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The Interrelationship of Attributions, Self-Efficacy,

Language Learning Beliefs, and Achievement

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How College Students Explain Their Grades in a Foreign Language Course: The Interrelationship of Attributions, Self-Efficacy,

Language Learning Beliefs, and Achievement

by

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Dissertation

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This dissertation is dedicated to my family.

I am so richly blessed by the people around me who have supported and loved me.

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Research on self-efficacy has been extremely prolific in the past two decades with many researchers investigating the relationship between students' self-efficacy and achievement in a wide variety of domains. Similarly, there has been a wealth of research examining the relationship between attribution and achievement. Self-efficacy are the beliefs people have about whether or not they can successfully complete a task while attributions are the beliefs people have for why they have or have not been successful at a task they have just completed. These two areas of beliefs and their effects on students' achievement have seldom been researched together though they have each independently contributed to our understanding of how critical students' appraisals of themselves can be for their success in school. Although studies have reported on how students make attributions in general and research has looked at students' self-efficacy in areas such as math, science and sports, one domain has been surprisingly neglected, language learning.

This study examined the general question of the relationship between foreign language learners' attribution, self-efficacy beliefs, general language learning beliefs, and their achievement in foreign language classes. Quantitative methods were used to examine Weiner's attribution theory and Bandura's self-efficacy theory in the foreign language field.

Participants were 500 undergraduates enrolled in Spanish, German, and French classes who were asked to fill out self-report questionnaires about their language learning beliefs, attitudes and motivation towards foreign language learning, and to provide attribution and self-efficacy ratings upon receiving two mid-semester exam grades.

Results indicated that self-efficacy correlated positively with internal, personal, and stable attributions, and negatively with external attributions. In addition, self-efficacy correlated positively with ability and effort attributions, and negatively with luck and teacher attributions. Results also indicated that students who made internal or stable attributions for success had higher self-efficacy beliefs than students who made external or unstable attributions. Students who made unstable or internal attributions for failure also had higher self-efficacy than those who made stable or external attributions. Finally, students making internal attributions received higher grades than students making external attributions, and the same was true for students making personal as opposed to non-personal attributions. Implications for research and practice are discussed.

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Chapter 1

Introduction

Beliefs influence perception. Perception structures reality. Reality suggests possibilities. Possibilities generate choices. Choices initiate actions. Actions affect outcomes. Outcomes impact beliefs. Awareness facilitates change. Change anywhere becomes change everywhere. Tobin Quereau, 1994.

"Why are they so different?" is probably the most commonly asked question when teachers are in classrooms with some students being more eager than others to learn. It has also been noted by teachers that the degree of effort that learners want to put into a learning task differs considerably across learning tasks. A student can be very motivated in one session of his or her science class because there are hands-on activities to work on while in another session, the same student can be very passive and indifferent in the science class because he or she is asked to read the textbook and memorize terms. There are individual differences between people and within individuals, there are differences across domain. One area of learning that may be very different from other types of learning is foreign language learning because students are asked to make something foreign a part of their self. The techniques used for teaching can also be a unique experience for the students because they are often asked to speak in front of the class. Therefore, it would be of interest to examine why some students are motivated and do

well in their foreign language class while some do not put in effort into their language class and are not successful at foreign language learning.

Many factors affect the learning process with motivation generally acknowledged as a key determinant of successful outcomes, one that has garnered much attention from educators and researchers. Motivation is generally defined as the force that energizes and directs a behavior towards a goal (Schunk, 1990). It appears to affect learning and performance in many ways, such as guiding individuals to work toward goals (Dweck & Elliot, 1983; Eccles & Wigfield, 1985; Maeher & Meyer, 1997) and promoting individuals to initiate activities and persist in those activities in the face of difficulty (Pintrich et al., 1993; Stipek, 1993).

Research clearly shows a positive correlation between motivation and achievement (Ringness, 1965; Wang, Haertel, & Walberg, 1993). However simply acknowledging the importance of learner motivation and how motivation relates to learners' actions does not allow us to understand fully how students develop motivation and how we can help students become motivated. Therefore, in order to understand and explain learners' motivation to a broader extent, knowledge of the factors that facilitate motivation to learn and achieve is critical. As a result, researchers and educators have turned to exploring why some individuals are more motivated than others to learn and how students develop motivation to complete a particular task. For example, as a learner encounters a task, how much motivation he or she has for it depends on many factors such as value for the task, past learning experiences, the nature of the task, and how it relates to the learner's goal. Whether he or she decides to persist on working on the task

depends on further analysis and evaluation of his or her ability, perceptions of capability, expectancy for success, and how he or she explains the outcome to determine whether future effort in a similar task would be worth the time.

In cognitive learning theories, the existence of cognitive structuring processes in general have long been demonstrated, and in recent research, it has become more evident that students simultaneously build up a network of beliefs about their capabilities and about reasons for success and failure. Recent cognitive motivation models also depict learners as people who actively attach meanings to their learning situations, with students' beliefs assumed to play an important role in their actions. Among several constructs within the area of motivation, two theories that have contributed substantially to our understanding of students' beliefs are the work on attribution and self-efficacy. Building on the two strands of research and focusing on the domain of foreign language learning, I investigated in this study the interactions among students' beliefs about learning foreign languages with their self-efficacy and attributional beliefs.

Many studies have reported on how students make attributions in general and, although research has looked at students' self-efficacy in areas such as math, science, and sports, one domain has been surprisingly neglected in this literature, language learning. Such an oversight would seem to need to be remedied because learning a language has characteristics that differ from other types of learning. Language learning involves making something foreign part of one's self. One's willingness to open oneself to change as well as one's attitude toward the foreign language's community will influence how well one can make this material part of a behavioral repertoire (Gardner, 2001).

Language learning is also different from other types of learning because probably no other field of study requires an individual to take social risks or endure potential public embarrassment in the way language study does (Horwitz, 1990). While a foreign language is a "learnable" school subject in that it has concrete grammatical rules that can be taught explicitly, it is also socially and culturally bounded, which makes language learning a deeply social event that requires the integration and assimilation of a wide range of elements of the target culture (Williams, 1994). As Horwitz (1988) has reported, many language learners make pre-assumptions of who can succeed in language learning. Learning a foreign language is different in many ways from learning other school subjects. Therefore, students' language learning self-efficacy and attributions may be very different from other areas of learning and may work differently in influencing their achievement. Because of the paucity of research in this combined area, I was interested in combining the three lines of research to understand how students' language learning beliefs relates to their self-efficacy and the attributions they would make in the foreign language classroom, and whether and how beliefs about foreign language learning are connected to learners' self-efficacy, attributional responses, and ultimately learners' achievement. In the next sections, I provide a brief overview of the literature on Weiner's attribution theory, Bandura's self-efficacy theory, language learning motivation, and language learning beliefs theories, before introducing the study itself.

Attribution

Weiner's attribution theory was an attempt to discover how individuals perceive the cause of their behavior and to look at the way their beliefs may affect their behavior

and motivation (Fiske & Taylor, 1984). In this view, the attribution process begins as follows: at many points in their lives, individuals succeed at some things and fail at others and, thinking back about their experiences, they ask themselves why success or failure has occurred. It is a part of human nature to find reasons for one's successes or failures. By seeking explanations and understanding for the underlying causes of one's success, one can predict and control the events that affect them and continue working, with the hope of succeeding again and again. Also, the process of ascribing a reason for failure can guide a person so as to avoid failing again. The process, however, is dependent upon one's beliefs. For instance, if a student believes that his or her success is due to the amount of effort he or she has put into the task, the student will expect to do well the next time he or she approaches similar tasks assuming that effort can determine the outcome. Or, if the student fails and believes that failure is due to his or her low ability, the student may avoid similar tasks in the future so as to avoid failing again. This reasoning process is known as making attributions, and it is a concept introduced in the literature to understand students' motivation and achievement in the classroom.

Heider (1958), generally acknowledged to be the founder of attribution theory, first proposed that perceived causes of behavior depend on two factors, personal and environmental factors. As an extension to Heider's theory, Rotter (1966) introduced the dimension of locus of control, a dimension concerned with whether the individual perceives the cause of an event as internal to the self or as due to external factors.

While there have been numerous attributional conception proposed, each having its own approach to causal thinking, the most recent and the theory that is most

comprehensive in its relationship to achievement motivation is the attribution theory formulated and elaborated by Weiner et al., in 1971. This attributional model presents a sketch of how individuals analyze or find causes of an event (Figure 1). Within this model, attributions can be categorized along three dimensions, locus, stability, and control. It is these three causal dimensions that influence individuals to choose to continue or to disengage doing a task. These dimensions also cause individuals to evaluate themselves when encountering tasks. Locus is concerned with whether the individual perceives the cause of an event as internal or external. For example, a student with an internal locus of control may attribute success to ability, something that may consequently affect his or her self-efficacy or pride and will then influence his or her expectancy for future success, while a student with an external locus of control may attribute success to luck, giving little basis for what future outcomes may be like. The stability dimension refers to whether the cause of an event is stable or unstable across time and events. Ability in this case would be characterized as being stable while effort would be unstable depending on an individual's choice in each new situation. Luck is also unstable because no one is able to predict when good or bad luck will strike. The last dimension, controllability, refers to how much control an individual has over a cause. Effort and strategy would be classified as controllable because the individual can control how much effort to allocate to a task and can decide on the strategy to use. Ability, along with luck and task difficulty, on the other hand, are all categorized as uncontrollable because ability is often perceived as something that is genetically determined (Weiner, 1985, and 1986).

	Internal		External		
	Controllable	Uncontrollable	Controllable	Uncontrollable	
Stable	Long-term effort	Aptitude	Instructor Bias	Difficulty of school requirements	
Unstable	Situational effort	Health	Help from others	Chance	

Figure 1. Achievement attributions classified by locus, stability, and controllability dimensions. From An Attributional Theory of Motivation and Emotion by B. Weiner, 1986, New York: Springer-Verlag.

There are many times when students will engage in spontaneous attributional search. Naturally curious about what is behind their success or failure, students are especially interested in this question. As Weiner (1986) noted, if an individual comes upon a situation that is unexpected, attribution is more likely to occur. Failure is more likely than success to lead individuals to search for reasons for the failure. Individuals are also more likely to find causes for an event that is important to them. But how do learners decide what causes them to pass or fail tests, or receive good or poor course grades? On what basis do they assign success or failure to internal or external factors, stable or unstable characteristics, controllable or uncontrollable causes? Weiner (1977) claimed that learners' attributions come from situational cues such as their past experiences, feedback from teachers, observation of the performance of peers, and how much help was received. Weiner also maintained that attributions come from students' self-perception. Ames and Ames (1984) found that learners who had high self-esteem

typically stated that their success was due to effort or ability rather than luck. Regardless of the accuracy of these attributions, they will influence students' motivation, achievement, and even emotions (Graham, 1994).

