</i>
<b>Eudaimonic activities and motives</b>	<b>Eudaimonic activities and motives</b>
Autonomous functioning	Autonomous functioning
Mindfulness	Personal growth*
Intimacy	Intimacy
Service to others	Service to others
<b>Basic psychological needs satisfaction</b>	<b>Basic psychological needs satisfaction</b>
Autonomy	Autonomy
Competence	Competence
Relatedness	Relatedness
Beneficence	Beneficence
	<b>Type of language environment*</b>
	Communicative*
	Noncommunicative*

*Note.* \* denotes new category or code.

Through the analysis, a new understanding of the research questions was discovered, in that they were found to be highly related and inseparable. Eudaimonic activities (i.e., autonomous functioning, personal growth, intimacy, and service to others), which represent the “doing well” aspect of flourishing within the Eudaimonic Activity Model, seemed to be necessary antecedents to students’ basic psychological needs (i.e., autonomy, competence, relatedness, and beneficence), which represent the “feeling well” aspect of flourishing. For example, language students who were engaged in learning situations characterized by intimacy with their peers and/or instructor (e.g., sharing personal experiences in the TL)—a behavior representing the “doing well” of flourishing—felt the satisfaction of relatedness (i.e., belonging and care) and other needs arising from that behavior. This same inextricable connection applies to the other eudaimonic activities and basic needs.

In addition to this, when students were engaged in one form of eudaimonic activity (e.g., autonomous functioning), there were likely to be engaged with others simultaneously. For example, students who were acting autonomously with their TL use, such as volitionally contributing a new perspective to a discussion in class, were likely to be engaged in actions of personal growth and intimacy at the same time. Furthermore, due to the simultaneous nature of eudaimonic activities, basic needs tended to arise together as well; that is, given engagement in eudaimonic activities, students were likely to feel the concurrent satisfactions of most or all of the basic needs. In other words, eudaimonic activities and basic needs satisfaction are nearly indistinguishable from one another other than one refers to the “doing well” and the other to the “feeling well” aspect of flourishing. Due to this redundancy, it may be more appropriate to give greater attention to basic psychological needs satisfaction and what aspects of the language learning environment fulfilled them, as students more often directly described their *feelings* during the interviews rather than describing their well-doing around language learning.

The experiences, situations, and environments (in and out of the classroom) participants shared in the interviews varied substantially. Students’ descriptions of situations in which they engaged with the TL, as well as their personal goals for their classes, ranged from fully communicative to noncommunicative in which all, some, or none of the communicative modes—interpersonal, interpretive, presentational—were addressed. In other words, while some of the participants were enrolled in WL courses which seemed to encompass the recommendations from the field, others seemed to embody more traditional, noncommunicative approaches to language teaching described by VanPatten (2015).

Two major findings arose from the qualitative phase. In response to the research questions, it became clear that communicative language learning environments were more

conducive to basic needs satisfaction and engagement in eudaimonic activities, while noncommunicative environments were not, or may even contribute to needs frustration. The following sections will present evidence from students' responses in support of these assertions.

**Finding #1: Communicative language environments are conducive to balanced needs satisfaction and engagement in eudaimonic activities.**

The essential finding of the qualitative phase of the study is that, more so than noncommunicative environments, communicative language learning environments tend to activate the interdependent nature of basic psychological needs satisfaction—autonomy, competence, relatedness, and beneficence—of language learners and foster their engagement in eudaimonic activities (e.g., autonomous functioning, personal growth, intimacy, and prosocial behaviors). Communicative language learning refers to students' and instructors' effective communication through one or more of the three modes of communication: *interpersonal* (i.e., active negotiation of meaning between people), *interpretive* (i.e., one-way communication from author/presenter), and *presentational* (i.e., one-way creation of messages) (ACTFL, 2017). A communicative language classroom is characterized by comprehension and significant use of the TL by the instructor and students where students are engaging in meaningful conversations, receiving comprehensible input, and presenting meaning to others through the TL. In this study, when students described situations in which they used the TL as a means to communicate effectively with others, especially in authentic situations, they experienced a balanced satisfaction of their basic needs in which most or all of their needs are fulfilled. This aligns with the mutually implicated nature of basic psychological needs in that “each need facilitates the satisfaction of the others under most conditions” (Ryan & Deci, 2017, p. 248). Similar to the inextricable and highly correlated nature of basic needs, eudaimonic practices tended to arise

simultaneously and were often indistinguishable from the needs satisfaction resulting from them. In noncommunicative settings, learners more often experienced the satisfaction of only individual needs at a time or felt an actively thwarting effect resulting in needs frustration.

Evidence supporting this primary finding will be illustrated through four pedagogical themes arising from students' descriptions of their basic needs satisfaction and engagement with eudaimonic activities. The themes should not be considered to be complete representations of how basic needs are satisfied in foreign language learning; instead, the themes arose as an appropriate means of presenting the findings most clearly. These four themes include:

1. Experiences of effective, authentic communication
2. Dialogic engagement within relevant, critical, and cultural topics
3. Helping others through the target language
4. Instructor attitudes, beliefs, and relationships with students

***Theme 1: Experiences of effective, authentic communication***

Experiences of effective communication were conducive to needs satisfaction and eudaimonic practices. When students felt that they were communicating effectively in the TL, they described feelings and actions reflecting basic psychological needs satisfaction—the satisfactions of autonomy, competence, relatedness, and beneficence—and engagement in eudaimonic activities (e.g., autonomous functioning, personal growth, intimacy, and prosociality). These situations happened both inside and outside of class and reflected all three modes of communication: the interpersonal, interpretive, and presentational.

In class, students expressed feelings of competence when they were able to comprehend the TL being used by their peers and instructor. Hannah, an intermediate learner of Spanish,

explained how comprehension did not come immediately to her when enrolling in a Spanish course using significantly more TL.

I think, for me, it took like a week or two before I was really able to settle into the class and really understand her. I don't know, I guess there was just like a brain shift that needed to happen to fully take in what she was saying. But then, after that happened, and I could understand her in class, that was really... that was good. I was like, "Wow, look at me, a little Spanish-learning girl" (Hannah, #3, Line 229).

Her eventual comprehension brought about feelings of capability and personal growth.

Language learners' need for competence is further satisfied when they are able to not only comprehend the TL around them but also produce their own which is understood by and responded to by others. Mark, an intermediate Spanish learner, expressed feelings of capability and autonomous functioning when he was able to comprehend what his professor was saying in the TL and then produce an instantaneous, natural response.

When like a professor will ask questions in class and I understand what they say, to have been able to just spit out the answer and not really think of each word individually, but just, I know how to respond to that and I don't even have to think about it in English and translate it one by one, I can just say it. And so that's really like a good feeling (Mark, #2, Line 444).

In this way, the feelings of competence arising from TL comprehension are enhanced through feelings of autonomy when one is able to respond volitionally and contribute meaningfully to two-way communication. Similarly, Nicole, an intermediate German learner, felt a sense of competence satisfaction and pride when what she said in German was comprehended by her peers. Although the "speed dating" activity she describes entails some rehearsal and structure, spontaneous and personalized communication does still occur.

It's mostly when speaking, and I feel like I said something grammatically correct and I'm proud of myself and someone understands what I'm saying. I actually hated this, but we did speed dating all the time, where she would just make us match with someone in the class and we had to talk. And so, I was kind of cool talking with a peer, 'cause I know they have about the same knowledge as I do. And so when we could have an effective conversation in another language, I just felt really good about that (Nicole, #9, Line 273).

Situations which support learners' competence and autonomous functioning such as the preceding one may also assist in developing belongingness between students in the course. Mark described how small group discussions with peers, especially with those who may sit on the other side of the room, help create a greater connection between all students in class. He explained that the fun, "embarrassing" aspect of talking in the TL can create a bond between students.

You bond over being awkward and stuff. So I think that kind of brings the class a little bit together. It's like, "Yeah, we're all just taking the class, we're all doing this, might as well have fun with it" (Mark, #2, Line 507).

Because it necessitates personal expression and frequent miscomprehension, learning a new language can be a vulnerable experience. To this end, Hannah also suggested that language courses were particularly apt to build relationships between students due to this vulnerable, interpersonal aspect. When students feel a sense of competence when they communicate in the language and use the language autonomously to express how they feel, it is understandable that relationships will begin to form.

Yeah, I think I made some good, solid friends in there. And I think actually, in my experience, the language classes are the easiest ones to make friends with, because they really encourage you to talk to each other, and talk to each other in Spanish. But yeah, to just have conversation and become more comfortable. And it's kind of a vulnerable experience anyway. So, then, when everyone's doing it, it's like you're closer." (Hannah, #3, Line 275).

Communication in the TL requires the engagement of multiple people to be successful. When a full class of students participate autonomously in meaningful TL use, relationships are bound to flourish, which can lead to even more competence and autonomous language use. Mark explained how a sense of relatedness in class with one's peers and instructor is directly supportive of one's TL competence and autonomy. In other words, if a student does not feel a

sense of belonging in class, they are less likely to seek out TL communication, which inhibits the satisfaction of competence and autonomy.

Speaking out in a class is easier when you know the other people, 'cause it just kind of feels more conversational. Whereas if you're sitting, say, in a big lecture hall, you don't want to be the one person to raise their hand, it's just kind of weird for some reason. More people means less willingness to talk. ... But if there's only 10 of us in a Spanish classroom and we're all sitting around at circle tables, it feels very conversational. And I've gotten to know the people in the class, so I feel comfortable just talking, 'cause I know no one's gonna judge me for me just saying something (Mark, #2, Line 499).

A conversational language learning environment will allow students to speak from their own perspectives and feelings (autonomy) which is more comfortable (competence) because students are focused primarily on the meaning being conveyed instead of the accuracy of the language form. This phenomenon, however, may not apply to all students. Some, like Liam—an advanced French learner—did not feel a sense of relatedness in his communicative, discussion-based language course. When asked if the amount of interpersonal communication in the class creates a sense of belonging for him, he replied, “Again, it might just be because I'm an introvert, but I really look at it as like, ‘We're all just here practicing our French.’” (Liam, #6, Line 461).

Assessments of language proficiency and performance are crucial to tracking student outcomes in world language education, but some, especially those that are controlling and high-stakes, can be distressing to learners. Mark, however, explained how he felt particularly competent as a result of oral assessments in his Spanish course because he was able to use what he had learned to hold a meaningful conversation in Spanish with his instructor.

My initial feeling is when we have our oral exam where you just go meet with the professor and just talk about things, just a normal conversation. You'll be given the questions in advance so you have an idea of what to talk about, but when you go in, it feels very like, "This is me actively showing what I've learned, and expressing like, I know the vocab, I know how to use the grammar, I'm able to hold a conversation in Spanish," and so it feels very kind of in control of your whole semester at that point. 'Cause it's not just regurgitate and spit the vocab on a piece of paper, but it's really like,

"I've learned it and I'm here to show what I've learned up to this point" (Mark, #2, Line 408).

Although these types of assessments may feel pressuring to some, they can be meaningful indicators to students that they are truly developing proficiency in the TL. Mark felt particularly comfortable and competent due to being able to showcase his TL proficiency autonomously through a relaxed conversation, as opposed to “regurgitation” of vocabulary. Daniela, an advanced learner of Spanish, described how her success during one of these one-on-one speaking assessments was a turning point in her Spanish studies, as she had switched to a Spanish major just a few days before and had been struggling with feelings of being behind.