With past research as a guide, the investigation of how language learners make attributions may bring new insight to the research on learner motivation. Different subjects are taught in different environments, by different teachers, used different methods and resources. Hence, it stands to reason that foreign language learners may have different attributions, different beliefs about themselves relating to the language they are learning.

Self-efficacy

During the past few decades, another line of work that has been concerned with the correlates of success and failure in achievement situations has focused on *self-efficacy*, a highly effective predictor of students' motivation and learning. As defined by Bandura (1986), *self-efficacy* refers to people's judgment of their capabilities to complete a task successfully. Bandura (1977), acknowledged as one of the principal initiators of self-efficacy theory, suggested that one's perceived self-efficacy has a powerful influence over one's choice of an activity, the kind of effort one expends, and how much one is able to maintain that effort in the face of difficulty. Consequently, self-efficacy beliefs have been proposed to influence students' motivation. Schunk (1991) suggested that there are four leading sources for how learners develop their self-efficacy level for a given achievement. These four sources are: learners' past performance accomplishments, vicarious experiences, forms of persuasion, and physiological indexes. Schunk explained

that learners who have had positive past experiences with a learning task tend to develop higher self-efficacy levels than those with negative experiences. As learners observe successful performances of peers, they also develop high self-efficacy levels. Learners who have been convinced by an authoritative figure that they are capable tend to see themselves as capable too, thus developing high self-efficacy. Lastly, learners who tend to have low anxiety symptoms when performing a task, as would be indicated by changes in heart rate, will likely interpret the situation as one for which they have high selfefficacy. In general, success raises efficacy and failure lowers it. Lowered efficacy can affect students' motivation negatively, although once an individual develops a strong sense of efficacy, one or two occasions of failure will not have much effect. Self-efficacy is not a personality trait or part of one's character, and there is no such thing as a "selfefficacious" person (Borich and Tombari, 1995). Rather, self-efficacy is an appraisal that one makes and a belief that one has about his or her competence to succeed at a particular task, similar to one's confidence level, although confidence is more global. Self-efficacy is situation specific, a context-specific assessment of competence to perform a specific task (Pajares & Miller, 1994).

Self-efficacy motivational theory holds that whether students want to expend effort on an academic task depends in part on whether or not they believe they are "good enough" at doing the task assigned. The beliefs that students hold about their capabilities are proposed to influence the way they make attributions for outcomes of success or failure. For example, students who hold high self-efficacy beliefs about themselves may attribute their success to high ability while failing at a task may be attributed to lack of

effort. On the other hand, students who hold low self-efficacy beliefs may attribute their success to luck or task ease while they attribute failure to low ability. Thus, the beliefs that students hold about their capabilities and the reasons they give for their success or failure may interact with attributions and influence their motivation.

Although Bandura (1986) and Schunk (1981, 1982, and 1983) have explicitly suggested the potential links between self-efficacy and attribution theories, research investigating the possible relationship between these two constructs in students' learning have been few. Schunk's research (1981, 1982, and 1983) has primarily focused on the relationship between efficacy and attributional feedback, where teachers give students feedback such as telling the students that they have done well because they are very talented or that they have not done as well as expected because they did not try hard enough. Only recently have researchers begun to look at the direct link between attribution and self-efficacy in the area of sports (Bond, Biddle, & Ntoumanis, 2001). More research is needed in other domains of learning.

Foreign Language Learning Motivation

Nearly everyone who works with foreign language students in the United States talks about insufficient motivation. Yet motivation is regarded as a key factor in second language achievement. According to Dulay and Burt (1977), simple exposure to language does not guarantee successful language learning. They explained that language learners with positive affective characteristics are seen as more able to acquire language. Motivation is a process whereby learning activities are sustained when learning activities

require effort and persistence from the learner's part. Therefore motivated learners take an active role when engaging in the task.

The pioneer researchers who studied the relationship between students' attitudes and motivation for second language learning were Gardner and Lambert (1972). They offered a differentiation between integrative and instrumental motivation for foreign language learning. Instrumentally motivated learners learn a language for practical and utilitarian purposes such as to get a better job, whereas integratively motivated learners have a desire to learn a language so as to integrate themselves with the target culture. According to Gardner and Lambert, integratively motivated learners are seen as having more enduring motivation for language learning and are therefore more likely to develop better communicative skills. Gardner and Lambert proposed that integratively oriented learners might be motivated because the nature of their goals is more likely to sustain the long-term effort needed to master the language. On the other hand, instrumentally motivated learners are more likely to see language learning as enabling them to do special tasks but as not holding personal meaning in itself. Gardner (1985a) suggested that motivation strongly influences the degree to which learners take advantage of opportunities to use the language. Although the premium given to integrative motivation over instrumental motivation has dominated the research literature, Gardner (2001) in a very recent article no longer considered the primacy of integrative motivation as the only route to successful language learning. Gardner's social educational model of second language acquisition was developed in 1985 and revised in 2001 to assess different aspects that contribute to the success of second language learning. The model is

comprised of four sections, external influence, individual differences, language acquisition contexts, and outcomes. All these factors are suggested to influence language acquisition.

The role of motivation for language learning had often been linked to students' attitudes in Gardner's earlier work. Gardner (1985a) defined motivation to learn a second language as "the extent to which the individual works or strives to learn the language because of a desire to do so and the satisfaction experienced in this activity" (p. 10). According to Gardner's definition, there are three indicators of learner motivation, learners' effort, learners' desire to learn the language, and learners' satisfaction with learning. These three aspects can be assessed with the Attitude/Motivation Test Battery (AMTB) (Gardner, Clément, Smythe, and Smythe, 1979). Gardner argued that all three components are necessary to describe foreign language learning motivation. The scales making up the AMTB were integrativeness (integrative orientation, interest in foreign languages), attitudes toward the learning situation (evaluation of teacher and course), motivation (motivational intensity, desire to learn the target language, and attitude toward learning the target language), language anxiety (language class and language use anxiety), and instrumental orientation.

However, as much as these views of motivation to learn a foreign language influenced second language researchers and educators, it is interesting that the more general approaches to motivation offered by the educational psychology literature have been until recently largely ignored in the context of language learning. Only recently have such constructs as causal attributions and self-efficacy been considered. In 1995,

Tremblay and Gardner addressed the issue and investigated the relation of a number of psychology measures of motivation to existing measures of attitude and motivation to learn a language. Although this research investigated the relationship among many psychological motivation variables such as goal salience, valence, self-efficacy, and causal attribution, their research merely discussed how these motivation variables influence the level of motivational behavior, such as one's effort, persistence, and attention.

By studying language learners' self-efficacy and attributions for success and failure in the field of foreign language, I hoped to advance our understanding of learners' experiences and to offer educators some insights into understanding and enhancing student motivation.

Language Learners' Beliefs

In recent years, students' cognitive processes have been heavily researched in both the fields of psychology and education. A common assumption in this work is that students' beliefs are a key to understanding their actions.

Much of this research has been aimed at elucidating learners' beliefs and their influence on academic performance. Some of the most influential research in this area was the focus on the development of epistemological beliefs by Perry (1968).

Epistemological beliefs are learners' beliefs about the nature of knowledge and learning. As one example of such research on beliefs, Schommer (1993) investigated the dimensions of students' epistemological beliefs and their influence on academic performance. However, in the field of language learning, beliefs have a special,

particular meaning, referring to learners' preconceived notions or assumptions about the nature of language and the language learning process. Because students' beliefs about language learning seem to have obvious relevance to the understanding of student expectations of, commitment to, success in, and satisfaction with their language classes, Horwitz (1988) argued that language teachers need to understand learner beliefs about language learning.

Horwitz (1987, 1988) noted the fact that because language learners have their own expectations and beliefs about language learning, when language classes fail to meet their expectations, students can lose confidence or interest in the instructional approach, and their ultimate achievement can be limited. From this viewpoint, she proposed that students' beliefs about foreign language learning have great influence on their achievement, motivation, and language learning strategies. Subsequent research has shown that students hold a wide variety of beliefs for language learning. Horwitz (1987) stated that little research has been conducted on the interaction of beliefs with other learner variables such as attitude or motivation to better understand how these variables impact language learning. As exciting as the construct of language learner beliefs is, it is surprising that it has not garnered as much empirical published studies as one would have expected. This dissertation was meant to contribute to further our understanding of how language learner beliefs are related to important psychological variables.

The Study

As stated previously, the conception of learning represented in this work took as a starting point that learners have beliefs about their capabilities and through those beliefs, they develop attributions to explain the reasons for their success and failure. Indeed, lines of research on attribution and self-efficacy have each independently contributed to our understanding of how critical students' appraisals of themselves can be for their success in school. However, prior to my study, researchers had not explored the link between students' attributions, self-efficacy, and language learning beliefs. Because language learning is different from other academic areas and Weiner (1983) suggested that learners' ability to learn one subject does not necessarily provide information about how well the learner will do in another subject, it seemed logical to investigate how foreign language learners' beliefs affect their achievement. To this end, the following main research questions will be addressed by this study:

- 1) Does the level of self-efficacy affect the degree of endorsement of each of the four attributions, internality, stability, external controllability, and personal controllability?
- 2) What is the relationship between language learners' beliefs and attributions for success and failure?
- 3) What is the relationship between language learners' beliefs and their selfefficacy and between beliefs and grades?
- 4) Do students' self-efficacy scores and their grades differ when they attribute success and failure differently?

- 5) What is the relationship between students' self-efficacy, attribution beliefs, and their achievement?
- 6) What is the relationship between students' attitude, motivation and language achievement?

There were several additional exploratory questions relating to students' demographic information, examining differences between men and women, and differences between successful and unsuccessful students.

To keep track of the variables being investigated in this study, a conceptual framework depicted in figure 2 was developed.

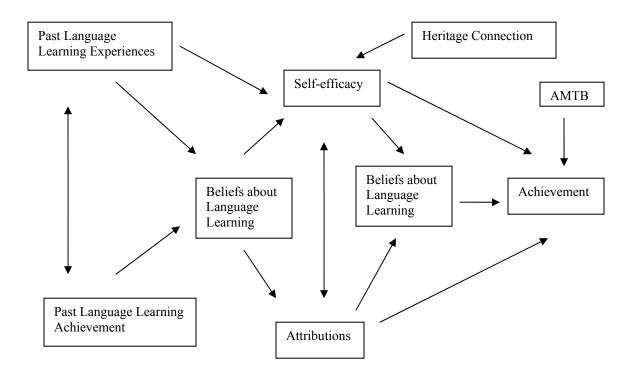


Figure 2. Conceptual framework.