We just had a conversation ... and he was asking me questions that were like on the review and that were required for him to grade me on, but it was a conversation. ... at the end of it he was like “You did really well, your pronunciation was spot-on ... you had a like a grammar hiccup here or there but you know who doesn't” ... and that's the highest I've ever done on like that kind of thing. And so like in that moment I felt competent and capable and those kind of things, because it was kind of also like a, you know, I just switched to this major a few days before and so it was also kind of like, I don't know if you believe in coincidences, but you know that kind of like, “You are able to do this” (Daniela, #1, Line 268).

In both of these assessments, students felt considerable autonomy due to the free-form nature of their conversation, as well as relatedness with their instructor, which led to the satisfaction of competence through their successful conversation. In addition to interpersonal communication, the presentational mode can also bring about competence satisfaction. Hannah described a situation where she felt capable using the TL spontaneously, and not rehearsed, in the presentational mode.

We had to do a group presentation, and so those are always scary, but it was really good, too, because you couldn't have note cards or anything. You just had to come up with it on the fly. And so, I felt very, actually, that I was able to put words into a sentence. [chuckle] (Hannah, #3, Line 192).

Experiences out-of-class in which students used their TL to communicate effectively with native speakers were strongly associated with satisfaction of autonomy, competence, relatedness, and beneficence. Melissa, an advanced learner of Japanese, felt an intensified feeling of competence when she spoke Japanese with native speakers.

Most of the time, I've felt that way, is when I'm talking to a native speaker and they can understand what I'm saying. 'Cause it's different talking to a native speaker and them understanding you, versus you talking to a classmate and them understanding you. ... I got that feeling a lot when I was in Japan, and I got that feeling a lot when the students visiting from Japan were here last month" (Melissa, #9, Line 278).

This enhanced competence may arise from the perception that one is using the TL to communicate authentically out of the classroom. The feelings of competence were also enhanced when she was able to use Japanese to help native speakers visiting her own campus in the United States.

The most recent time was the students visiting here and me being able to talk to them both in English and Japanese. 'Cause not only did I feel like I was helping them with improving their English, I felt like, "Okay, now, I really have a chance to be able to talk to people in Japanese and they're gonna understand what I'm saying and I can explain stuff to them in Japanese." ... and it's like, "Oh, my gosh, I can do this, I can speak in Japanese and I'm closer to getting fluent." (Melissa, #9, Line 309).

In this case, Melissa's fulfillment of competence was enhanced by her effective communication in the TL being used as a means to a prosocial end, namely helping a visiting student. As expected, those experiences of competence and beneficence also helped create a meaningful bond between her and her Japanese language partners.

I felt that way, too, when the students visited here from Japan. I felt really connected to my language partner immediately when I met her ... I feel really connected to also the people that I met that were other conversation partners for the students that visited here. So, I feel connected and I feel like I belong to those people, or with those people that I've just hit it off with over the years with learning Japanese (Melissa, #9, Line 304).

While meaningful communication can and should happen in class, authentic TL use outside of the classroom may be particularly apt to satisfy basic needs. Melissa explained how

her experience of building relationships through TL communication happened more often outside of the classroom rather than in class.

I'd say it was probably because we did stuff that wasn't related to learning Japanese. ... Yes, we're learning Japanese, but especially on the study abroad, we all went on excursions together, we'd go out to eat together. And I felt really connected to the people that I spent time with on that trip outside of class, and I felt really connected to those students that visited here because I did stuff with them outside of class. So, I feel like actually talking in Japanese with people outside of class is what made me more connected to them than talking with them in class (Melissa, #9, 335).

Here, Melissa used the language autonomously and intimately with native speakers outside of class, which helped her feel the satisfactions of autonomy, competence, and relatedness. During her time studying abroad in Italy, Daniela found a sense of personal autonomy and competence when her instructor helped her with words she would need to function successfully in her new city. Similar to Melissa's experiences, Daniela's authentic TL use out of class was particularly powerful and motivating for her.

The same thing happened you know once I actually got to the country. Every single day at the beginning of class, the first thing we would do is say, "Okay, these are the things I needed to know how to say yesterday and I couldn't. So let's figure out how you say them." And that was very helpful, too, because you know when I was in the grocery store the next day trying to buy pasta ... and I was able to convey that correctly, and so that was freeing in and of itself not being tied to a dictionary and those kind of things (Daniela, #1, Line 239).

Daniela's success in using Italian autonomously and competently in an authentic setting helped her differentiate between the amount of confidence she felt in her Italian program as opposed to her Spanish studies. This may be because her proficiency and confidence in a new language was an important goal for her before starting at the university.

You know, it was something I had always dreamed of but I'd never seen to fruition ... and by the time I got back from Italy, and maybe it was this immersion that helped, but I mean like I just felt so confident, you know, being abroad. ... But like I was able to speak to people and, like, people thought I was Italian, like that's how good the ... Italian was. And I was like ... I could never do that with Spanish (Daniela, #1, Line 188).

Hannah recounted feeling this rush when her developing Spanish proficiency was needed to solve a real-world problem. Her authentic TL use helped her feel the satisfaction of autonomy, competence, relatedness, and beneficence: autonomy was satisfied due to her volitional use of the language, competence because of her successful translation and helping, relatedness because of the praise and connection she felt with the professor, and beneficence due to feeling like she helped someone else.

“When I was in Bolivia in South America, the translators had left, they went off somewhere and we were there with a professor from the university there and he didn't speak any English, he only spoke Spanish. He asked me to translate the dinner menu for the group and I was like, "Wow!" And he was very complimentary, he said like my Spanish was the best and that was just really cool. Well, because no one else there was learning it, so. [chuckle]” (Hannah, #3, Line 177).

All of these accounts demonstrate how communicative language environments, particularly those in which students were using the TL in an authentic setting, are conducive to basic needs satisfaction, eudaimonic activities, and flourishing. In particular, communication in the TL requires autonomous functioning and intimacy with others, which in turn are supportive of the satisfactions of autonomy, competence, and relatedness. This first theme may be the most salient for this finding and can be further seen in the next themes.

### ***Theme 2: Dialogic engagement within relevant and critical topics***

Students often described situations characterized by basic needs and eudaimonic activities in which they were engaged in discussions around both relevant and critical topics in class. This is a small yet substantial extension from the previous theme, because it exclusively involves in-class TL use around topics organized by the students themselves or their instructor's curriculum. Furthermore, these complex topics encourage students to contribute to the discussion autonomously from their own perspectives and beliefs due to their open-ended nature.

Environments centered around dialogic engagement on these relevant topics may also impart a

strengthening effect on students' satisfaction of competence; not only do students feel competent when they use the TL effectively for communication, it is also satisfied when they are learning more about the topic's content or essential question at hand. In this way, the contextualized nature of language learning, when tapped by educators, is particularly conducive to the satisfaction of basic needs and engagement in eudaimonic activities.

Instructors who foster relevance in the themes, topics, or questions they design inherently encourage feelings of autonomy and competence. Students are motivated to talk about themselves and learn about others in the TL, especially within topics to which students bring varying perspectives.

I feel like I keep mentioning "question of the day," but I like doing that because we get to talk about... Because the purpose of that was to use grammar things that we're learning, but we get to share with the whole class like what we're doing for the weekend, and what would we do in this situation... And I don't know, I just feel like getting to talk about ourselves, but still applying the concepts we're learning" (Nicole, #8, Line 246).

Although the "question of the day" was assigned by her instructor, Nicole endorsed the question herself and felt freedom to relate her background experiences to it and answer how she felt. Furthermore, discussion about personally relevant topics can help build community in class because it creates a space where students are able to acknowledge and discuss shared experiences. Mark explains how open-ended questions based on shared experiences between students are particularly satisfying.

We'll have questions like, "What do you like about your professors? What do you not like about your professors?" And so we can really say. And 'cause we've all had those professors who just sit there and it's super boring and just dry, and read out of a textbook, and so it's like, we can all kinda relate to that when we say, "This is something I really don't like." And then we're all, it's like, "Oh, yeah, I know what you mean." So it builds relevance and kinda builds that sense of, we're all still students and have very similar backgrounds when it comes down to things (Mark, #2, Line 392).

Students can also experience autonomy and competence resulting from exploring personally relevant topics in the presentational mode. Having choice on the topic to present on, as well as freedom to explore it in the way they choose, may be particularly beneficial in supporting autonomy and competence in this communicative mode.

We had a small group presentation in class, so probably that one because we got to pick what we would talk about. So... .. I think the outlines were, it was like a two-person project, and each person had to talk for five minutes. And me and my partner chose food in Latin American countries. ... And so, we made a food dish, and then we just talked about different cuisines .... Yeah, yeah, like having the choice to talk about whatever I wanted, and just choosing. You also have to research it. So, yeah, that was a lot of fun (Hannah, #3, Line 200).

Although Hannah's group presented on food, a somewhat superficial component of culture, it was nevertheless personally relevant to her because she and her groupmates were able to choose their specific topic. Daniela also used her TL proficiency within the presentational mode to share with her peers something that was personally relevant to her.

One of the most enjoyable things that I've gotten to do up to this point was my final project for my elementary Italian 2 class that I took last spring. Because it was a video project and you got to do it about anything that you wanted to. And so a lot of us of course chose trips ... and so I got to talk about my senior trip that I took with my mom, and it was a cruise and all of those kind of things and so that you know, making that and like looking up the vocabulary and you know like learning how to form these sentences about something that, like, actually mattered to me and was like you know really important to me. That was that was great for me (Daniela, #1, Line 230).

Choice is essential to autonomous functioning and the satisfaction of basic needs in SDT. In these previous examples, students were assigned a general prompt through which they were able to choose a specific theme or question to explore. Regardless of the communicative mode, the students could respond to the prompt in whichever fashion they chose.

The discussion of complex, critical topics seems to be strongly conducive to basic needs and eudaimonic practices. Students explained how they felt mentally engaged or "into it" when discussing topics with no single correct interpretation. When asked about a situation where she

felt a sense of volition and freedom, Summer, an advanced learner of Spanish, described the organization of her recent Spanish literature course for graduate students about postcolonialism and subalternity in Latin America.

That course was analytical in nature. So we were going through movies, any other kind of literature and relating that to real-time events and political events and things like that. And that was different in the fact that I had never had just a “pick anything” or basically anything from this item of 40 things in a five-week course that you can analyze and explain, I guess, about that either story or movie and how it portrays this character of the subaltern. So that was just a lot of freedom in the course that I didn't have specific assignments, the only assignments were two essays (Summer, #10, Line 288).

In this case, Summer worked within a larger curricular theme to analyze a topic that was especially relevant or interesting to her. The analytic nature of the course was conducive to exploration, curiosity, and self-direction, which are all essential qualities of autonomous functioning. Of note should be that she had not yet experienced a course where she could “pick anything” she was interested in to explore. Other curricular approaches, such as those centered around films in the TL, can cultivate students' autonomous functioning and meaningful TL use. When asked about a moment of empowerment, Cora, a heritage Spanish speaker, described a recurring moment in her analytical advanced Spanish film course.

I guess, in that film class, I felt that way a lot, when we were discussing really some heavy topics in some of the movies we watched, and her trying to draw out critical thinking and then having an opportunity to discuss that in Spanish. ... One of the movies we watched was about globalization. They had these Anglo or European people that were staying at this ... fancy hotel in the Dominican Republic or some place, and the lady starts a relationship with a young girl that's really poor. And the relationship they have with each other, it's like how much of that is another form of taking over that culture, already happened hundreds of years ago, but this is the modern version of it. It's just a movie that I had never heard about and it was just, I guess, thinking of how, for being Latin American, you're just thinking about the whole history of Latin America has been people taking advantage of other people. And then thinking of like, "Okay, all of that history has led up to how everything is now." And then also thinking about what's still going on in those places that you don't see because you don't live in Latin America, and here's small windows of watching these movies that are made in those places, of just, this is sort of an experience of what it's like there, and then discussing that with other people. And then I guess, it's just really interesting 'cause I know a lot of the kids in those classes

have never traveled to Latin American countries and they definitely are really interested in the language. ... It was just knowing that there's so many different perspectives in just that one classroom, and then having a teacher that's from Peru or something, it's just like, I don't know. I guess that was very mentally engaging for me, just like, there's so many perspectives coming into this one classroom where we're all discussing this one thing that... We all watched the same thing and we're all going to draw different opinions on it, or... So I guess, and then being able to vocalize that, it was just very... I don't know, it was just rewarding (Cora, #7, Line 321).

In this situation, Cora found it to be a meaningful experience that she and her peers could contribute autonomously to this complex topic. She felt a sense of competence not only through her TL use with her peers, but that she was also becoming deeply familiar with issues of oppression and justice through a synthesis of art and current events. She also felt a greater connection with her peers.

Students often recalled how arguments on certain topics in class were moments of engagement and autonomous functioning. These originated from discussions on controversial “gray area” topics about which students had strong beliefs and opinions.

We had this discussion one time where we were talking about if prostitution should be legal or not. And I have very strong opinions on that and women's bodily autonomy. And I was able to voice those opinions in class and hold kind of like a pseudo discussion or argument with another kid in class about it ... it just felt good to be able to speak and voice my opinions without having a language inhibition necessarily, and not just inhibition of not knowing the language, but... 'Cause I know the language, but do I know the language? I'm always nervous to speak because I think I'll grammatically say it wrong, but the environment that our professor had created was very open to that, so it didn't matter (Tess, #12, Line 302).

Tess, an advanced learner of Spanish, attributed this uninhibited language learning environment to her instructor. As in previous situations, the student was able to use her language proficiency autonomously to purposefully share her perspective within a broad, yet meaningful topic. Because of this, Tess felt competent in her language use and most likely a sense of belonging with her peers as well. Additionally, her fears of making a grammar mistake were quelled due to her instructor's focus on the meaning of students' utterances instead of the

grammatical form. This will be explored in more depth in the final theme (Theme 4). Liam shared a similar story of arguing amicably with a peer in French.

We read the story in class of ... this guy, cheats on his wife, and then he's walking home to apologize to her and he goes into the rough part of town to buy some cigarettes and he gets murdered under a bridge. And we had this discussion question, "Whose fault is it? Is it the wife for getting mad at him? Is it the murderer's fault? Is it his fault? Is it chance?" And I was arguing that it was his fault and there was this other guy who said that it was chance, because you're not guaranteed to encounter a murderer. And we like fought it out in French, and I got really into it (Liam, #6, Line 321).

In this scenario, Liam acted autonomously by arguing for a self-endorsed position through meaningful communication in French. His instructor purposefully directed the class to engage with a complex, philosophical prompt that required students' perspectives for it to be successful. Liam indicated that there were no hard feelings between him and his peer, and that their friendship may have further activated both of their autonomous functioning in the TL: "I'm friends with that guy, which I think is why we had the freedom" (Liam, #6, Line 327).

This theme demonstrated how, above and beyond times where students communicated effectively in the language (Theme 1), complex topics allowing for personal interpretation and encouraging lively dialogue between students are particularly conducive to the satisfaction of basic needs, eudaimonic activities, and flourishing.

### ***Theme 3: Helping others through the target language***

One of the strongest themes in the data was students' engagement in activities involving the TL which they perceived to help others. The association between TL use and perceived prosociality was apparent in four ways: contributing to peers' learning, course-related helping, out-of-class helping, and motivation to learn the TL to help. When asked about a time when they felt they were helping others through the TL, some students explained that there was a service-learning component in their current or previous course that allowed them to feel this way. In a

recent course, Summer and her group acted autonomously in choosing the context for their service-learning activities.

Thinking to a different service-learning course with the health professions, my group decided to go work with [a hospice]. ... An actual need for their location is that they had just put out a new admission packet, and so we were able to translate their whole admission packet, and so that was pretty neat instead of translating just basic flyers or something, this was something that they really needed right then and there and we were able to say, "Hey, we can do that." ... We got the opportunity to choose where we worked with and choose exactly what we did as long as it fulfilled a certain amount of hours (Summer, #10, Line 296).

Summer states that her group's feelings of prosocial impact were especially strong due to it being an immediate need of the hospice facility. She further explains that the sense of purpose accompanying helping behaviors also helps support feelings of competence for TL communication.

So, of course, all of those service learning courses I've taken have had something to do with that where I felt like we were doing something purposeful and it was different from just filling out a worksheet or turning in a written assignment. I felt like we were doing something that was a true need right then and there, but also being able to better my Spanish and feel like I actually have a very good grasp on the language has been really important in my day-to-day life, having family who don't speak English very well or friends who don't speak English very well. ... I may not be certified, but I feel confident and other people have given me As in my classes, they must think that I'm confident enough to do something. So just in general, not even having applied to school, I felt like I've been able to help a lot more people (Summer, #10, 346).

Not all prosocial impact occurred as part of their university courses. Some students described meaningful instances in which they used the TL to benefit others outside of class that had no association with their academic studies. Daniela recollected a recent experience in which she was able to help an injured inmate at her work at a local detention center.

And unfortunately often times we have inmates that come in that do not speak English or they are illiterate or those kind of things. And there was a man who came in one time. ... While he was being brought in there was a bit of a scuffle, he ended up getting injured all of those kind of things and he couldn't speak English and so he couldn't tell any of the nursing staff what was happening to him. And I have a close relationship with one of the my supervisors and they were like, "Wait, you speak Spanish, don't you?" ... But I was

able to go and talk with him and figure out what was going on and provide him medical treatment because of that. And if I had not been there and if I could not have it and if I didn't speak the language you know would he have gotten medical care? You know would have had ever been fixed? Like those kind of things. And now of course they're like oh she seems finished send it to her and so I get all the emails and like you know talk to all of those people those kind of things but like I I would not have been able to do that had I you know, you do an entire section and intermediate to just on the body and just on medical parts or medical terminology of those kind of things, and so like that specific class and that specific section of language and grammar like helped me be able to help someone else (Daniela, #1, Line 326).

In addition to helping others and feeling the sense of beneficence arising from it, Daniela also felt competent because the new words she acquired in class were useful in an authentic, real world situation. Cora felt a similar sense of beneficence arising from helping customers who do not speak English at her work at a large hardware store chain.

A lot of times they'll have customers that don't speak any English at all, and then they'll have to be like, "Oh, where's [Cora]? We have to get somebody to translate." So they'll call me from all the way across the store ... Afterward, they were like, "Oh, thank you, you're so helpful," or whatever. And I do have a real sense of pride of just like, I'm glad I was able to help them because it would have taken twice as long for somebody to figure out like, "Is this what you're looking for?" Just pointing at stuff. And so I feel like I actually did help them. And then sometimes they'll come back and be like, "Oh, yeah, will you help me again?" (Cora, #7, Line 401).

Motivation to help others was also apparent. Melissa was thoroughly motivated to learn Japanese so that she could help other people. She believes that learning a language will better help her to leverage her knowledge of chemical engineering to create a better world.

So, I was like, "Well, what else could I use Japanese for?" 'Cause I was applying and it's like, "Okay, what do you wanna do with this?" And when I really started thinking about it, I would like to become a professor for, working for a university. And I would love to do it in Chemical Engineering, but at the same time, I want to be able to contribute as much as I can in the aspect of research and education. So, I felt that if I could learn a language that I really enjoy and become fluent in it, that I could possibly expand whatever I do in the future to a global level or something and create, I guess, a better world. Or at least be able to say that, "Okay, I am really being able to make a difference. Not just in my country, but in another country, too, because I could be participating in collaborative research projects ..." (Melissa, #9, Line 137).

This caused a sense of fulfillment when she was able to act in line with this personal goal, which she explains she does not often feel.

The most recent experience, and I keep bringing this up, it's the students that were visiting here, being able to speak with them in English and me being able to contribute to their learning English because I'm becoming bilingual. And it felt like I'm making a difference because these people could, after they graduate university, be able to either do the same thing I'm doing. They can talk to American companies and do stuff that is gonna help our economy, that is gonna help the world, the global economy. And that just makes me super happy, knowing that I've made an impact and somebody else is benefiting from me learning Japanese. And I felt like that's really the kind of feeling I've just been striving to find and it just took a really long time to get here (Melissa, #9, Line 370).

Mark was also motivated to use his developing Spanish proficiency in his future work in non-profits, which was directly associated with this campus work at the time.

I want to work with non-profits in the future, and I think Spanish is a helpful language 'cause there's a lot of Spanish-speaking individuals who come in. I run the food pantry on campus. ... So we have plenty of Spanish-speaking clients who come in. We have a Spanish application. So it really helps to have a Spanish background, so I can at least try and answer some of their questions. Obviously, I can't hold a fluent conversation with them 'cause we're being taught very proper Spanish, and sometimes they'll be using slang that I don't know. But it helps to be able to read through the application, to be able to point out what they're looking for. Yeah. So yeah, that helps a lot" (Mark, #2, Line 166).

Unlike Mark, Melissa explained how she often felt a sense of defeat and frustration when she was not able to feel that she is helping others through her Japanese proficiency. Despite this, she did feel of sense of competence and fulfillment when she finally had the opportunity.

I kept getting frustrated with not being able to find that feeling 'cause it's like, once I decided that I wanted to learn Japanese for that purpose, when you don't get it after a while of trying to find that feeling, it can get frustrating. But once I finally got it, I was like, "Oh, yes, finally." ... I guess technically, I've also been helping and benefiting people that are in the classes with me. Because if I'm talking with them in Japanese, then not only does my Japanese gets better, but their Japanese gets better. And they can go on and do stuff with that, so. I don't know, now I feel that way about my classmates (Melissa, #9, Line 380).

When asked about situations in which students felt they were having a prosocial impact on others, many students explained that assisting peers in class or contributing new ideas or perspectives felt as if they were helping others.

I don't know if I would say I was bettering society. I don't know. I feel like when I contribute to... Not like a conversation, but just like an activity in, like, a way... Like if we're reading a book and then she'll ask what this one word means, and I'm like, "Oh, I looked it up last night. I wrote it down, here's what it means." And then I feel like I'm contributing to other people, and that we don't have to sit there in awkward silence if no one does it, I mean, but ... I don't know, I feel like I don't really feel I'm contributing in the larger way, if that makes sense (Nicole, #8, Line 338).

The conception of helping others through the language was more common to hear from students in noncommunicative language environments, such as Michael, an elementary learner of Italian.

I think whenever I get together in the small group things that we do, the little exercises we do and such, I feel like I'm a contributor, you know? 'Cause one of the things that I wanna do is start off by looking over and saying... "So, [name], what do you think? What did you do this weekend?" You know? And if she starts going there, then I feel proficient enough to be able to offer... "Okay you want to use this word then instead of that word," or you know, "You didn't do either. Okay well let's look up the word 'either.'" So, sort of a mentoring, modeling type thing. (Michael, #4, Line 723).