The figure of the conceptual framework depicting the multifaceted relationship among variables of interest was derived from theories and hypotheses that were presented in this study. According to self-efficacy theory, learners' self-efficacy beliefs are strongly related to their past learning experiences and past achievement (Schunk, 1991). A relationship between students' self-efficacy and their attributions was hypothesized because self-efficacy is a perception of competency and can be based on one's attribution for an outcome. Having higher self-efficacy gives an individual more confidence to approach the task and positive beliefs about one's capabilities lead to positive results, which in turn, may lead the individual to believe that it is his or her effort and ability that led to success. The relationship between students' language learning beliefs, selfefficacy, and attribution was hypothesized because there was an interest in examining how students develop self-efficacy and make attributions. It was hypothesized that students' general language learning beliefs was related to their attributions and selfefficacy. From the conceptual model, a relationship between self-efficacy, attributions, and achievement was drawn to determine how well self-efficacy and attributions predicted achievement through regression analyses.

To address these research questions, I designed and conducted an empirical study with college students as participants. Participants responded to six self-report questionnaires as well as demographic questions.

The following chapters will detail the results of this study. Chapter 2 will present a review of the relevant literature concerning foreign language learning motivation, attribution, self-efficacy, and language learners' beliefs. Chapter 3 will present the

methodology used to answer my research questions. Chapter 4 will present the results of the study. Chapter 5 will discuss the implications, limitations, and future directions for research based on the results of this study.

Chapter 2

Review of the literature

This chapter will review the literature on a) language learning motivation theory, b) attribution theory, c) self-efficacy theory, and d) language learner beliefs, respectively. The first section will describe the development and progress of foreign language learning motivation theory. The second section will detail some of the theoretical frameworks relevant to attribution published in the last twenty years, and discuss the limitations of attribution research. The third section will examine the literature on the relationship between self-efficacy and achievement. The fourth section is devoted to the work on language learners' beliefs, an area that began in the late 80's to explore learners' attitudes and beliefs about language learning. In a final section, I will link the four lines of research to show how they contributed to my understanding of language learners' motivation and achievement and led me to conduct the research I did.

Foreign Language Learning Motivation

Motivation is one of the main determinants of student achievement and has been an important area of study in the field of educational psychology for many decades. Various researchers have applied educational psychology findings to explore how the motivation research applies to different academic domains. However, in the foreign language learning field, a different approach has been adopted in explaining learner motivation.

The pioneer researchers who studied the relationship between students' attitudes and motivation for second language learning were Gardner and Lambert (1972). They offered a differentiation between integrative and instrumental motivation for foreign language learning. Instrumentally motivated learners learn a language for practical and utilitarian purposes such as to get a better job, while integratively motivated learners have a desire to learn a language so as to integrate themselves with the target culture. One reason behind the development of this theory was because of the unique language learning experiences the learners had in the environment that Gardner and Lambert were studying: in Canada where language learners were learning French as a second language rather than as a foreign language.

Although Gardner's motivation theory has offered a great deal of insight to how and why students learn a foreign language, it did not go unchallenged over the years. According to Oxford and Shearin (1994), the current theory might not cover all possible kinds of foreign language learning motivation. In his first attempt to expand on foreign language learning motivation theory in 1985, Gardner developed the socio-educational model in which the two types of orientations were expanded and more variables were introduced. In 2001, Gardner revised the original model and included four categories of factors that might influence language learning: external influences such as history and motivators (family background, value, and need for language learning), individual differences such as one's integrativeness, attitude, aptitude, and motivation (effort, persistence, and enjoyment), language acquisition contexts (formal or informal learning), and outcomes such as aspects of proficiency in the language or the consequences of

language learning such as language anxiety. The socio-educational model of second language acquisition has an associated set of measures for these individual variables, the Attitude/Motivation Test Battery (AMTB), which was originally developed by Gardner and Smythe in 1981 and revised in 1985. The attributes measured by this test battery include: integrativeness, attitudes toward the learning situation, motivation, language anxiety, and instrumental orientation. These variables were developed and applied to situations in which English-speaking Canadians were studying French as a second language.

In his most recent paper, Gardner (2001) organized findings of research on language learners' attitude and motivation. He reported that Clément, Smythe, and Gardner (1978) found that learners who have integrative motivation for language learning are less likely to drop out and will continue with language study in future years. Gardner and Smythe (1981) found that integrativeness, attitudes toward the learning situation, and motivation are separate but correlated constructs, and that motivation has a direct effect on second language achievement. Gardner and Lysynchuk (1990) also found that learners' motivation promotes the retention of second language skills because motivated individuals will tend to use the language in subsequent situations. Much of the findings support Gardner's proposal that integratively motivated learners have more enduring motivation for language learning and are therefore more likely to develop better communication skills and to sustain the long-term effort needed to master the language.

Although Gardner's motivation research seems to have captured much of the experience of language learners as it pertains to motivation and language achievement,

Crookes and Schmidt (1991) proposed that the research on second language motivation has been limited and recommended that researchers consider adding motivation variables from the field of psychology. To address this issue and concern, Tremblay and Gardner (1995a) expanded their consideration of motivation constructs in language learning by adding motivation variables such as expectancy, self-efficacy, valence, causal attributions, and goal setting. They then investigated the relationships among motivation variables from Gardner's (1985a) Socio-educational Model with these new measures of motivation. Their goal was to determine how other measures of motivation, derived from the psychological literature, would fit into the original Gardner model. Results of this study found that many of the variables mediated the relationship between language attitudes and motivational behavior (effort, attention, and persistence). The three most important mediators were found to be goal salience, valence, and self-efficacy. The results indicated that specific goals lead to an increase in motivational behavior, that language attitudes influence valence, and that the higher the level of motivational behavior, the more learning is valued. The third mediator indicated that language attitude influences self-efficacy and in turn influences students' effort, attention, and persistence. However, although Tremblay and Gardner used educational psychology variables to look at language students' motivation and attitude, they did not examine the direct relationship between these variables and students' foreign language achievement. In another study also noting the relevance of the general educational research, Dornyei (2001) suggested that because of the generally high frequency of language learning failure worldwide, attributional processes are assumed to play an important role in language studies, but that

investigation with much further scope is needed. Due to the limited views of motivation and hypotheses offered by Gardner and the salient role that motivation is believed to play in foreign language learning, many researchers in the foreign language field have called for the development of new approaches to understanding language learners' motivation (Crookes & Schmidt, 1991; Dörnyei, 1990; Oxford, 1994; Oxford & Shearin, 1994).

Researchers have begun to apply these expanded notions of motivation from general psychology, such as need theory, equity theory, and instrumentality theory, to the foreign language field. They have pointed to the importance of learners' needs, suggesting that foreign and second language learners might have different motivations associated with varying needs (Oxford & Shearin, 1994), suggesting that teachers should recognize students' needs and provide learning environments that can help students learn. A second broad area of motivation theories includes instrumentality theory, which suggest that learners engage in an activity for some valued outcome. This theory reminds educators in the field that foreign language learners' expectancies of success or failure, and how much they value language learning are very important in determining their motivation to learn the language. The third type of motivation theory, equity, has also been applied to foreign language learning. Equity theories are related to this field because learners must believe that the probable results for learning a foreign language are worth the effort expended (Oxford & Shearin, 1994).

Although researchers are applying motivation constructs to expand the model of foreign language learning, a more diverse and broader framework needs to be incorporated and examined in actual educational settings to gain more understanding of

the importance of motivation in learning. Theories of motivation need to be tested in this field in order to understand students' actual motivation and how it relates to their achievement.

Thus, in the extensive research on foreign language learners' motivation, theories provided by the educational psychology field need to be integrated in an explanation of students' foreign language learning. One aim of my study was to test two specific motivation theories in the domain of foreign language learning to broaden the understanding of language learners' motivation, achievement, and individual differences.

Attribution

Motivation is the process whereby goal-directed activity is instigated and sustained (Pintrich & Schunk, 2002). It is a process rather than a product that involves goals that provide a drive for and direction to action.

It is an assumption of cognitive psychology that people's behavior is determined by their thinking and interpretations and not merely a result of rewards or punishment (Stipek, 2002). The central assumption in cognitive theories is that people actively, rather than passively, respond to their surroundings. A prime example of such a theory is attribution theory. According to Kelley (1967), "attribution theory concerns the process by which an individual interprets events as being caused by a particular part of a relatively stable environment" (p. 193). Attribution is therefore the perception that people form about the causality behind the degree of success of their actions in situations when these causes may not be directly observable.

As stated previously, there have been three dimensions of causality identified in attribution theory: locus, stability, and controllability (Weiner, 1986). Because educational researchers have become particularly interested in the effects of casual ascriptions on the striving of students, Weiner applied attribution theory to the study of the educational process. Weiner (1976) investigated specifically the influence of causal attributions on learners' behaviors. He suggested that it is important to understand students' attributions in achievement settings because these are likely to influence the likelihood of undertaking achievement activities, the intensity of work at these activities, and the degree of persistence in the face of failure. Attributions are also expected to have influence on students' expectancy, values, emotions, and beliefs about their competence, and, in turn, influence motivational variables (Weiner, 2000).

Limitations to attribution theory research. In the early works of attribution theorists, the main focus was to investigate the perception of causality, or to find the reasons individuals ascribed as to why particular events had occurred. For the research reported in the early 70's, the relevance of attribution research to educational practice was often questioned because most studies focused on students' reactions to hypothetical scenarios, contrived laboratory tasks, or tasks that were of no salience to learners. For example, Weiner and Kukla (1970) examined the relationship between causal attribution and achievement motivation. In five of the six experiments of this study, participants were either involved in role-playing situations or given a scenario for which they were asked to explain why they believed a particular academic result occurred and the extent to which the outcome was a result of the person's effort or ability. Only one experiment

involved a "real" situation in which participants were asked to guess a list of numbers and later asked to estimate whether their scores for completing the task were due to skill or luck. Frieze and Weiner (1971) investigated the decision making and cue utilization of people when given information about their achievement. In that study, participants were also asked to ascribe an attribution to the success or failure of a hypothetical event. Even as late as 2001, Holschuh, Nist, and Olejnik used scenarios to determine how individuals make attributions for successes and failures. Although these studies on attribution most often made use of hypothetical situations, asking participants to ascribe an attribution to something that they did not do, which may not capture how they truly feel, nevertheless they did contribute to a developing understanding of how attributions might be relevant in learning situations. Nevertheless, more research examining attributions in real learning settings was and is needed.

Attributions for different outcomes. There are many approaches to understanding how individuals decide when to make internal or external attributions for a performance. Frieze and Weiner (1971) found that success is more likely to be attributed to internal factors, such as ability and effort, than is failure. According to ego-serving bias theory (Miller & Ross, 1975), individuals are anticipated to take more credit for success while taking little responsibility for failure in order to protect perceptions of the self to maintain confidence in the future.

Often times, individuals make attributions by referencing the outcome to their environment. Personal success or failure when consistent with the performance of others results in task ascriptions, whereas inconsistency is attributed to ability, effort, and luck.

When there is consistency with one's own past performance, outcome is ascribed to ability and task difficulty, while inconsistent outcomes give rise to luck and effort attributions. Frieze's study in 1976 on how individuals make causal ascriptions found that in academic situations, effort was the most common attribution whereas for nonacademic situations, success was ascribed more often to ability. In addition, in failure situations, individuals would request information about the cause of failure more often than in successful situations, thus supporting Weiner's (1986) theory that individuals ascribe causes more often when they fail unexpectedly than when they succeed or when the event is less important to them.