Finally, one student felt a sense of beneficence arising from the perception that he was contributing to an intercultural dialogue during a study abroad trip:

It was really cool to take part in that sort of cultural learning, cultural understanding thing with these international students. ... I felt like I was doing something a little bit important by talking about my experiences, in French, to them. ... Like everyone kind of wants to know what's going on in America ... So they had questions like, "How much are you guys really paying for college?" "Do you really have to say the national anthem every morning in class?" [chuckle] We all stood up and we did the Pledge of Allegiance in unison, and that freaked them out. But yeah, everyone really wants to know like what life is like in America and what Americans think about their country ... And yeah, it was really cool to be able to talk about that sort of stuff with people (Liam, #6, Line 506).

In all of these situations, language learners perceived that they were using their proficiency and/or knowledge of the language to benefit the welfare of others. Students

perceived prosociality in many ways, from helping others as a part of class requirements, to helping others outside of class, to feeling as if they helped out peers in class or contributed to intercultural communication abroad. Regardless, these situations were conducive to the satisfaction of basic psychological needs and engagement in eudaimonic activities through using the TL communicatively.

***Theme 4: Instructor attitudes, beliefs, and relationships with students***

Students often referred to how their language learning environment made them feel in relation to their instructors' attitudes, beliefs, or personality. Students who felt that their teachers were deeply invested in each of their language "journeys" were likely to have their needs satisfaction and be involved in eudaimonic activities as a result of their courses. Students felt a sense of fulfillment when their language instructors demonstrated that they genuinely cared for the well-being and language proficiency development of their students. This included situations in which students perceived that their instructor understood their interests and identities and actively sought to incorporate them into the curriculum. Daniela explains:

And so I feel like their curriculum is a lot more based on or, it's not more based but like, when the curriculum is relevant to student they highlight it because I think that makes people more motivated, if that makes sense. Because they're like, "Oh yeah, this applies to me. I get this." ... I guess because like she made a point to like highlight that like, "Yes, you're here to learn a language, but like you're also here, too, because you have a purpose for this language." ... She [the instructor] has a purpose for this language and that's to teach us ... but we each have our own purpose for learning language" (Daniela, #1, Line 319).

This can also be manifested in times where students perceived that their instructors had a deep familiarity with their identities and backgrounds. Cora, a heritage learner of Spanish, felt that way about some of her professors who understood her experiences navigating multiple cultures and languages.

So, definitely in those classes, and then also feeling like the professors in those classes were always from a Latin country, so I feel like they really felt for our experience. So just, yeah, I understand what it's like to be in the midst of two cultures, and, "You guys already know Spanish," just when they teach us grammatical stuff or just like, "Don't overthink it. You already know this stuff, just look it over. But if you think about it too much, you're going to stop yourself from being able to write it. You already have everything almost memorized just from learning it your whole life." But I guess it felt very part of a community in that sense. Not that I still talk to any of the people from those classes, but within that space, it felt very connected (Cora, #7, Line 409).

Her instructor's care and understanding of her students also helped create an atmosphere of connectedness in class. This can be further amplified when students feel that same sense of shared experience not only with their instructor, but with their peers.

So I would say, in general, the Spanish classes I've taken have made me feel that way, especially in the heritage speaker classes, and I think that's just because the heritage speakers, there's not... Compared to the whole student population, there's not that many, so they're scattered all over the university. So then, having the opportunity to be in a classroom with other students that have had a very similar upbringing or cultural experiences I've had has made me feel really like I belong in this classroom because they're all going to speak Spanglish with each other, just jokingly (Cora, #7, Line 403).

Outside of class, students felt a sense of relatedness from their instructors when they perceived that they were a support network instead of disconnected and distant. Daniela stated multiple times how supportive and available her Italian professors were compared to the professor in the Spanish department.

You know, even though I've taken more [Spanish course] semesters, ... all of them [Italian professors] are very much available. Maybe that's the difference. You know any time I was like, "Okay, wait, I don't understand this. Can you explain this to me during office hours," they would stay after class, they would email me help. They would do guest lectures. They do all of these other sorts of things to make sure that you fully comprehend. ... The Spanish department is more of the impression of, "You should already know this. I shouldn't have to go back and teach you" (Daniela, #1, Line 193).

She portrays the Italian professors as doing everything they can to make sure that students are developing in their Italian proficiency, which includes putting together guest

lectures and study abroad trips. Hannah felt similar about her Spanish professor who was always available to students when they needed help.

Everyone felt very comfortable asking questions to the instructor. [She] is just like a very sweet lady, so no one felt very intimidated by her, I guess. I guess I've had instructors that people felt kind of intimidated to ask questions, but not here. And also, in class, like, "Come to my office hours, come... Any questions you have, I'm here." And yeah, just very open, friendly. Very... Yeah, very supportive of us. ... Liked us, cared for us, wanted to see us succeed and do well." (Hannah, #3, Line 290).

Daniela further described how her Italian professors both at her university and abroad took the time to stay connected and give her and her peers time to bond and share their experiences.

Every single time I see them on campus they make a point to say hi to me, ask me how my studies are going, you know. I had a couple of them that emailed me while I was in Rome and asked me how it was going ... because like they are invested in my language journey even if they're not my teacher at that point in time. ... I remember last year or last summer when we were in Italy there were just four of us and this in this advanced class and the [instructor title/name] was our professor for that one. and every Monday after the weekend we would come back and we would just speak she would give us 15 or 20 minutes and we would all just talk about our weekends—in Italian, of course—and so it was like this great chance for us to bond as a group and you know be like, "Oh my gosh, I should go check out [unintelligible] and like those kind of things, but also like learn that vocabulary and develop those relationships. That was a really cool moment for me (Daniela, #1, Line 285).

Some instructors, such as Cora's advanced film course instructor, specifically designed their courses to be open to different perspectives and safe place for all, which created an environment conducive to autonomous functioning, intimacy, and the satisfaction of autonomy, competence, and relatedness.

I felt like the instructors were really supportive, and not just in a learning context, but just really wanting to make sure that you're doing well outside of the class. That was a big thing for [the instructor] that taught the film class. She was like, "I want this to be a discussion space where everyone feels safe." And actually, now that I think about it, she would say stuff like that in English, to really... Drive the point home, yeah. And just, we're not all gonna agree on the interpretation or some of these scenes are gonna be uncomfortable, and whatever. And so, I think, overall, I felt very comfortable and like I could approach her with even personal stuff, which I did and she was really, really nice

about it (Cora, #7, Line 320) ... The last day of class, one of the girls... Our professor shared some really deeply personal stuff that happened in her life and then made it feel very comfortable for other people. And at the last day of class, one of the girls spoke up and was just like, "This was a safe place for me to feel like I have a voice, and that even if something bad happens to you, you can still have a sense of empowerment." And a lot of us hung back after that class, and wanted to hug [the instructor] afterwards, like, "Thank you for a great semester." And that was probably the best example I've had, it was definitely that class (Cora, #7, Line 417).

Instructors have significant influence over the extent to which students engage in eudaimonic activities and experience basic needs satisfaction. The students in this study clearly recognized and appreciated their instructors' availability, friendliness, transparency, and dedication. Students felt respected when their instructors understood their background and goals and sought to design their language courses around students' shared experiences. All of this together created an environment that allowed them to use the TL autonomously in class and build intimate relationships with others.

**Finding #2: Non-communicative language environments and situations are less conducive to balanced needs satisfaction and engagement in eudaimonic activities and may bring about needs frustration.**

In contrast to the first finding, students involved in noncommunicative language environments were less likely to engage in eudaimonic activities and experience a balanced basic psychological needs satisfaction. Noncommunicative language environments refer to situations and classrooms in which students are not effectively leveraging the TL within the three modes of communication: interpersonal, interpretive, and presentational. This may involve a lack of comprehension of the TL to which they are exposed or the consistent breakdown of one- or two-way communication.

In addition to a lack of engagement in eudaimonic activities and the satisfaction of most if not all basic needs, noncommunicative environments were more conducive to the satisfaction

of only isolated needs or even needs frustration. Language classrooms with a stronger curricular focus on language form (i.e., grammar and structure) could sometimes help students feel competent in terms of their technical understanding of the language, but there is little evidence that other basic needs were satisfied as well. At the same time, noncommunicative environments could also actively thwart basic needs. Language classrooms providing inconsistent amounts of comprehensible input for students, as well as classrooms where students feel surveilled about their grammar accuracy, may lead students to feel incapable, controlled, and disconnected from their peers in class.

Paige, an elementary French learner, described a recent situation in her language class when they were learning about “switching irregular adjectives to feminine tenses” in which students had to share a sentence they created using this process: “I don’t remember which one I had. But whatever sentence I said, it was clean. And I hate talking in class, so I was like, ‘Yeah! Did it. Killed it.’” (Paige, #5, Line 309). While she felt competent that the sentence she shared was free of errors in this situation, the negative feelings she assigns to speaking in class suggest grammatically-flawed sentences may receive a different reaction from her instructor. Paige also explained how she felt very capable in noncommunicative group exercises in which students were speaking exclusively in English and not in French.

He’ll give an exercise that’s like ... a paragraph in French and there’ll be words missing and you’ll be like, ‘Oh, fill them in, fill in the words in the blocks and conjugate them,’ maybe in the past or whatever. And so I’ll be like, ‘Oh, it could be this one.’ They’ll [peers] be like, ‘It could be that one though. ...’ It’s just like we’re all kind of contributing to that (Paige, #5, Line 483).

Regardless of perceiving her instructor in this relatively positively light, the environment the instructor created feelings of fear and surveillance within her. She described the environment as being “more formal” and less “chill” which makes it “feel worse when you mess it up.” These

similar situations show how, when instructors place substantial emphasis on correct language form, language learners may be more likely to feel the frustration of competence rather than its satisfaction. In this case, Paige's consistent feelings of incapability in form-focused situations also impedes her engagement in class, and most likely her autonomous use of the TL in class, given the opportunity. Courtney, another elementary French learner, explained how she felt a sense of competence when she could spell French words correctly. This, however, entailed only the satisfaction of competence and not other needs.

But in my French class, we have French spelling tests. So she'll say the word, and then we'll have to write it correctly. And I'm a little bit dyslexic ... and spelling's always been kind of rough in English. So French has little dashes and all that good stuff. So when I would get those back and I'd memorize them well or I could write them and I didn't misspell them, I felt really good and solid about where I was in the curriculum" (Courtney, #13, Line 222).

Mark felt competent and proud of his accomplishments when doing well on paper-based language tests involving grammar and vocabulary, but the experience did not help him feel connected with others.

For me, it's when I'm taking the actual exams. Because I've been studying really hard up for those, and so when I sit down to do 'em, I feel very like, "I know what's on this exam, I know how to do each part, I know the grammar from the section, I know the vocab." And so I feel very like almost proud of the work that I've accomplished when they show it on the exam (Mark, #2, Line 429).

Cody, an elementary learner of Japanese, felt a sense of competence not only when he comprehended the Japanese his teacher produced, but when he was able to construct sentences using the grammar and vocabulary they were learning.

Obviously, a lot of it's retaining information, so whenever we were given these grammar tools, like construct sentences and half the vocabulary that we had, whenever we're capable of constructing our own sentences with vocabulary and the grammar, ... it was pretty... What's it called? Satisfying, I'd say (Cody, #11, Line 354).

When asked about times where he felt capable with the language, Michael explained “I’m just... blessed with a really good memory. So I can remember words and conjugations and things that you need to know when you do a language so yeah, it gives me a feeling of mastery, like I said before. So yeah, I get that” (Michael, #4, Line 573).

While noncommunicative settings can be conducive to the satisfaction of individual needs and engagement in limited eudaimonic activities in some situations, they also tend to frustrate students’ needs for autonomy, competence, and relatedness and create feelings of anxiety and fear. Despite her previous example of competence in a noncommunicative situation, Paige explained how she does not like to speak up in front of the class in French for all to hear: “I’m just more nervous it’s gonna be wrong ... in a language [more] than I am in English, it’s weird.” When asked if something would happen if she used the form incorrectly, she explained:

I’ll just look like an idiot. ... No, nothing would happen. I just get corrected but I feel like I’m dumb. ... He’d just be like, he’d probably correct me like, “Hey, it’d make more sense if you said this.” He’s not mean, he’s cool (Paige, #5, Line 326).

Here, Paige felt the frustration of competence, which likely accounted for her reticence to speak in front of the class in French but not in English. Nicole clearly links incorrect language form and feelings of incompetence in one of her German classes: “I’ve never really been afraid of speaking in front of people, and I know a lot of people are. If I feel like my answer was wrong, though, then I’m afraid” (Nicole, #8, Line 251).

When students are evaluated on the accuracy of their language form, they may be more likely to feel the frustration of competence than its satisfaction. Liam felt pressured to perform well on a test evaluating students’ technical understandings of French.

But actually the Grammar and Composition class, so many little details of the language and little grammatical tricks were thrown at us that the first test I was terrified. I honestly felt horrible about going into it. I did alright, it turned out. But yeah, I was a little

overwhelmed by all the little details and things, but I tend to get in my head about tests (Liam, #6, Line 419).

Daniela felt frustrated when she and her peers were evaluated through an exam on the accuracy of their Spanish form instead of their ability to use Spanish to demonstrate their analysis of the literature they had read. Not only was she frustrated because of the unexpected change in the evaluation criteria, she most likely felt that she had still effectively communicated her understanding of the content through Spanish, yet was evaluated heavily on grammar inaccuracies instead.

The issue that happened with this specific exam is like we were not told how the exam was going to line up. And then of course the entire exam was written in Spanish, right, and so you're writing all of these Spanish essays. And we all got a D because he graded on grammar instead of content. And so we had this huge conversation on Monday about, like, "Is this a grammar class or is this a content class?" Because you know there's an Advanced Grammar class, right, and so we're like "What is happening?" And he was of the impression, he was like, "You guys already know how to write like this. This is an advanced Spanish course" (Daniela, #1, Line 91).

Just because a TL immersive environment has been created for students, it does not mean that a student will feel they are communicating or comprehending effectively. Daniela's first university course was conducted fully in Spanish, but no comprehensible input was provided for her, leading to competence frustration and most likely a lack of participation in class.

Because it started in Intermediate 1, you know, there was no English whatsoever and so like for that entire first semester it was literally just me sitting in the classroom, like, "Okay, what did she just say? Wait, we have homework? Did she just say homework?" ... I feel like I've never really caught up since then because they have all been 100% in Spanish (Daniela, #1, Line 89).

In this situation, the issue is not that the class was conducted fully in Spanish, but that the Spanish she interacted with was not comprehensible input just above her level of understanding. This is something she was still encountering the semester before the interview. When asked about her level of comprehension in her current advanced Spanish course, she replied:

Absolutely none. ... He will speak and I will sit there and I will try and comprehend a sentence and by the time I've gotten through it and ... worked it out you know, he's already moved on to the next thing (Daniela, #1, Line 150).

Although one of the themes from the first finding was that relevant and critical topics are conducive to needs satisfaction, the effects of those discussion will not be realized if students feel incompetent due to a lack of comprehensible TL input. Nicole described a situation in which the class was discussing multiculturalism, but she had a difficult time understanding what was going on.

Yeah, I feel like that kinda goes back to like those moments where I felt like I didn't understand what was going on, and so then I felt like out of the conversation, and so I just kind of felt defeated. I think there was this one story we were reading earlier this semester. I forgot what it was called. It was about multiculturalism, and I just didn't understand it, 'cause the grammar was kinda weird. ... That whole time we were reading it, I just felt like I wasn't as included in the class” (Nicole, #8, Line 351).

Not only did she feel a lack of competence because she could not understand the reading, she also felt disconnected from the course itself. Mark explained similarly how he feels that language courses which do not allow for much discussion and student interaction are not conducive to the satisfaction of relatedness.

### **Mixed Methods Results**

This mixed methods study is guided by the overarching question, *What are the characteristics of university world language education which foster student flourishing?* “Flourishing” in this study is conceptualized through the Eudaimonic Activity Model which comprises three components: eudaimonic activities, basic needs satisfaction, and subjective well-being. Students who are flourishing in their language learning must not only “feel” well, but also “do” well. In this way, flourishing entails engagement in specific behaviors (eudaimonic activities) which tend to elicit the satisfaction of objective indicators of wellness (basic psychological needs) as well as positive emotions and meaningfulness (subjective well-being). In

this study, environments and moments related to students' language development that do not consistently embody each of these components is not considered flourishing.

Results from the first phase of the study supported the study's quantitative hypothesis (*H1*) that language students' basic psychological needs satisfaction was strongly and significantly associated with their subjective well-being during their language studies in the Fall 2019 semester. The results reinforce previous evidence that feeling autonomous, competent, connected to others, and prosocial is associated with happiness and meaningfulness, while disassociated with negative emotions. The quantitative analysis did not investigate specific *characteristics* of language learning environments that support these needs and subjective well-being; only the *association* between basic needs satisfaction and subjective well-being (SWB) in the context of postsecondary language study was confirmed. This was one of the further objectives of the qualitative phase—to identify antecedents in language learning environments which bring about basic needs satisfaction and engagement in eudaimonic activities. The quantitative phase provides evidence that, in the context of language learning, feeling autonomous, competent, connected to others, and prosocial also feels good and meaningful. This accounts for the “feeling well” aspect of flourishing.

Themes arising from the qualitative analysis in the second phase of the study explored the associations between the former two components of flourishing: eudaimonic activities and basic psychological needs satisfaction. The primary finding was that language learners' basic psychological needs were more likely satisfied in communicative language environments. These environments could include WL classroom settings or out-of-class experiences in which the target language was used for communication. When students found themselves in environments in which language was used communicatively (interpersonal, interpretive, or presentational),

they were more likely to describe situations in which a combination—or even all—of their basic needs were satisfied. The satisfactions of competence and relatedness seemed to be the fundamental links, or entry points, from which other needs were fulfilled.

One of the primary patterns was that basic psychological needs and eudaimonic activities, at least in the context of language learning, are inextricable and arise simultaneously. For example, the need for competence is strongly linked to feelings of autonomy (and autonomous functioning), relatedness (and intimacy), and beneficence (and prosocial behaviors). When students feel capable in the language (personal growth / competence), they are more likely to communicate their own thoughts, identity, and beliefs (autonomous functioning / autonomy) which helps build relationships with their peers and teacher (intimacy, relatedness). A classroom built on love (intimacy / relatedness) enables meaningful discussion (personal growth / competence) in which students contribute new ideas (prosocial behaviors / beneficence) which they themselves endorse (autonomous functioning / autonomy). When students help others outside of class (prosocial behaviors / beneficence) they grow in their TL proficiency by using it in a meaningful, authentic context (autonomous functioning / autonomy; personal growth / competence) while becoming closer to new people (intimacy / relatedness).

Learners described how environments and situations in which language was interacted with noncommunicatively did sometimes lead to basic needs satisfaction, but only isolated needs. For example, many students felt accomplished from their success on an assessment focused on language form or when working with other students on an activity in English; however, this sense of mastery rarely arose together with other basic needs (i.e., autonomy, relatedness, beneficence) or eudaimonic engagement (i.e., autonomous functioning, intimacy, prosocial behaviors). Additionally, noncommunicative language learning was often described in

terms of need frustration, specifically feelings of control, fear, incompetence, and disconnection from their instructor due to reticence to speak out of fear of correction.

Returning to the overarching mixed-methods research question guiding this study (*What are the characteristics of university world language education which foster student flourishing?*) a synthesis of the findings from the two phases suggests that student flourishing is supported through communicative world language learning environments, especially those which encourage effective, authentic communication in the TL, service to others, and discussion within relevant and critical themes. Students consistently involved in meaningful, authentic TL use in or out of class are likely to be involved in multiple forms of eudaimonic behavior. These behaviors bring about the satisfaction of most or all basic psychological needs as well as an enhanced positive emotions and meaningfulness.

## CHAPTER SIX

### DISCUSSION

#### Overview

The purpose of this mixed methods study was to identify the characteristics of university world language learning environments which are conducive to world language learners' flourishing. The study conceptualized flourishing through the Eudaimonic Activity Model (EAM) (Martela & Sheldon, 2019) which posits that flourishing requires one to not only *feel* well, but also *do* well. Well-doing, in this model, entails engaging in certain activities and motivations characteristic of autonomous functioning, personal growth, service to others, and intimacy. Well-being (i.e., feeling well) comprises two components: the satisfaction of the basic psychological needs within self-determination theory (SDT)—autonomy, competence, relatedness, and a candidate need, beneficence—and subjective well-being. The objective of this study was to explore how flourishing may arise in language learners at the postsecondary level.

The study employed a convergent parallel mixed methods design through which quantitative and qualitative data were collected and analyzed separately. The quantitative phase included responses from a large sample ( $N = 466$ ) of undergraduate students learning a world language about their basic needs satisfaction and subjective well-being during their Fall 2019 language course. The qualitative phase included semi-structured interviews with a small sample ( $N = 13$ ) of participants from the previous quantitative phase to identify which characteristics of world language study were conducive to basic needs satisfaction and engagement in eudaimonic activities. Results from each phase were compared and interpreted. In analyzing the mixed methods results, more emphasis was placed on the analysis of the qualitative data (quan +

QUAL) because they were able to identify certain pedagogical antecedents to flourishing rather than only their statistical association.

### **Purpose of the Study**

The study sought to fulfill two goals beyond the research objectives. First, one goal was to document specific pedagogical characteristics of university world language education which could support students' flourishing. This could include recommendations for instructional strategies, curricular modification, core practices, and educator attitudes. These pedagogical insights may positively impact the practice of language educators at American postsecondary institutions as well as language educators of other levels and contexts.

Additionally, the study sought to further the conversation around the purpose and motivation for learning a new language to include not only learners' language proficiency, but also their healthy psychological and human development. This area has been explored recently through the frameworks of SDT (Noels et al., 2019; Ryan & Deci, 2017) and positive psychology (Dewaele et al., 2019; MacIntyre et al., 2019). Due to the exploratory, interdisciplinary, and interpersonal nature of language, second language education would be a welcome addition to institutions' curricular offerings due to its numerous academic and non-academic benefits.