Individual differences. How individuals make attributions may differ across culture, gender, and achievement motivation. Many studies have shown that there are individual differences in beliefs about the causes of success and failure. Holloway (1988) reviewed the research on concepts of ability and effort cross-culturally and found that effort is considered the main determinant of achievement in Japan while it receives relatively less emphasis in the United States compared to ability. Graham (1991) summarized the research on ethnic differences in African-American students' attributions. It has been found that early research seemed to suggest that African American students use information about effort less than Whites when they evaluate others in hypothetical situations (Weiner & Peter, 1973). However, Graham (1994) noted that more recent research on this issue has not shown such differences (Wong, Derlaga, & Colson, 1988).

The area of gender differences has a long history in research on motivation and it includes gender differences in attributional patterns. This research, however, has

produced very mixed and conflicting results (Pintrich & Schunk, 2002). A number of studies have found that women are more likely than men to show maladaptive patterns of attributing success to external causes and failure to internal and stable causes. They also in general have somewhat inaccurate and lower expectancies and perceptions of their competence (Eccles et al., 1998). However, some studies have not found these gender differences. Bar-Tal (1978) systematically reviewed the attribution research on individual differences. Data suggested that gender influences how students attribute success and failure, with female students making more external attributions when they succeed (Bar-Tal & Frieze, 1977; Feather, 1969; McMahan, 1973) than male students. Riordan, Thomas, and James (1985), in a study looking at athletes' attributions, found an ego-serving pattern for both male and female athletes for successful outcomes. However, for unsuccessful outcomes, boys and men tended to be less ego-protective in ascribing more internal causation to self than were girls and women. However, Nelson and Cooper (1997) found men to be more ego-protective for failures by making external, unstable attributions, whereas women were less ego-protective, yet self-defeating by attributing success to external factors. In addressing college students' attributions to academic performance, Beyer (1999) found that men were more ego-protective, making internal, stable attributions for success, whereas women engaged in more self-defeating internal, stable attributions for failure. With the conflicting results and findings, there is a need to extend the findings of past research to shed light on the points of conflict.

Another area of individual differences has also been researched, that of the attributional patterns of successful and unsuccessful students. Successful students tend to

attribute their successes to internal factors, such as effort (over which they have control and which gives them more responsibility about the successful outcome) and ability (which gives them a sense of pride), while unsuccessful students tend to attribute their failure to internal factors not under their control, such as their lack of ability (Carr & Borkowski, 1989; Kistner, Osborne, & LeVerrier, 1988). These attributions lead unsuccessful students to conclude that they can do little to increase their level of achievement, an attribution that can be harmful to their confidence in themselves and their motivation to learn.

Data have also suggested that different levels of self-esteem play a major role in influencing causal attributions. Fitch (1970) investigated individual differences in beliefs about causes of success and failure and suggested that individuals with low self-esteem tend to make more internal attributions than do high self-esteem individuals in a failure situation. Betancourt and Weiner (1982) also reported that attributions of success to internal, ego-related causes increase self-worth, and attributions of failure to internal causes decrease self-worth and self-esteem. On the same line, Skaalvik (1994) examined Norwegian students' attributions, math self-concept, and self-esteem. It was found that students with low self-concept had higher self-esteem if they attributed their results to effort or some external factors than to ability. All of these findings indicate that attributions have important effects on how students feel about themselves.

In a study of the relationship between academic achievement and achievement motivation, Kuo (1983) investigated causal attributions of success and failure by both success and failure-oriented children. She found that learners in the success-oriented

group tended to attribute their success to ability and effort while learners in the failureoriented group tended to attribute their failure to luck. The students who were grouped as the success-oriented learners also had higher academic achievement.

The most frequently investigated individual differences in making attributions are those associated with achievement needs (Bar-Tal, 1978). As early as 1970, Weiner and Kukla reported that individuals high in achievement motivation attributed their success more to high ability and positive effort than individuals low in achievement motivation, indicating that high-achievement individuals perceive task outcome as primarily determined by the self and take more responsibility for the outcome while individuals low in achievement perceive outcome as being externally controlled and independent of their ability and effort.

In summary of these studies, attribution of success to high effort leads to a high level of satisfaction as well as greater rewards from others. Therefore, it would be desirable to change students' attributions in the direction of emphasizing ability and effort as the causes for success and lack of effort as the cause of failure. These causal perceptions can maximize the academic performance of students.

Outcomes of attributions. The influence of individuals' attributions on their expectancy for future success has also been of much interest to researchers because it has been suggested that attributions influence learner motivation. Andrew and Debus (1978) found that when failure is attributed to a stable cause, future failure is anticipated and expectancy of success decreases. Meyer (1970) demonstrated that in situations of failure, expectancies of future success do not greatly decrease among individuals who attribute

their failure to lack of effort. Individuals high in achievement needs tend to ascribe failure to effort, an internal unstable cause, therefore taking control of whether to increase or decrease effort on future occasions. The attributional process appears to be a significant determinant of students' expectancy of success for learning and performance in the classroom, and is also true in non-academic settings. In a study investigating athletes' attribution, Martin-Krumm et. al. (2003) found that athletes who habitually explain bad events with causes that are stable in time and global in effect, and explain good events with causes that are unstable and specific have lower expectations of success, increased anxiety, and have poorer achievement. Researchers investigating children with dyslexia suggested that when children made uncontrollable attributions, they had significantly lower perceived scholastic competence than children who made controllable attributions (Frederickson & Jacobs, 2001), suggesting that one's attributions play an important role in determining students' perceived competence, expectations and achievement.

Dweck (1975) noted that attributions of failure to one's ability result in less effort to change future patterns of motivation than do attributions to effort. In an experiment, Dweck taught students who exhibited learned helplessness to attribute failure to lack of effort. Results showed that these students started to improve their performance and at the same time, attribute failure to insufficient effort. Individuals' expectancy for success changes as their attributions differ. In McMahan's study in 1973, participants were asked to solve five five-letter anagrams. Prior to solving the anagrams, participants rated their confidence in reaching the correct solution and these ratings were considered to measure

expectancy of success. Results indicated that attributions to ability and task were associated with high expectancies following success and with low expectancies following failure, while attributions to effort and luck were associated with low expectancies following success and with high expectancies following failure.

Much empirical evidence has indicated that attributions will influence student achievement motivation, and vice versa. For example, Schunk (1983) found that students who were given ability attributional feedback demonstrated the highest skill in a task and had higher self-efficacy than their counterparts who were given no feedback on how they did by their teachers. One explanation for this is that as children observe their learning progress, they develop a sense of efficacy. Providing attributional feedback helps to support their self-perceptions of progress and validates their sense of efficacy (Schunk, 1982). A heightened sense of efficacy helps sustain motivation, which leads to greater skill acquisition.

Attribution and achievement. As Graham (1991) reported in a review of attribution theory research, because attributional processes seemed to be one of the most influential factors for the formation of students' expectancy and beliefs, numerous researchers began to study the relationship between learners' attribution and achievement motivation in general learning contexts. These investigations have been particularly numerous in the mathematics field. Powers et al. (1985, 1986) reported findings from several studies investigating the relationship between attributions of success and failure in math with achievement motivation. They generally reported that achievement motivation was most strongly correlated with attributions of success to effort, and

negatively correlated with attributions of failure to lack of effort. Kloosterman's (1991) study suggested a relationship between four types of beliefs students have about how mathematics is learned and mathematical achievement. The four beliefs were self-confidence in learning math, attributional style in math, effort as a mediator of math ability, and failure as an acceptable phase in the learning of math. Results in this study indicated that these beliefs about how math is learned were significantly positively correlated with achievement in math. Bempechat, Ginsburg, Nakkula, and Wu (1996) also investigated the relationship between attributions and mathematics achievement. Results indicated that high achievement was associated with attributing success to ability and not attributing failure to lack of ability. It was also found that athletes who made stable attributions for negative outcomes and made unstable attributions for positive events have poorer achievement (Martin-Krumm, Sarrazin, Perterson, & Famose, 2003).

Although there have been many studies investigating the relationship between attributions and motivation or achievement in math and more recently in the area of sports (Green & Holeman, 2004), no work on attributions could I find in the area of foreign language learning. Therefore, there is a need to introduce attribution theory to this field.

Self-efficacy

The motivational constructs of expectancy for success, perceptions of competence, and self-efficacy are beliefs that link to attributional processes. Attribution theory is built upon the beliefs system of individuals in terms of what they take to be the causes for their

failure or success. Therefore, it is important to understand how individuals construct these beliefs and what influences the development of these beliefs. This leads us to the theory of self-efficacy.

Researchers and educators have long recognized the importance of students' beliefs about their academic capabilities and the essential role it plays in their motivation to achieve. One of the most important of these research efforts focused on self-efficacy (Zimmerman, 2000). Social learning theorists defined *perceived self-efficacy* as one's confidence in performing a specific task. Bandura (1977, 1986, 1997) formally defined perceived self-efficacy as individual's judgment of his or her capabilities to organize and execute courses of action required to attain designated types of performances. Self-efficacy is concerned not with the skills one has but the judgments of what one can do with whatever skills one possesses.

Influences of self-efficacy. Self-efficacy influences the choice of activities one engages in, and one's effort and persistence in the face of difficulty. How one decides to go about a task depends heavily on self-efficacy. Schunk (1984) reviewed Bandura's theory by discussing how students acquire information about their level of efficacy in achievement settings. Self-efficacy measures focus on performance capabilities rather than on personal qualities. According to Bandura (1982), given adequate skill, positive outcome expectations, and personally valued outcomes, self-efficacy is hypothesized to influence the choice and direction of student behavior. Individuals acquire information about their self-efficacy level through four sources: past performance, vicarious experiences, verbal persuasion, and physiological cues. This information, however, does

not automatically influence one's self-efficacy, but rather, the effects of such information on self-efficacy depends upon how the outcome is cognitively appraised. After an evaluation process and feedback about how well they are learning, students will decide whether or not to proceed in a task. Motivation is enhanced when students perceive they are making progress in learning. In turn, as students work on tasks and become more skillful, they develop a sense of self-efficacy for performing well (Schunk, 1991).

Therefore, self-efficacy is one of the key factors in determining students' motivation.

However, self-efficacy beliefs are not a single trait but rather are multidimensional in form and differ from domain to domain. For example, efficacy beliefs about performing on a history test may differ from beliefs about a biology examination (Zimmerman, 2000). Therefore, various research on students' self-efficacy beliefs in various domains have evolved in the past two decades.

Self-efficacy beliefs have been shown to be an influencing factor in academic motivation, with key indices such as choice of activities, level of effort, and persistence. There is evidence (Bandura, 1997) that students who have higher self-efficacy participate more readily, work harder, take on more challenging tasks, persist longer in the face of difficulty, and have fewer adverse emotional reactions when they encounter difficulties than students who doubt their capabilities. Zimmerman and Kitsantas (1999) found self-efficacy to be highly correlated with students' rated intrinsic interest in a writing revision task. Furthermore, measures of self-efficacy correlate significantly with students' perseverance and success in course work (Hackett & Betz, 1989; Lent, Brown, & Larkin, 1984).

Self-efficacy and achievement. During the past twenty years, research has demonstrated the positive and significant relationships between self-efficacy beliefs and student achievement (Lane & Lane, 2001; Pajares & Miller, 1994; Schunk, 1981, 1982, 1983, 1984, 1987; Wood & Locke, 1987). Self-efficacy theory (Bandura, 1997) also predicts that this reciprocal relationship between self-efficacy and performance extends to future efficacy beliefs. Individuals who begin with high self-efficacy are more likely to have higher future self-efficacy following performance than those who begin with low self-efficacy (Chase, 2001). Research on self-efficacy has contributed significantly allowing us to understand how critical students' beliefs about their ability can be for their achievement in school. It has been found that as students' efficacy beliefs are strengthened, their performance also improves noticeably. Lane and Lane (2001) examined whether self-efficacy measures predicted academic performance. Results of the study indicated that as self-efficacy scores increased, academic performance also improved. Pajares and Miller (1994) explored the role of self-efficacy beliefs on mathematical problem solving using the Mathematics Confidence Scale to measure students' math self-efficacy and the Mathematics Problem Performance Scale to assess students' performance, both developed by Dowling (1978). Although students' selfefficacy beliefs were partly based on prior experiences, it was found that students' judgment about their math self-efficacy was predictive of their ability to solve math problems. Results of this study support the hypothesized role of self-efficacy as suggested by Bandura's (1986) social cognitive theory regarding the predictive role of self-efficacy on achievement.

In his Self-Efficacy Analysis, Schunk (1981) demonstrated that students' perceived efficacy was an accurate predictor of arithmetic performance. Math self-efficacy has consistently been found to predict math-related performance (Hackett, 1985). Pajares and Johnson (1996) studied the relationship between writing self-efficacy and writing performance and found students' efficacy had direct affect on their performance. Chemers, Hu, and Garcia (2001) found that of the many variables that may influence students' performance (i.e. students' past performance, optimism, and self-efficacy), self-efficacy was significantly and directly related to academic performance. Wood and Locke (1987) also reported a relationship between academic self-efficacy and performance in a college management course. Not only was self-efficacy found to have a positive relationship with academic achievement, it also had a positive relationship with motivation, defined as choice, effort, and persistence (Chase, 2001).

An overabundance of research supports the positive relationship between self-efficacy beliefs and academic motivation. A meta-analysis revealed that self-efficacy beliefs accounted for 12% if the variance in academic persistence (Multon et al., 1991). In the sport psychology literature, research has also shown that individuals with higher self-efficacy have greater persistence, as measured by muscular endurance (George, Feltz, and Chase, 1992). Chase, Feltz, and Fitzpatrick (1995) also indicated that individuals who had higher self-efficacy expectations would persist longer than those with lower self-efficacy expectations.

Support for the relationship between self-efficacy and academic achievement has been extremely prolific, focusing primarily in the areas of science and math and also

beginning to grow in the area of sports (e.g. Bond, Biddle, & Ntoumanis, 2001; McAuley et al., 1992; Pajares & Miller, 1994, Pajares, Britner, &Valiante, 2000, Schunk, 1981).

However, little research exists in a domain such as foreign language learning.

The relationship between self-efficacy and attributional feedback. In the selfefficacy framework, attributional variables constitute an important source of efficacy information. Although attribution is viewed as having an important influence on students' self-efficacy, only the relationship between self-efficacy and attributional feedback was researched in the early 80's. Frieze (1980) and Frieze and Bar-Tal (1980) found that effort attributional feedback influenced one's self-efficacy tremendously. It was found that providing students with effort feedback conveys to students that they possess the necessary capability to perform well. Effort feedback thus supports students' perceptions of their success and leads to an increase in self-efficacy. Schunk (1981) also found that students who were given effort attributional feedback after they solved a puzzle increased in self-efficacy, skill, and persistence. Another study by Schunk (1983) found that when students were given ability attributional feedback on their subtraction skills, they demonstrated higher levels of self-efficacy and skill compared with the effortonly and effort-plus-ability conditions. Zhang and Lu (2002) investigated the formation of motivation through two important factors, self-efficacy and attributional feedback. The task studied was mirror drawing, a test of students' motor skills. Zhang and Lu found that self-efficacy and attributional feedback both influenced students' motivation. The results supported Bandura's theoretical hypothesis that self-efficacy is mediated by attribution and that attribution plays its role by affecting people's self-efficacy (Bandura,

1999). Results of these studies clearly show the significant influence of attributional feedback on students' appraisals of self-efficacy. These findings suggest that self-efficacy, along with skill and motivation, can be enhanced with the appropriate attributional feedback.

Although there are potential links between self-efficacy and attribution theories that have been made explicit by Schunk (1981, 1982, and 1983) and Bandura (1986), the existence of such links have failed to encourage much research investigating the possible relationship between these two constructs in students' learning. Bandura (1986) maintained that attributions are a fundamental part of one's perception of self-efficacy. Efficacy is not just determined by mastery experience alone but by how these experiences are appraised. Schunk (1981, 1982, and 1983) reported a series of studies that examined the relationship between attribution and efficacy, but focused primarily on attributional feedback. Despite Bandura's proposal about the link between attribution and self-efficacy, the link has remained comparatively unresearched until most recently.

The relationship between self-efficacy and attribution. Bond et al. (2001) investigated the relationship between self-efficacy and causal attribution in the area of sports and found that when golfers were successful in their performance, attributional stability was predictive of post-competition self-efficacy. Golfers whose efficacy increased from pre to post-competition made more internal and stable attributions for their performance than those whose efficacy level decreased. Lyden, Chaney, Danehower, and Houston (2002) set out to integrate self-efficacy, anchoring, and attribution theory by looking at students' GMAT scores. From the findings of this

research, it seems that when giving individuals feedback on their performance, feedback should be carefully structured because it may influence the causal attributions that individuals make. Also, results indicated that self-efficacy is formed through one's attribution analysis of one's past performance. Therefore, Lyden et al. concluded that attributions have a mediating influence on one's performance and self-efficacy. Stajkovic and Sommer (2000) also looked at the relationship between self-efficacy and causal attributions. As their self-efficacy measure, they asked participants to rate their ability to give as many uses for an object as they could in one minute. Later on in the study, they used the Causal Dimension Scale, created by Russell (1982) to measure participants' attributions. Multiple regression analyses indicated that individuals high in self-efficacy attributed success to internal factors and failures to external factors. Results indicated that self-efficacy and causal attributions are directly and reciprocally related, and both attributions and self-efficacy were found to be significantly predictive of performance. Results of a study by Sherman (2002) supported the theory that individuals with higher self-efficacy believe their failures are due to lack of effort and that those with lower self-efficacy believe failure is due to lack of ability. Attributions that students make for their failure are important to future self-efficacy and motivation because if students believe they cannot change their ability, then they probably will not want to continue trying to improve.

Bandura (1990) suggested that there is a reciprocal relationship between causal attributions and self-efficacy expectations. Individuals who have high self-efficacy and experience failure tend to attribute it to lack of effort; whereas individuals with low self-

efficacy who experience failure attribute it to low ability. In turn, success will increase one's self-efficacy if the individual attributes the outcome to an internal attribution such as ability rather than luck. Failure can decrease one's self-efficacy if the individual attributes the outcome to an internal, stable, uncontrollable factor, such as lack of ability (Chase, 2001).

Limitations. Though these studies were intended to connect the two lines of research, self-efficacy and attribution, there were limitations. The study by Stajkovic and Sommer (2000) involved an experimental task that lacked personal authenticity. The task merely involved asking participants to give as many uses as they could for objects in one minute. Due to the nature of the task, participants may not have had the incentive or motivation for successful performance, and therefore success or failure would not yield convincing results to explain the relationship between self-efficacy and attribution. The study by Zhang and Lu (2002) also has a similar shortcoming in that participants were asked to do mirror drawing and task tracing. Tasks that have little salience to participants may skew results in that self-efficacy levels may not be as important and their attributions may not be as accurate as when the tasks are more personally relevant.

Domain specificity of self-efficacy. Self-efficacy has been defined as a context-specific assessment of competence to perform a specific task, a judgment of one's capabilities to execute specific behaviors in a specific situation (Pajares & Miller, 1994). In academic settings, support for the relationship between self-efficacy and academic achievement has only been substantial in the math domain. Research on self-efficacy is also beginning to grow in the area of sports but understanding students' self-efficacy in

the area of foreign language learning has been a neglected area. Bandura (1986) cautioned that, because judgments of self-efficacy are task specific, different ways of assessing learners' confidence will be needed to correspond to the assessed performance. Therefore, self-efficacy must be specifically rather than globally assessed, and must be measured as closely as possible in time to when the task is performed.

Language Learners' Beliefs

Metacognitive knowledge as defined by Flavell (1979) is learners' awareness of their learning process, including all facts learners acquire about their own cognitive processes as they are applied and used to gain knowledge and acquire skills in various situations. Metacognitive knowledge specifically refers to learners' preconceived ideas or notions, opinions, perceptions, and assumptions of the nature of the learning process. As early as 1986, Wenden suggested that learners have metacognitive knowledge or beliefs about foreign language learning and that these beliefs will have influence on how learners approach the task. However, one of the most important foray into the study of beliefs about learning a foreign language came with Horwitz (1987). Acknowledging that the study of foreign languages is a domain that elicits many strong opinions and beliefs, Horwitz (1987) developed an instrument that assesses student beliefs about language learning. Its purpose is to let teachers understand the types of beliefs students have and for teachers to see what possible influences these beliefs have on students' foreign language learning and strategies. The instrument is called the Beliefs about Language Learning Inventory (BALLI). It is a 34 Likert-scale item inventory and

consists of five general categories, namely the belief categories of "foreign language aptitude," "the difficulty of language learning," "the nature of language learning," "learning and communication strategies," and "motivation." As Horwitz noted, because language learners have their own expectations and beliefs about language learning, when language classes fail to meet their expectation, students can lose confidence or interest in the instructional approach and their ultimate achievement can be limited. From this viewpoint, students' beliefs about foreign language learning can have a great influence on their achievement, motivation, and language learning strategies.

In general, the acquisition of individuals' belief systems involves the process of cultural transmission (Pajares, 1992). With respect to learners' beliefs, Horwitz (1987) argued that individual learners' beliefs are attributable to their cultural backgrounds and previous school experiences, while Wenden suggested that they evolve from personal experience or the opinions of others.