### **Findings**

This study sought to address the overarching mixed methods research question, *What are the characteristics of university world language education which foster student flourishing?* The primary finding of this study was that communicative language learning environments are more conducive to language learners' flourishing than noncommunicative environments. Language learners in communicative environments were consistently involved in meaningful

communication in the target language (TL) through the interpersonal, interpretive, and presentational modes. Communicative environments were supportive of student flourishing because they promoted engagement in eudaimonic activities (i.e., autonomous functioning, personal growth, intimacy, and service to others), which satisfied learners' basic psychological needs (autonomy, competence, relatedness, and beneficence) and led to increased positive emotions and feelings of meaningfulness. Environments attuned to interpersonal, interpretive, and presentational forms of communication were also likely to "activate" the truly balanced, interdependent nature of basic psychological needs, in which feelings of autonomy arose simultaneously with competence, relatedness, and beneficence.

As found in the quantitative phase, the satisfaction of basic psychological needs was strongly and positively associated with subjective well-being, measured by subjective vitality in this study. A synthesis of the study's qualitative and quantitative findings provide empirical evidence in support for the operationalization of flourishing within the Eudaimonic Activity Model (EAM), as postsecondary language learners were more likely to "do well" and "feel well" in communicative language learning environments over those that are noncommunicative.

What may be most powerful about communicative environments is that they required students to use the TL autonomously. Learners who used the language autonomously spoke and wrote from their own perspectives, beliefs, and values, and autonomous functioning and the satisfaction of autonomy are the foundation of well-being and flourishing within SDT. Because communicative environments were much more attuned to the meaning transferred through the TL rather than the accuracy of its form, students were more likely to have their needs for competence, autonomy, and relatedness satisfied. The perception that one comprehended the TL around them and that others comprehended and responded to their own TL utterances

represented the basis of the findings' conceptualization of flourishing in language education. This is further enhanced when students communicated in the TL as a means to a greater end, such as discussing personally relevant, cultural, and critical topics, as well as engaging in service to others in and outside of class.

Noncommunicative environments, however, seemed to be less conducive to flourishing because they tended to involve students in isolated eudaimonic activities and the satisfaction of individual needs. This is not confined to classrooms with an emphasis on grammar and language form; some students described situations where significant amounts of TL were used in class yet were fully ineffective due to the lack of comprehensible input for these particular students' levels of comprehension. In both of these environments, students were neither able to consistently comprehend the language around them nor were able to use the TL autonomously to communicate with others. Further, language learning situations which did not expect or involve students in meaningful TL communication also often frustrated needs and brought about negative emotions such as fear.

### **Recommendations for Practice**

Language educators are an agentic influence in fostering not only language learners' TL proficiency, but also their well-being. A synthesis of the findings from this study and previous research can provide a number of principles for language educators' practice. The findings from this study suggest that integrating activities into curricula that allow students to act autonomously, engage in service to others, experience personal growth, and develop intimate relationships with peers and instructors will support language learners' flourishing. By participating in activities in which they are "doing well," they also "feel well" through the satisfaction of their needs for autonomy, competence, relatedness, and beneficence as well as

increased positive emotions and meaningfulness. A collection of hypothesized and evidence-based need-supportive teaching practices in language education can be found in the second half of the literature review.

The four themes from the first qualitative finding lay out steps that educators can take to modify their language instruction, the design of their curriculum, and the ways they interact with students. What these four themes share is that they entail students using the TL for meaningful communication as a means to something beyond themselves. In addition, language educators have the ability to change aspects of their teaching to bring these four pedagogical themes into reality for students. Perhaps the most effective changes supported by this study's findings is the internalization and actualization of the high-leverage teaching practices (HLTPs) for world language education, which are "essential for novice teachers to enact in their classrooms to support second language teaching and development" (Glisan & Donato, 2017a, n.p.). The HLTPs share in common the creation of a communicative language learning environment centered within community discourse around cultural topics and authentic texts. Pedagogical suggestions for each of these themes will be explored with consideration to the HLTPs. The HLTPs for second language teaching include:

1. Facilitating target language comprehensibility
2. Building a classroom discourse community
3. Guiding learners to interpret and discuss authentic texts
4. Focusing on form in a dialogic context through PACE
5. Focusing on cultural products, practices, and perspectives in a dialogic context
6. Providing oral corrective feedback to improve learner performance (Glisan & Donato, 2017a, n.p.)

### ***Prioritizing Comprehensible Input and Communication***

First, educators must prioritize effective, authentic communication in the TL during language instruction. Students must not only comprehend the TL used in class, but also actively negotiate meaning with others through the TL (interpersonal mode), interpret spoken and written TL (interpretive mode), and present spoken and written language to others (presentational mode) (ACTFL, 2017). While it is recommended for educators to remain in the TL for 90% or more of instructional time, what may potentially be more important is that the spoken and written language which students interact with in class is *comprehensible input*. In other words, the amount of target language used in class may be rather inconsequential if it is much too advanced or too simplistic for learners, as well as too irrelevant or un compelling (Krashen, 1982; Krashen & Bland, 2014). This is supported by the first two HLTPs, “HTLP#1: Facilitating Target Language Comprehensibility” and “HLTP#2: Building a Classroom Discourse Community” (Glisan & Donato, 2017a).

As a basis for teaching, instructors must make certain that they know each student’s level of comprehension and proficiency and surround them with comprehensible, compelling input to satisfy their need for competence and help them grow personally. Competence, in particular, arose as a key entry-point into other eudaimonic activities and basic needs; when students felt capable in their TL communication, they were likely to contribute more often in class, especially from their own perspectives, which helped build solidarity and community between peers and their instructor. Shrum and Glisan (2016) provide a number of suggestions for instructional practices conducive to communication and the development of language proficiency. A selection of these include endeavoring to mirror authentic, real-world interaction between students, incorporating inquiry-based activities, interpersonal and interpretive tasks, and approaching

culture in a way “that emphasizes exploring the connection of cultural products and practices to their philosophical perspectives” (Shrum & Glisan, 2016, p. 56).

Noncommunicative environments, on the other hand, did not encourage TL communication between students, which impeded the satisfactions of autonomy and competence and restricted community-building and connectedness between students. To avoid this, educators should seek to move away from a grammar-based *learning* approach toward a more contextualized *acquisition* approach. Shrum and Glisan (2016) suggest that educators limit activities that are mechanical, close-ended, or decontextualized and try to incorporate authentic texts and tasks which require the use of at least one of the communicative modes. When form must be addressed, it should be explored within a meaningful context, such as an authentic TL article or video, and in dialogue with peers and the instructor (HLTP#4: Focusing on Form in a Dialogic Context through PACE) or through constructive, corrective feedback which supports and does not impede communication (HTLP#6: Providing Oral Corrective Feedback to Improve Learner Performance) (Glisan & Donato, 2017a).

### ***Discussing Relevant and Critical Topics***

Next, discussion around relevant and critical topics was strongly supportive of autonomous functioning in class, TL competence, and community building. Clementi and Terrill (2013) encourage building the language course’s curricular units around global themes, such as belonging, challenges, creativity, discovery, exploring time and place, identity, or well-being. They argue that these global themes are inherently communicatively and culturally focused, intrinsically interesting, cognitively engaging, and based on modern standards for language learning. For maintaining effective and appropriate interpersonal communication between students and the instructor, the authors suggest “exchanging ideas and information purposefully

and with clarity,” “listening attentively,” “engaging other participants by inviting their perspectives on the topic,” and “withholding judgment during the exchange of ideas and information” (Clementi and Terrill, 2013, p. 10).

Critical topics within a focus on social justice are also fitting for students’ autonomous use of the TL through interpersonal communication with others. Glynn, Wesely, and Wassell (2018) provide a list of thought-provoking, critical themes around which educators may organize their curricula—disability; environment and climate; health; immigration and refugees; war and genocide; race, racism, and discrimination; and gender—as well as authentic texts and contextualized, communicative tasks to accompany them. Finally, the actualization of this finding is supported by three HLTPs, “HLTP#2: Building a Classroom Discourse Community”, “HLTP#3: Guiding Learners to Interpret and Discuss Authentic Texts”, and “HLTP#5: Focusing on Cultural Products, Practices, and Perspectives in a Dialogic Context” (Glisan & Donato, 2017a).

### ***Integrating Service to the Community***

The results from this study also suggest that one of the most high-leverage changes language educators can make is to integrate service to others into the WL curriculum. This may be more feasible when the language studied is commonly spoken or signed in the local area; however, small, yet meaningful and impactful acts of prosociality can be incorporated into many if not all postsecondary language programs (Bettencourt, 2015). Some activities may be more communicative than others, but the essential quality is that they are authentic and highly motivating for language learners. This could involve—such as Summer’s service-learning project—translating resources for a local organization, assisting with a local festival, event, or outreach project, or mentoring students, and can elicit both well-being and linguistic outcomes

such as the experiences of the Italian learners in Australia placed in an aged-care service setting (Bouvet et al., 2017).

It is critical, however, that language learners' helping behaviors be situated within a collaboration with community partners based on reciprocity and reflection. Programs must listen to the actual needs of community partners, which forms "the basis for the ethical and sustained engagement of higher-education institutions with partner organizations and community stakeholders" (Palpacuer Lee, Curtis, & Curran, 2017, p. 170). Community-based service-learning (CBSL) is an approach with seeks "to develop community-university partnerships to address community needs while also engaging students in critical analysis of sociopolitical issues linked to language" (Leeman, 2011, p. 303). For this reason, the integration of service activities, such as those promoted through CBSL, should accompany deep explorations, discussions, and reflections on sociopolitical and sociolinguistic topics as recommended in the previous section. In this way, this pedagogical theme is supported by "HLTP#1: Facilitating Target Language Comprehensibility", "HLTP#2: Building a Classroom Discourse Community", and "HLTP#5: Focusing on Cultural Products, Practices, and Perspectives in a Dialogic Context" (Glisan & Donato, 2017a).

### ***Investing in Students' "Language Journeys"***

Finally, students care about and benefit greatly from their instructors' personal investment in their individual "language journeys"—a phrase coined by Daniela about her Italian professors. Learners feel well and cared for when they feel that their instructor understands their purpose in the language and tailors the course to them. This could involve a survey at the beginning of the semester taking note of students' personal, linguistic, and professional goals, their needs, and their interests. It also involves actively listening to students,

being flexible, and consistently drawing on students' cultural capital and background experiences within instruction, the curriculum, and their interactions with the them.

Glynn, Wesely, and Wassell (2018) recommend that, to make space for students' identities in class and build a community of learners, educators can promote choice in class, make time to check-in with students (e.g., in person, online, through surveys, email, etc.), use examples representing their identities, capitalize on their unique perspectives, and facilitate a discourse community. Finally, language learners recognize and appreciate their instructors' flexibility and availability; however, having an open schedule cannot make up for unapproachability resulting from apathy toward students and teaching. Educators must truly care for and respect their students and recognize their humanity. This final pedagogical theme is primarily supported by two HLTPs: "HLTP#1: Facilitating Target Language Comprehensibility" and "HLTP#2: Building a Classroom Discourse Community".

### **Theoretical Implications**

The findings of this study have substantial implications for different theoretical frameworks. These include implications for Krashen's language acquisition hypotheses, the candidate need *beneficence*, and the Eudaimonic Activity Model informed by SDT.