Language learners' beliefs, assumptions, and perceptions. From research findings, Horwitz (1988) suggested that people have preconceived notions of who is more likely to succeed in learning a foreign language and how a foreign language should be learned. Some of the most common beliefs are that children are better learners than adults, women are better at language learning than men, only a few people are born with the aptitude for learning foreign languages, second language learning is mainly a matter of learning new vocabulary words and translation, or that it takes little effort to learn a foreign language. Some of these beliefs may be facilitating for learners but others may

lead students to develop unachievable expectations that may be detrimental to their confidence and their ultimate achievement.

Researchers in the foreign language context are beginning to realize the importance of beliefs in foreign language learning. Mantle-Bromley (1995) conducted research to understand whether language learners enter the language class with misperceptions, with mistaken beliefs, or both, that could cause frustration with the language learning process. The results of this research, indicated that many students have misperceptions about language learning when they first enter the language class. About 69% of the students believed that one could become fluent in a second language in two years' time or less. Students who believe that language is easy to learn may become frustrated with the class or themselves. This cognitive dissonance may cause their attitudes to be less positive. Mantle-Bromley also found that 31% of the students believed that they are not meant for languages, thus they may erroneously attribute part of their difficulty to lack of ability or intelligence. These misperceptions were suggested to be a hindrance for students' progress and persistence in language study. Because students hold a wide variety of beliefs for foreign language learning before they learn the target language, it is important to realize that some of these beliefs may be sabotaging students' learning motivation. When beliefs are inaccurate or unrealistic, teachers should help students rid themselves of preconceived notions and prejudices that would likely interfere with their language learning (Horwitz, 1988).

Language learning beliefs and motivation. Oxford and Ehrman (1993) suggested that learners' beliefs about language learning are linked to motivation because learners'

motivation is conceptualized in terms of the explicit beliefs and values. Oxford and Ehrman indicated that if language learners do not believe that their performance can lead somewhere or is valuable, their motivation decreases. Horwitz (1990) found that students who expect fluency in a foreign language in two years will be frustrated and attribute their failure to poor instruction or their personal deficit. Furthermore, such negative language learning experiences may lead to students' low self-efficacy beliefs, resulting in low motivation for foreign language learning. Therefore, it is important to understand learners' beliefs in order to better understand students' motivation.

The BALLI is a useful instrument for collecting information about students' beliefs about language learning. Yet, because the BALLI does not yield a composite score, data in studies using the BALLI have always been presented using frequency tables. Using frequency tables to describe learners' responses yields limited information about each individual learner's beliefs. Thus, it may be difficult to analyze and compare data with other variables. Nevertheless, the BALLI is the only assessment tool that is available for understanding learners' beliefs in the language learning context of the classroom. As students' beliefs about language learning vary from individual to individual, it is of interest to look at some of the beliefs that are more prevalent among learners and investigate how these beliefs affect students' motivation and learning.

Synthesis

In the foreign language context, learner beliefs have been suggested to influence learning motivation and strategy use (Oxford & Ehrman 1993; Horwitz, 1987; Wenden &

Rubin, 1997). Although many studies have looked at student beliefs for language learning (Horwitz, 1987, 1988; Kern, 1995; Rifkin, 2000) and suggested that these beliefs will interfere with or facilitate language learning, there has not been any study that makes the connection between the educational psychology approach to attributions and selfefficacy and the foreign language literature on learner beliefs. Attribution is a cognitive operational process that depends on beliefs to interpret occurrence and self-efficacy is also a belief that one has about one's capabilities to complete a task. Because attribution and self-efficacy are so important to success in learning, understanding students' various types of beliefs can offer a path to understanding their achievement and motivation. By elucidating the different types of learner beliefs, I hoped this study would contribute significantly to research in both second language learning and educational psychology and help teachers identify the self-sabotaging beliefs that students may have and enforce enabling beliefs to help sustain students' motivation. The following chapter presents the details of an empirical study that explored the relationship between attribution, selfefficacy, and language learners' beliefs, and the relationship between these beliefs and language achievement.

Chapter 3

Method

This chapter presents the description of participants, instrumentation, data collection procedures, research questions, hypotheses, rationale for the hypotheses, and method, including and data analyses techniques.

Participants

Participants for this study consisted of 500 undergraduate students learning a foreign language at the University of Texas at Austin. The language classes were nine Spanish, five German, and four French. These languages are taken by many students and therefore are likely to draw from a diverse group of participants.

There are several reasons for choosing 1st year, 1st semester foreign language learners for this study. First, these students would have already established their language learning beliefs either through prior experiences with other foreign languages in high school or through vicarious experiences. Therefore, their beliefs about language learning can be measured as soon as school starts. Second, university students may be better able to identify causes for their success or failure and evaluate their self-efficacy level than younger learners.

Measures

Participants filled out a short information form about their gender, major, whether or not they had taken a foreign language course prior to this course, the language that they had taken, for how many semesters had they studied the language, what grades they had made in the foreign language course, how they felt about their previous language learning experience, and whether or not they had a heritage connection to the language they were taking now (Appendix B). Other measures and their statistical characteristics are discussed in the following paragraphs.

The Beliefs about Language Learning Inventory (BALLI). Students' beliefs about foreign language learning were measured using the BALLI. This inventory was developed by Horwitz (1988) as a 34-item scale that assesses student beliefs in five major areas: 1) difficulty of language learning; 2) foreign language aptitude; 3) the nature of language learning; 4) learning and communication strategies; and 5) motivations and expectations. The "difficulty of language learning" items questions learners' beliefs about the general difficulty of learning a foreign language and the specific difficulty of the students' particular target language. The "foreign language aptitude" items concern students' beliefs in the general existence of specialized abilities for language learning and beliefs about the characteristics of successful and unsuccessful language learners. The "nature of language learning" items assess students' viewpoint about the nature of the language learning process such as the role of cultural contact and language immersion in language achievement. The "learning and communication strategies" items concern learning and communication strategies and are most directly related to a student's actual

language learning practices. The "motivations and expectations" items measure desires and opportunities the students associate with the learning of their target language.

In this inventory, an individual is asked to read a statement, such as "I have foreign language aptitude." Then, the person must decide if he or she (1) strongly disagrees, (2) disagrees, (3) neither agrees nor disagrees, (4) agrees, or (5) strongly agrees with each statement. Because the BALLI was designed to assess learners' opinions and beliefs about language learning, there are no right or wrong answers for the BALLI, as was mentioned explicitly in the instructions to the students (Appendix C).

The reliability of the BALLI by Horwitz (1988) has been tested by previous studies (Yang, 1992; Truitt, 1995; Kuntz, 1998), which reported similar Cronbach's alpha coefficients on the BALLI, ranging from .61 to .69. The Cronbach alpha coefficients obtained from my study was .65 for 34 items (see Table 1).

A low internal consistency was expected because each of the individual items of the BALLI was designed to survey discrete dimension of beliefs about language learning. The BALLI does not yield a single composite score.

Causal Dimension Scale (CDS-II). This self-report instrument, designed to measure causal attributions for performance, was developed by McAuley, Duncan, and Russell (1992). The questionnaire contains 12 items assessing the four subscales of locus of causality, stability, personal control, and external control that are each scored on a 9-point scale. Subscales scores can range from 3 to 27, with higher values representing attributions that are more internal, stable, personally controllable, and externally controllable. McAuley, Duncan, and Russell (1992) have reported internal consistency

values for the four subscales as follows: locus of causality, r = .60 to .71; stability, r = .66 to .68; personal control, r = .72 to .90; external control, r = .71 to .92 (Appendix D). The reliabilities for the four subscales obtained in this study were as follows: locus of causality, r = .59 to .63; stability, r = .57 to .66; personal control, r = .67 to .68; external control, r = .79 to .80 (see Table 2).

Motivated Strategies for Learning Questionnaire (Self-efficacy Scale for Language Learners). This self-report inventory was designed by Pintrich, Smith, Garcia, and McKeachie (1991) to measure students' motivational orientations and use of learning strategies for college students. The questionnaire contains 81 items and is divided into two categories, the motivation and learning strategies. The motivation category is divided again into three subcategories: value, expectancy, and affective component. Of the 12 items in the expectancy component, I only used the six items that target self-efficacy for learning and performance for my study (Appendix E). An example of a self-efficacy item is "I am confident I can learn the basic concepts taught in this course."

Students rated themselves on a 5-point Likert scale (1= not at all true of me to 5 = very true of me). Pintrich et. al., reported the Alpha coefficients for subscales in the motivation section, ranging from .62 to .93. The reliability obtained for this study for the subscale of self-efficacy was .90 (see Table 2). (Appendix E)

Self-efficacy Questionnaire (Percent Confident). Another self-efficacy measure was developed that assesses confidence intervals toward the competences needed to achieve success in the language course. Participants were asked to circle either "yes" or "no" according to whether they felt they were able to score a particular score on their

next test. Then, for each of the 7 scores they responded "yes" to, students had to indicate how certain they were of scoring each score. The self-efficacy measures were on a scale of 0-100, where 100 = very certain and 0 = very uncertain (Appendix F).

Language Achievement Attribution Scale (LAAS). Eight questions were being asked in this inventory. Students were first asked their score on the last test they had taken and how satisfied they were with the result. According to how satisfied the students were with the result, success and failure was determined. Students' ratings of their satisfaction under 3 were categorized into the unsuccessful category whereas those whose ratings were 4 and above were categorized into the successful group. Students were then being asked to rate the degree to which they believed the result of their test was due to their ability, effort, difficulty of the task, and luck (Appendix G).

Attitude/Motivation Test Battery (AMTB). To understand students' attitude and motivation toward the language they were learning, 32 items out of the 63 items were taken from the AMTB, developed by Gardner (1985). The original AMTB consisted of eight categories: 1) attitudes toward French Canadians; 2) interest in foreign languages; 3) attitudes toward European French people; 4) attitudes toward learning French; 5) integrative orientation; 6) instrumental orientation; 7) French class anxiety; 8) parental encouragement. For my purposes, I only asked about students' interest in foreign language, attitudes toward learning the target language, integrative orientation, instrumental orientation, and target language class anxiety. The "interest in foreign languages" items question whether or not individuals wish to learn foreign languages. The "attitudes toward learning the target language" items question how much students

like or dislike learning the target language, either Spanish, German, or French for my study. Both the "integrative orientation" items and the "instrumental orientation" items question the reasons for individuals to learn the target language. The "language class anxiety" items question whether or not learners feel anxious about speaking in the target language. Due to the wording of several of the AMTB items, some categories and items were modified to correspond to the nature of this study. For example, items that were related to "French" were modified to either "Spanish" or "German" for the purpose of this study since these were the languages that were incorporated in this study. Categories such as "Attitudes toward European French people" and "Parental Encouragement" were deleted from the original questionnaire (Appendix H, I, J).

In this inventory, an individual is asked to read the statements and decide if he or she (1) strongly disagrees, (2) disagrees, (3) neither agrees nor disagrees, or (5) strongly agrees with each statement.

Reliability of measures. Coefficient alphas were calculated for all measures and all categories. The following table lists the number of items and coefficient alpha for each measure for both time 1 and time 2.

Table 1
Number of Items and Reliability Coefficients of Each Measure at Time One and Time
Two

Name of Measure	Number of Items	Coefficient Alpha (Time 1)	Coefficient Alpha (Time 2)
The Beliefs about Language Learning Inventory	34	.54	.65
Locus of Causality	3	.59	.63
Stability	3	.57	.66
Personal Control	3	.67	.68
External Control	3	.79	.80
Self-efficacy items from MSLQ	6	.90	.90
Interest in Foreign Languages	9	.86	NA
Attitudes toward Learning French (Spanish, German) Positively worded items	5	.87	NA
Attitudes toward Learning French (Spanish, German) Negatively worded items	5	.88	NA
Integrative Orientation	4	.70	NA
Instrumental Orientation	4	.53	NA
French (Spanish, German) Class Anxiety	5	.84	NA

Procedure

One week after the beginning of the semester, students were asked whether they would like to participate in a research study. Participants received a consent form that had two parts, one which explained the study and requested permission to use their research data in future publication of the study, and another that asked their permission to

obtain their course grade (Appendix A). While handing out the consent forms, I explained to the students that the purpose of the study was to gain a better understanding of their beliefs about language learning. I asked them for their help in gaining this better understanding, and I also explained that their participation in the study would have no effect on their grades. At this initial introduction of my study, I also informed them of their rights to confidentiality and my responsibility not to allow anyone else to read their responses on my questionnaires. On that same day, students were asked to fill out the Beliefs about Language Learning Inventory to assess the beliefs they had pertaining to the language they were learning. They also filled out the demographics questionnaire.

I established with the teachers when the first test would occur and more importantly, when it would be returned, graded, to the students. When the test was returned to the students, two questionnaires on attributions (CDS-II and LAAS) and one on self-efficacy were attached to their test asking students to evaluate whether they perceived their score to be a success or failure and to measure attributions for their achievement. Measure of success and failure was not determined by students' test grades, rather, students' perception of whether the test was a success or a failure was used because getting a 90% on a test may be categorized as successful grade, but for students with very high expectations of themselves may view it as a failure, failing to reach their own standards or goals. After rating whether they felt the test was a success or a failure, they were asked to rate how much they believed their performance was due to locus of causality, stability, personal control, or external control factors. As a measure of self-efficacy, students were asked to rate their confidence about successfully completing this

language course. Students filled out the attribution and self-efficacy questionnaires a total of two times after receiving their test grades, once after the first test and a second time after their third or fourth test.

On the last class day, students were given two questionnaires. The first questionnaire was the BALLI (post test) to see whether students' beliefs about language learning had changed over the semester. The second questionnaire was the AMTB, to see what students' attitudes and motivation was toward the language they were learning (See Table 2 for timeline).

These processes were repeated in each classroom (Spanish, German, and French) that I visited over the semester.

Table 2 *Time line of procedure*

1st Day	After 1st Exam (When test is returned to the students)	After 3rd Exam (When test is returned to the students)	Last Day of Class
BALLI			
Demographics Questionnaire			
	Attribution: LAAS		
	Attribution: CDS II		
	Self-efficacy: MSLQ		
	Self-efficacy: Percent Confidence		
		Attribution: LAAS	
		Attribution: CDS II	
		Self-efficacy: MSLQ	
		Self-efficacy: Percent Confidence	
			BALLI

AMTB

Main Hypotheses

Research Question 1

Does the level of self-efficacy affect the degree of endorsement of each of the four attributions?

<u>Hypothesis 1(a).</u> It was predicted that scores on the self-efficacy scale would correlate positively with scores on the **internal** attribution scale.

<u>Hypothesis 1(b)</u> It was predicted that scores on the self-efficacy scale would correlate positively with scores on the **stable** attribution scale.

<u>Hypothesis 1(c)</u> It was predicted that scores on the self-efficacy scale would correlate negatively with scores on the **external** control attribution scale.

<u>Hypothesis 1(d)</u> scores on the self-efficacy scale would correlate positively with scores on the **personal** control attribution scale.

Rationale. Individuals with high self-efficacy have strong beliefs about their capabilities to complete a task successfully. Self-efficacy does not necessarily mean the amount of skill the individual actually has but rather what the individual believes he or she can do with what he or she has (Bandura, 1997). Having high self-efficacy gives an individual more confidence to approach the task and positive beliefs about one's capabilities lead to positive results, which in turn, lead the individual to believe that it is his or her effort and ability that led to success. Therefore, students who have higher self-efficacy would also take more responsibility for the outcomes of their grades.

Researchers have yet to establish a relationship between language learning self-efficacy beliefs and the attributions that students make.

Statistical Analysis. These hypotheses were tested using the Pearson Product Moment correlation coefficient. The critical value for the test of significance of the correlations was set at p < .01.

Research Question 2

What is the relationship between language learners' beliefs and attributions? Hypothesis 2. There will be a correlation between learners' language learning beliefs and the ascriptions to causes of success and failure.

Hypothesis 2a: It was predicted that the more individuals report believing that learning a language depends on having a special talent or ability for that language, the higher would their scores be on a scale that measures their attribution of success or failure to ability.

<u>Hypothesis 2b</u>: Scores that measure the degree to which individuals believe that the foreign language they are learning is difficult will be positively correlated with the scale that measures attribution of success or failure to the difficulty of the task.

<u>Hypothesis 2c</u>: It was predicted that scores on the beliefs scale indicating the degree to which an individual believes that practice is an important aspect of success in foreign language learning would be positively correlated with attribution ratings of effort.

Rationale. This hypothesis examined whether learners' beliefs are constructed in a similar way to learners' attributions for causes of outcomes. Attribution is a type of belief in which learners find causes for their success and failure according to their beliefs about how much effort they have put into the task and how much ability they have. The prediction was that there would be a significant correlation between beliefs about what influences language learning and attributions of success or failure on a foreign language task.

Statistical Analysis. These hypotheses were tested using the Pearson Product Moment correlation coefficient. The critical value for the test of significance of the correlations was set at p < .01.

Research Question 3

What is the relationship between language learners' beliefs and self-efficacy and between beliefs and grades?

Hypothesis 3. There will be a significant relationship between learners' language learning beliefs and their self-efficacy beliefs. It was predicted that the more language learners believe that they have the aptitude to learn a foreign language the higher would be their self-efficacy scores. It was also predicted that the more language learners believe that they have the aptitude to learn a foreign language, the higher their grades.

Rationale. These hypotheses examined whether learners' language learning beliefs are constructed in a similar way to learners' self-efficacy beliefs and whether

students' beliefs reflect their actual achievement. Self-efficacy is a type of belief learners have about the capabilities to successfully complete a task. The prediction was that there would be a significant correlation between beliefs about what influences language learning and self-efficacy on a foreign language task.

Statistical Analysis. This hypothesis was tested using the Pearson Product Moment correlation coefficient. The critical value for the test of significance of the correlations was set at p < .01.

Research Question 4

Do students' self-efficacy scores and their grades differ when they attribute success and failure

differently?

<u>Hypothesis 4(a).</u> It was predicted that students who rated themselves as being successful would have **higher self-efficacy** when they attributed the **success to internal and/or stable causes** than when they attributed the **success to external and/or unstable causes**.

Hypothesis 4(b). It was predicted that students who rated themselves as being unsuccessful would have **higher self-efficacy** when they attributed the **failure to external and/or unstable causes** than when they attributed the **failure to internal and /or stable causes**.

Hypothesis 4 (c). It was predicted that students who attributed their success to **internal** and **personal** factors would have higher achievement than students who attributed their success to **external** and **non-personal** factors.

Rationale. These hypotheses endorsed and expanded on Hypothesis 1. If self-efficacy beliefs do affect the degree to which individuals ascribe a particular attribution, then it would seem plausible to assume that students who attributed success and failure differently would have different levels of self-efficacy and achievement.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p<.05.

Research Question 5

What is the relationship between students' self-efficacy, attribution beliefs, and their achievement?

<u>Hypothesis 5(a).</u> It was predicted that the higher students' self-efficacy, the higher would be their achievement.

<u>Hypothesis 5(b).</u> It was predicted that the more students attributed outcomes to ability or effort, the higher would be their achievement.

Hypothesis 5(c). It was predicted that the more students attributed outcomes to internal and stable causes and less to unstable, external causes, the higher would be their achievement.

Rationale. This hypothesis examined how well achievement was predicted by students' self-efficacy beliefs. Self-efficacy is a belief that students have for how well they can complete a task successfully. Given this definition, it seemed plausible to hypothesize that the higher students' self-efficacy beliefs, the higher would be their achievement. It was also predicted that students who attributed the outcome to something for which they are accountable would be more likely to expect higher achievement in the future because achievement is dependent upon students' effort or their ability.

Statistical Analysis. These hypotheses were tested using a multiple regression analysis.

Research Question 6

What is the relationship between students' attitude, motivation, and language achievement?

<u>Hypothesis 6.</u> It was predicted that the more positive students' attitude and motivation were toward the language they were learning, the higher would be their language achievement.

Rationale. Research has supported the positive relationship between students' attitude, motivation, and performance (Gardner,1985a; Samimy & Tabuse, 1991). Therefore it was hypothesized that there will also be a positive correlation between these variables.

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Statistical Analysis. This hypothesis was tested using the Pearson Product Moment correlation coefficient. The critical value for the test of significance of the correlations was set at p < .01.

Exploratory Hypotheses

Research Question 7

7a) Do men and women differ on the attributions (LAAS) that they make? 7b)

Do students who are successful and those who are unsuccessful differ on the attributions (LAAS) that they make?

<u>Hypothesis 7a</u>) It was predicted that there would be a significant difference between how women and men make attributions.

<u>Hypothesis 7b)</u> It was predicted that there would be a significant difference between how successful and unsuccessful students make attributions.

Rationale. 7a) Research has found conflicting results in how men and women make attributions. Some researchers found that men were more ego-protective, making internal, stable attributions for success, whereas women engaged in more self-defeating internal, stable attributions for failure (Beyer, 1999) while others have found that men are less ego-protective. Therefore, there is a need to extend the findings of past research to shed light on the points of conflict. 7b) This hypothesis was exploratory in nature.

There is little to no evidence available that examined the differences between how successful and unsuccessful students make attributions. However, it is hypothesized, based on the self-serving bias theory (Miller & Ross, 1975), that individuals would want

to protect their ego when it comes to an unsuccessful situation, therefore attribute failure differently than would a successful student.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p<.05.

Research Question 8

Are there any gender and group differences on students' attributions (using the CDS II questionnaire)?

<u>Hypothesis 8a)</u> It was predicted that there would be a significant difference between how women and men make attributions.

<u>Hypothesis 8b)</u> It was predicted that there would be a significant difference between how successful and unsuccessful students make attributions.