#### ***Krashen's Second Language Acquisition Hypotheses***

The qualitative findings strongly support Krashen's (1982) hypotheses of second language acquisition, specifically the learning-acquisition distinction, the input hypothesis, and the affective filter hypothesis. The divergence between communicative and noncommunicative language environments in the results closely mirrors that of the learning-acquisition distinction. Acquisition refers to a "subconscious process" in which "language acquirers are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are

using the language for communication” (Krashen, 1982, p. 10). Learning, on the other hand, “is ‘knowing about’ a language, known to most people as ‘grammar’, or ‘rules’” (p. 10). In this study, environments in which students were *acquiring* the TL unconsciously were more conducive to flourishing than those attuned to *learning* about the TL.

Further, students who were involved in *acquiring* rather than *learning* the TL felt the satisfaction of competence when they comprehended the TL around them. This refers to comprehensible input, or understandable messages that are just beyond one’s current level of competence (Krashen, 1982). In this way, students’ satisfactions of competence, as well as the other needs which arose with it, were sensitive to the acquisition taking place when they interacted with comprehensible input in and out of class. Finally, in line with the affective filter hypothesis, students’ emotions could act as a barrier to acquisition. Students who were consistently anxious or lacked confidence in class were not only less likely to be in a communicative environment but were also less likely to be acquiring the TL. This supports Reeve’s (2016) suggestion to create an environment tolerant of failure.

### ***SDT and the Eudaimonic Activity Model***

Flourishing was conceptualized in this study through the Eudaimonic Activity Model due to its inclusion of both behavioral (i.e., well-doing) and psychological (i.e., well-being) components of flourishing, which supported the pedagogy-related objectives of the study. Despite well-doing, or eudaimonic activities, being integral to this model for flourishing, the well-doing behaviors addressed in this study (e.g., autonomous functioning, personal growth, intimacy, and service to others), as well as the many others in the literature (Huta, 2013; Ryan, Curran, & Deci, 2013; Sheldon, 2018), are nearly identical to the basic psychological needs of autonomy, competence, relatedness, and beneficence which are theorized and evidenced to arise

from them. In this way, it may be more useful for future researchers to center their attention on the basic psychological needs satisfaction of an individual and then to what certain environmental conditions or behaviors helped bring them about. Further, the model operated well given the intertwining and simultaneous nature of basic needs satisfaction and engagement in eudaimonic activities in the contexts of teaching and learning. The categorization of the model between “doing” and “feeling” well across three components instead of individual needs and activities is appropriate to the phenomena it seeks to capture.

### ***Beneficence***

This study marks the first investigation of the candidate need for beneficence—feelings of prosocial impact (Martela & Ryan, 2015)—in the contexts of teaching and learning. As of the completion of this study, beneficence has not yet met the criteria required to be considered a basic psychological need (see Martela & Ryan, 2020). The results from this analysis provide evidence that beneficence meets some of these criteria. First, the results demonstrate that prosocial behaviors and feelings of prosocial impact are meaningful influences in the origination of language learners’ well-being and flourishing. Additionally, this study identified this association in a new context—education. Helping behaviors tended to activate a balanced basic psychological needs satisfaction in which most or all needs were met. For example, students engaged in service to others not only felt a sense of beneficence but also felt autonomous and competent in their TL use and often a sense of belonging with their peers or community; however, when autonomy, competence, or relatedness were the instigating need, the satisfaction of beneficence was not likely to arise with them. This finding may lend some support to the claim that prosocial behaviors are inherently satisfying and that basic needs satisfaction mediates the relationship between helping behaviors and well-being (Weinstein & Ryan, 2010).

While this study did not test for the empirical separability of beneficence from autonomy, competence, and relatedness, the quantitative analysis demonstrated strong correlations between them, especially between beneficence and relatedness,  $r(466) = 0.76, p < .001$ . This overlap could also be seen not only in the structural model's modification indices, particularly with the item referring to having a "positive impact on the people around me" (BEN1), but also in the experiences students described in the qualitative phase. When asked about a situation when students felt they had helped others, students often referred to helping their peers with an activity in class. As mentioned previously, it may be that, due to the proximity in which students learn, the "people around me" are their peers with whom they have consistently intimate and constructive relationships. This is not surprising given that "people experience relatedness and belonging, for example, through contributing to the group or showing benevolence" (Ryan & Deci, 2017, p. 11). This may be a measurement issue specific to educational contexts, or further evidence of beneficence's inseparability from autonomy, competence, and relatedness. More research is needed in this area.

### **Recommendations for Further Research**

The foremost recommendation of this study is for the inclusion of more qualitative and mixed methods educational research in SDT and positive psychology. While structural models incorporating psychological variables are important to uncovering unique, cross-cultural patterns between internal states and subsequent behaviors, they are ill-equipped to detect nuance in the lived experiences of diverse individuals across diverse environments. One of the elements of this study's qualitative findings—the interdependent, simultaneous nature of basic psychological needs satisfaction in language learning—could easily be mistaken as multicollinearity or measurement redundancy in statistical models. Additionally, quantitative methods in SDT

remain largely disconnected from the needs of the people on which the field is grounded: learners and educators.

Further, although SDT argues that schools are contexts for student flourishing, research within the theory remains largely focused on engagement, performance, and achievement outcomes. While these are undoubtedly relevant outcomes, they must be considered in light of students' basic psychological needs and well-being with particular emphasis on what aspects of the environment bring them about. To this end, experimental research testing the effects of specific needs-based language approaches, activities, and curricular models on well-being, engagement, and language learning outcomes is needed, especially given SDT's self-endowed positioning as both a critical and practical theory (Ryan & Deci, 2017).

### **Final Thoughts**

It was stated in the foreword that there are simple things that educators can do that will make a significant difference in students' experiences in school. The results of this study lend support to this claim, at least within university world language education. One of the fundamental assumptions of this study is that all human beings are born with an innate capacity and inclination to thrive and that thriving entails certain ways of living and feeling. These are not prescriptive; they include acting in line with one's values, feeling a sense of mastery, belongingness, and love, and benefitting the welfare of others. In the United States, the American Council on the Teaching of Foreign Languages (ACTFL) and other experts in world language pedagogy have promoted evidence-based principles for language teaching that directly support these elements of flourishing, which are likely to encourage students in "becoming motivated, vital, resourceful, and fully functioning adults" who feel "empowered and confident in their learning and problem solving and feel a sense of belonging to their schools and larger human

community” (Ryan & Deci, 2017, p. 354). The students are ready—they were born ready—and now it is up to educators and teacher educators to actualize schools and world language education as contexts for flourishing.

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## Appendices

### Appendix A: Quantitative Online Survey Protocol

#### Section: Introduction

Thank you for participating in this survey! The purpose of this research is to explore the relationship between students' attitudes, motivation, and language use in their world language classes. This is an anonymous survey which is not an evaluation of you or your language course or instructor.

This survey will take no longer than 6 minutes to complete. Participants who complete the survey will be entered into a drawing for one of three [retailer] gift cards. There are no risks or benefits involved in participating in this study. You will not be paid for your participation in this study. Your name will not be associated in any way with the information collected or with the research findings from this study. The researcher will not share information about you with anyone unless required by law or unless you give written permission. All information will be kept confidential to the extent allowed by [state] law and university policy. Completion of this instrument will be considered permission to use the information you provide in an anonymous manner to analyze responses. Your confidentiality will be protected to the extent allowed by law and university policy. Participants who have won a gift card in the drawing will be notified by email at the beginning of the Spring 2020 semester. If a response to the notification is not received within one week, a new email address will be drawn.

1. Gender identity

- Male
- Female
- Transgender, non-conforming or other

2. Racial/ethnic identity

- African American
- Asian
- Latinx
- Native American
- Pacific Islander
- White
- Other

3. Age \_\_\_\_\_

4. In which world language course are you currently enrolled at the [university]?

- Arabic
- Chinese
- Classics
- French
- German
- Italian
- Japanese

Portuguese  
Russian  
Spanish  
Swahili  
Other  
None

5. In which course level of [language] are you currently enrolled?

Elementary 1  
Elementary 2  
Intermediate 1  
Intermediate 2  
Higher than Intermediate 2 (Advanced)

6. [Language] is my...

Major  
Minor  
Neither my major nor my minor

**Section: Basic Psychological Needs Satisfaction, Part 1 (randomized item order)**

7. *Recently in my world language course, . . .*

I feel a sense of choice and freedom in the things I undertake. (AUT1)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

8. *Recently in my world language course, . . .*

I feel that my decisions reflect what I really want. (AUT2)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

9. *Recently in my world language course, . . .*

I feel confident that I can do things well.

Strongly disagree  
Disagree

Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

10. *Recently in my world language course, . . .*

I feel capable at what I do. (COM2)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

11. *Recently in my world language course, . . .*

I feel that the people I care about also care about me. (REL1)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

12. *Recently in my world language course, . . .*

I feel connected with people who care for me, and for whom I care. (REL2)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

13. *Recently in my world language course, . . .*

I have been able to improve the welfare of other people. (BEN3)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

14. *Recently in my world language course, . . .*  
My influence in the lives of other people has been positive. (BEN4)
- Strongly disagree
  - Disagree
  - Somewhat disagree
  - Neither agree nor disagree
  - Somewhat agree
  - Agree
  - Strongly agree

**Section: Basic Psychological Needs Satisfaction, Part 2 (randomized item order)**

15. *Recently in my world language course, . . .*  
I feel I can successfully complete difficult tasks. (COM4)

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

16. *Recently in my world language course, . . .*  
I feel competent to achieve my goals. (COM3)

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

17. *Recently in my world language course, . . .*  
I feel my choices express who I really am. (AUT3)

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

18. *Recently in my world language course, . . .*  
I feel I have been doing what really interests me. (AUT4)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

19. *Recently in my world language course, . . .*

I feel close and connected with other people who are important to me. (REL3)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

20. *Recently in my world language course, . . .*

I experience a warm feeling with the people I spend time with. (REL4)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

21. *Recently in my world language course, . . .*

I feel that my actions have a positive impact on the people around me. (BEN1)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree  
Strongly agree

22. *Recently in my world language course, . . .*

The things I do contribute to the betterment of society. (BEN2)

Strongly disagree  
Disagree  
Somewhat disagree  
Neither agree nor disagree  
Somewhat agree  
Agree

Strongly agree

**Section: Subjective Vitality (item order randomized)**

23. *Recently in my world language course, . . .*

I feel alive and vital. (VIT1)

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

24. *Recently in my world language course, . . .*

I don't feel very energetic. (VIT2)

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

25. *Recently in my world language course, . . .*

I feel so alive I just want to burst. (VIT3)

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

26. *Recently in my world language course, . . .*

I have energy and spirit. (VIT4)

Strongly disagree

Disagree

Somewhat disagree

Neither agree nor disagree

Somewhat agree

Agree

Strongly agree

27. *Recently in my world language course, . . .*

I feel alert and awake. (VIT5)

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

28. *Recently in my world language course, . . .*

I feel energized. (VIT6)

- Strongly disagree
- Disagree
- Somewhat disagree
- Neither agree nor disagree
- Somewhat agree
- Agree
- Strongly agree

### **Section: Summary**

29. Would you be interested in being interviewed next semester about your experiences learning a language at [university name]?

- Yes
- No

30. In order to be entered into the drawing for one of the [retailer] gift cards, please type your university email address in the box below. Be sure to hit the submit button below to complete this survey. Thank you!

---

## Appendix B: Semi-Structured Qualitative Interview Protocol

Can you tell me a little bit about your world language (WL) class last semester?

- What language and level were you enrolled in?
- Are you majoring or minoring in this language?
- Why are you learning this language?
- Why did you enroll in the class?
- What did you expect from the course? What were your goals?
- What were your overall impressions of the class?

How much TL was generally used in a normal class meeting?

- How much was produced by your instructor? You? Your peers?
- How much of the language in the class did you comprehend?

Did anything change about your motivation for learning the language during the last semester?

During your WL class last semester, can you think of times where you felt empowered, alive, or full of spirit?

- What made you feel that way? What did your instructor or peers do to make you feel that way?

During your WL class last semester, can you think of times where you felt a sense of freedom or volition, or like you were in control?

- What made you feel that way? What did your instructor or peers do to make you feel that way?

During your WL class last semester, can you think of times where you felt effective, competent, or capable?

- What made you feel that way? What did your instructor or peers do to make you feel that way?

During your WL class last semester, can you think of times where you felt connected to others, like you belonged, or were cared for?

- What made you feel that way? What did your instructor or peers do to make you feel that way?

During your WL class last semester, can you think of times where you felt like you had a positive impact on others, benefitted the welfare of others, or contributed to something greater, such as society?

- What made you feel that way? What did your instructor or peers do to make you feel that way?

Is there anything else you would like to share about your experiences learning a language last semester?

## **Appendix C: Informed Consent for Qualitative Phase**

*Introduction:* You are being asked to participate in a research study. It is important that you read the following information and ask as many questions as necessary to be sure you understand what you are being asked to do.

*Title of Research Project:* Exploring the Antecedents of Needs Satisfaction for University World Language Learners

*Principal Researcher:* William S. Davis, M.A.T.  
Ph.D. Student and Graduate Assistant  
University of Arkansas, College of Ed. And Health Professions  
Dept. of Curriculum and Instruction, Peabody Hall 109  
[wsd002@uark.edu](mailto:wsd002@uark.edu)

*Co-Researcher:* Freddie A. Bowles, Ph.D.  
Associate Professor of World Languages Education  
University of Arkansas, College of Ed. And Health Professions  
Dept. of Curriculum and Instruction, Peabody Hall 306  
[fbowles@uark.edu](mailto:fbowles@uark.edu)

*Purpose:* The purpose of the research is to identify the antecedents to university world language learners' feelings that their psychological needs have been met during their world language courses at [university].

*Procedures:* You will be asked to participate in an interview about your experiences learning a new language at [university]. The interview will last approximately 30 minutes. The audio from the interview will be recorded with your permission.

*Potential Benefits and Risks of the Research:* Your participation in this study will contribute to the fields of world languages education. There are no direct benefits or risks of participating in this research.

*Right to Withdraw:* You are free to refuse to participate in the research and to withdraw from the study at any time. Your decision to withdraw will bring no negative consequences.

*Confidentiality:* All information will be recorded anonymously. All information collected will be kept confidential to the extent allowed by law and University policy. Results from the research will be reported using pseudonyms.

*Questions about the Research:* If you have any questions about the research, please ask them now. If you have questions later, you may contact William Davis either by phone [number removed] or by email ([wsd002@uark.edu](mailto:wsd002@uark.edu)) and Dr. Freddie Bowles by E-mail ([fbowles@uark.edu](mailto:fbowles@uark.edu)).

This research project has been reviewed and approved by the Institutional Review Board for the Protection of Human Subjects at The University Arkansas. You may also contact the University of Arkansas Research Compliance office listed below if you have questions about your rights as a participant, or to discuss any concerns about, or problems with the research.

Ro Windwalker, CIP  
Institutional Review Board Coordinator  
Research Compliance  
University of Arkansas  
109 MLKG Building  
Fayetteville, AR 72701-1201  
479-575-2208  
[irb@uark.edu](mailto:irb@uark.edu)

**Informed Consent:**

I, \_\_\_\_\_ (**please print**), have read the description including the purpose of the study, the procedures to be used, the potential for benefits and risks, the confidentiality, as well as the option to withdraw from the study at any time. I have been able to ask questions and express concerns, which have been satisfactorily responded to by the researcher. I understand that participation is voluntary. I understand that no rights have been waived by signing this consent form. My signature below indicates that I agree to participate in this study and that I have received a copy of this agreement from the researcher.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

## **Appendix D: Data Collection Schedule**

### ***Quantitative Phase***

December 4 <sup>th</sup> , 2019	Survey distributed to potential participants via email
December 10 <sup>th</sup> , 2019	Follow-up reminder email sent

### ***Qualitative Phase***

February 25 <sup>th</sup> , 2020	Interview with Daniela
February 27 <sup>th</sup> , 2020	Interview with Mark
March 1 <sup>st</sup> , 2020	Interview with Hannah (Zoom)
March 3 <sup>rd</sup> , 2020	Interview with Michael
March 4 <sup>th</sup> , 2020	Interview with Paige
March 5 <sup>th</sup> , 2020	Interview with Liam
March 10 <sup>th</sup> , 2020	Interview with Cora
March 16 <sup>th</sup> , 2020	Interviews with Melissa (Zoom) and Nicole (Zoom)
March 17 <sup>th</sup> , 2020	Interview with Summer (Zoom)
March 18 <sup>th</sup> , 2020	Interviews with Cody (Zoom) and Courtney (Zoom)
March 19 <sup>th</sup> , 2020	Interview with Tess (Zoom)

## Appendix E: Mplus Input for Full Latent Structural Model

```
TITLE: WD Full Latent Structural Model
DATA: FILE IS
"\mydocs.uark.edu\mydocs\wsd002\Documents\Dissertation\WD052520
.dat"
FORMAT IS free;

VARIABLE:
NAMES ARE
AUT1 AUT2 AUT3 AUT4
COM1 COM2 COM3 COM4
REL1 REL2 REL3 REL4
BEN1 BEN2 BEN3 BEN4
VIT1 VIT2 VIT3 VIT4 VIT5 VIT6;

USEVARIABLES ARE
AUT1 AUT2 AUT3 AUT4
COM1 COM2 COM3 COM4
REL1 REL2 REL3 REL4
BEN1 BEN2 BEN3 BEN4
VIT1 VIT2 VIT3 VIT4 VIT5 VIT6;

ANALYSIS:
ESTIMATOR = MLM;

MODEL:
Autonomy BY AUT1 AUT2 AUT3 AUT4;
Competence BY COM1 COM2 COM3 COM4;
Relatedness BY REL1 REL2 REL3 REL4;
Beneficence BY BEN1 BEN2 BEN3 BEN4;
Vitality BY VIT1 VIT2 VIT3 VIT4 VIT5 VIT6;

NeedsSat BY Autonomy Competence Relatedness Beneficence;

Vitality ON NeedsSat;

OUTPUT:
modindices stdyx;
```

## Appendix F: Screenshots of Qualitative Analysis in Dedoose

The screenshot shows the 'Media' view in Dedoose. The interface includes a top navigation bar with the Dedoose logo and user account information. Below the navigation bar is a 'Columns & Filters' sidebar on the left, which allows users to toggle the visibility of various columns and filters. The main area displays a table of documents. The table has the following columns: Selected, Type, Title, Date/Time, Excerpts, Length, and Descriptors. The data in the table is as follows:

Selected	Type	Title	Date/Time	Excerpts	Length	Descriptors
<input type="checkbox"/>	Document	Int 5 Transcript.doc	06/05/2020	20	73185	0
<input type="checkbox"/>	Document	Int 12 Transcript.doc	06/05/2020	19	51198	0
<input type="checkbox"/>	Document	Int 1 Transcript.docx	06/05/2020	43	43106	0
<input type="checkbox"/>	Document	Int 2 Transcript.doc	06/05/2020	30	65058	0
<input type="checkbox"/>	Document	Int 3 Transcript.doc	06/05/2020	16	39115	0
<input type="checkbox"/>	Document	Int 4 Transcript.doc	06/05/2020	10	89280	0
<input type="checkbox"/>	Document	Int 9 Transcript.doc	06/05/2020	17	56569	0
<input type="checkbox"/>	Document	Int 6 Transcript.doc	06/05/2020	16	58997	0
<input type="checkbox"/>	Document	Int 7 Transcript.doc	06/05/2020	18	56910	0
<input type="checkbox"/>	Document	Int 8 Transcript.doc	06/05/2020	16	39144	0
<input type="checkbox"/>	Document	Int 10 Transcript.doc	06/05/2020	13	47981	0
<input type="checkbox"/>	Document	Int 11 Transcript.doc	06/05/2020	14	47641	0
<input type="checkbox"/>	Document	Int 13 Transcript.doc	06/05/2020	4	43612	0

At the bottom of the table, it indicates 'Page: 1 of 1. Items: 1-13 of 13'. There are buttons for 'Delete Selected', 'Select All', 'Select None', 'Make Set', 'Add To Set', and 'Remove From Set'.

The screenshot shows the 'Active Excerpts' view in Dedoose. The interface is similar to the 'Media' view but displays excerpts instead of full documents. The 'Columns & Filters' sidebar on the left is configured to show columns for Selected, Type, Media, User, Length, Codes Count, Codes Short, and Memo. The main table displays the following data:

Selected	Type	Media	User	Length	Codes C...	Codes Short	Me...
<input type="checkbox"/>	Excerpt	Int 7 Transcript.doc	wsdavis89	476	2	Autonomous functioning, Intimacy	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	55	1	Autonomous functioning	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	409	3	Autonomous functioning, Helpin...	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	376	2	Helping others, Autonomous fun...	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	1218	1	Autonomous functioning, Intimacy (17856-17968)	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	1218	1	Competence	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	735	2	Competence, Autonomy	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	260	1	Competence	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	230	1	Competence	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	301	1	Competence	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	778	2	Competence, Autonomy	
<input type="checkbox"/>	Excerpt	Int 1 Transcript.d...	wsdavis89	112	1	Competence	

A tooltip is visible over the 'Competence' code in the last row, showing 'Showing 1 of 1 Codes'. At the bottom, it indicates 'Page: 1 of 17. Items: 1-15 of 236'. There are buttons for 'Delete Selected', 'Select All', 'Select None', 'Make Set', 'Add To Set', and 'Remove From Set'.

## Appendix G: IRB Exempt Approval for Quantitative Phase



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**To:** William S Davis  
BELL 4188

**From:** Douglas James Adams, Chair  
IRB Committee

**Date:** 08/26/2019

**Action:** **Exemption Granted**

**Action Date:** 08/26/2019

**Protocol #:** 1908207157

**Study Title:** Target Language Use and Comprehension as Antecedents to University World Language Learners' Basic Need Satisfaction

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

cc: Freddie A Bowles, Investigator

## Appendix H: IRB Exempt Approval for Qualitative Phase



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**To:** William S Davis  
BELL 4188

**From:** Douglas James Adams, Chair  
IRB Committee

**Date:** 02/13/2020

**Action:** **Exemption Granted**

**Action Date:** 02/13/2020

**Protocol #:** 2001244987

**Study Title:** Exploring the antecedents of needs satisfaction with university WL students

The above-referenced protocol has been determined to be exempt.

If you wish to make any modifications in the approved protocol that may affect the level of risk to your participants, you must seek approval prior to implementing those changes. All modifications must provide sufficient detail to assess the impact of the change.

If you have any questions or need any assistance from the IRB, please contact the IRB Coordinator at 109 MLKG Building, 5-2208, or [irb@uark.edu](mailto:irb@uark.edu).

cc: Freddie A Bowles, Investigator