Rationale. These hypotheses examine the same questions as research question 7. While research question 7 examined students' specific attributions such as ability, effort, task difficulty, and luck, research question 8 examined the dimensions of the attributions. Within the dimensions introduced by Weiner (1979), the CDS II measured internal, external, stable, and personal attributions.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p<.05.

Research Question 9

Are there group and gender differences on students' self-efficacy beliefs?

Hypothesis 9a) It was predicted that there would be a significant difference between the self-efficacy levels of the successful and unsuccessful students.

Hypothesis 9b) It was predicted that there would be a significant difference between the self-efficacy levels of men and women.

Rationale. 9a) It has been suggested by self-efficacy researchers that students who succeed would have higher self-efficacy than those who do not. Therefore, it seemed plausible to hypothesize that the more successful the students believed they were, the higher their self-efficacy beliefs. 9b) This hypothesis is intended to examine whether women's self-efficacy would also be higher than that of men's, because there are some majors that attract more women than men and perhaps foreign language is one of them.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p < .05.

Research Question 10

Do students learning different language have different self-efficacy beliefs?

Hypothesis 10. It was predicted that learners of different language would have different self-efficacy beliefs.

Rationale. This hypothesis was exploratory in nature. There is no evidence available that examines the difference between learners' self-efficacy. However, because

language learners choose to enroll in a particular foreign language for a reason, therefore, perhaps their self-efficacy levels play a role in determining what language to enroll in.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p<.05.

Research Question 11

Are there any differences between students' self-efficacy depending on their past experiences and heritage connection to the language they are learning?

Hypothesis 11. It was predicted that there would be a difference between students' self-efficacy levels depending on how much past experiences they had in the past and whether they have heritage connection to the language they are learning.

Rationale. Research suggested that past experiences is one of the factors that determine one's self-efficacy levels. However, there are no studies that examined the how one's heritage connection to a language influences one's self-efficacy, therefore, this research question is an attempt to examine such a relationship.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p<.05.

Research Question 12

Are there any group or gender differences on students' beliefs about language learning?

<u>Hypothesis 12a)</u> It was predicted that successful and unsuccessful students have different beliefs about language learning.

<u>Hypothesis 12b</u>) It was predicted that men and women have different beliefs about language learning.

Rationale. These hypotheses were exploratory in nature. There is no evidence available that identifies the difference between successful and unsuccessful students or demographic variables such as gender. The testing of these hypotheses was intended to help educators identify the difference beliefs students may hold and to provide future directions for possible research questions examining the reasons for why successful and unsuccessful students have different beliefs.

Statistical Analysis. These hypotheses were tested using Multivariate Analysis of Variance (MANOVA) techniques. The critical value for the test of significance of the tests was set at p<.05.

Research Question 13

What are the most common attributions among each group (success and failure) and gender?

Rationale. The purpose of this exploratory question is to see what students attribute their success and failure most to and to see whether men and women attribute

the grades they receive on their tests differently. Perhaps men and women have a certain way of attributing outcomes of events.

Statistical Analysis. Descriptive statistic comparing means were used to examine this research question.

Research Question 14

What are the most common beliefs students have about foreign language? How are the results obtained in this study similar to Horwitz's findings in 1988?

Rationale. Understanding students' beliefs about the language they are learning can help teachers identify students' unrealistic expectations or pessimistic beliefs.

Knowing what the most common beliefs that students hold can give teachers an idea of how students view language learning and perhaps use strategies to help students overcome obstacles or self-sabotaging beliefs that may hinder their learning.

Statistical Analysis. Frequency distributions will be used for this question.

Research Question 15

Do students' beliefs about foreign language learning change after taking a semester of the language course?

Rationale. This exploratory question exams whether students' assumptions and beliefs about language learning will change after being exposed to the language course. Perhaps the unrealistic and self-sabotaging beliefs will change because of the course or

perhaps new beliefs will be developed through experiences they have in the class. It would be interesting to see which beliefs have changed over the semester.

Statistical Analysis. A paired sample t-test will be run to see whether there is a difference in students' language learning beliefs before and after the course.

All hypotheses were tested twice, once for measures taken at Time one in the semester (near the first exam) and again for measures at Time two, nearer the end of the semester.

Data Analysis

Students' responses on the demographics questionnaire were coded (e.g., male = 1, female = 2, whether taken a foreign language course prior to this course: yes = 1, no = 0). The responses to the questionnaires given throughout the semester were scored using the following five-point scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree. These codes along with the students' responses on all of the questionnaires were entered into a database. Data analyses were computed using the SPSS (Statistical Package for Social Sciences) version 11.0 to address the hypotheses of the study.

Initially, all analyses were conducted first with the whole sample. After running the initial analyses, I then conducted analyses with different language groups, different groups of students (e.g. successful or unsuccessful students), and by gender.

Chapter 4

Results

This chapter presents the results of the study and discusses the findings. The purpose of this study was to understand the different types of beliefs that language learners hold. Furthermore, because the motivation behind students' learning is of great interest, I examined students' self-efficacy and attributional beliefs to see how these would affect students' language achievement. A further concern was to see whether students who believed their test score was a success versus those who viewed their test score a failure differed on their self-efficacy beliefs and attributional responses. Gender differences were also explored to see whether men and women differed on general language learning beliefs, their self-efficacy beliefs, and whether they attributed successes and failures differently. As I present my findings, I am going to illustrate the relationships that are being tested by taking parts of figure 2 to explain the hypotheses.

My analyses included the entire sample of 500 students. These analyses provided a picture of the various beliefs that students held, the differences between the successful and unsuccessful students, and the different beliefs that male and female students held.

Descriptive Analyses of the Demographic Questionnaire

The demographic questionnaire provided information about the participants in this study including gender, major, whether or not they had taken a foreign language course prior to this course, the language that they had taken, for how many semesters they had studied the language, what grade they had made in their last foreign language course, how they felt about their previous language learning experience, and whether or not they had heritage connection to the language they were now taking. These data offered insights about the three groups of language learners (Spanish, German, and French) regarding their exposure to the language they were learning, prior language learning experiences, and their feeling about learning the language. Table 3 provides a demographic breakdown of students and the descriptive statistics on how students viewed the outcome of their test at both Time One and Time Two of the study.

Of the students who participated in this study, more than half in each language group had had some foreign language experience. With 82% of the German students having the largest number of "experienced" learners, these students perhaps had the most informed sense of efficacy for foreign language learning. Results indicated a slight difference among the three groups of language learners in terms of the percent of students who were satisfied with their past language learning experience. It was found that students learning German were most satisfied with their past language learning experiences and had the highest self-efficacy for language learning, compared to the Spanish and French learners. From the results of the BALLI, it was found that students who were taking German assumed that it was a difficult language to learn (mean of 2.51 on a 5-point scale with 1 being "a very difficult language to learn" and 5 being "a very easy language to learn", and a mode of 2), compared to Spanish (mean of 3.61 and mode of 3) and French (mean of 2.69, and mode of 3). Spanish learners were least satisfied with their past learning experiences and assumed Spanish to be an easy language to learn

when answering the items on the BALLI. However, because I asked first-year first-semester language students to participate in this study, the language they had previously learned may not have been the language they were currently learning but reflected their choice of language to learn given either a positive or negative language learning experience in the past. Although results do not show much difference between German, French, and Spanish learners' self-efficacy, German learners indicated having higher self-efficacy and have had more positive past experiences than other language learners. Therefore, inferring that German students had higher self-efficacy due to positive past experiences and therefore were willing to take on the challenge of learning a difficult language is plausible, supporting Schunk's theory (1991) that positive past experiences increases self-efficacy. From the demographic data results, it was also shown that 47% of the students taking German were of German descent, indicating that they may have been learning the language to deepen their understanding of their heritage.

Table 3
Participant's Demographic Information

Language	Spanish (%)	German (%)	French (%)	Total
Total number of students	252	137	111	500
Number of female students	114	50	60	224
Number of male students	138	88	50	276
Percent of students who had taken a language class before	78%	82%	74%	
Percent of students who were satisfied with their past language learning experiences	28%	38%	33%	
Percent of students who had heritage connection to the language they are taking now	14%	47%	10%	

Table 4 shows the number of students who rated themselves as either successful or unsuccessful on their two tests. Of the three language groups, more German students rated themselves as successful than other language students at Time One. However, more Spanish students rated themselves as successful at Time Two. At both times, French learners rated themselves as most unsuccessful compared to other learners.

Table 4
Students' Ratings of Success and Failure on Tests

Language	Spanish (%)	German (%)	French (%)	Total
Number of students who thought they were successful at time 1	138 (55%)	91 (66%)	42 (38%)	271 (54%)
Number of students who thought they were unsuccessful at time 1	40 (16%)	16 (12%)	34 (31%)	90 (18%)
Number of students who thought they were successful at time 2	115 (46%)	54 (39%)	22 (20%)	191 (38%)
Number of students who thought they were unsuccessful at time 2	68 (27%)	54 (39%)	46 (41%)	168 (34%)

Mean Scores on Attribution and Self-Efficacy Scales

The following tables provide the means, standard deviations, and the range of scores on the six measures of students' attributions and self-efficacy beliefs.

A comparison of these means indicated that the mean of language learners' self-efficacy beliefs went down slightly, and as previous tables indicated, scores dropped from Time One to Time Two. Students' attributions for their test grades changed from more internal at time one to more external at Time Two (Tables 5 and 6).

Table 5
Means, Standard Deviations, and Ranges on Attribution and Self-efficacy Measures at
Time One

Name of Measure	Mean (SD)	Range
Locus of Causality	6.37 (1.45)	1 to 9
External Control	3.96 (1.72)	1 to 9
Stability	5.43 (1.74)	1 to 9
Personal Control	7.49 (1.20)	1 to 9
MSLQ Self-efficacy Scale	4.19 (.68)	1 to 5
Self-efficacy measure – percent confident	72.92 (17.68)	1 to 100

Table 6
Means, Standard Deviations, and Ranges on Attribution and Self-efficacy Measures at
Time Two

Name of Measure	Mean (SD)	Range
Locus of Causality	5.87 (1.5)	1 to 9
External Control	4.16 (1.76)	1 to 9
Stability	5.29 (1.84)	1 to 9
Personal Control	7.18 (1.29)	1 to 9
MSLQ Self-efficacy Scale	4.13 (.77)	1 to 5
Self-efficacy measure – percent confident	68.03 (20.55)	1 to 100

From the results of the paired sample t-test, it was found that students' self-efficacy and grades experienced a significant drop from Time One and Time Two (p < .001), indicating a relationship between grades and self-efficacy, which will be further investigated later in the chapter.

Main Research Questions

Research Question 1

Does the level of self-efficacy affect the degree of endorsement of each of the four attributions?

<u>Hypothesis 1(a).</u> It was predicted that scores on the self-efficacy scale would correlate positively with scores on the **internal** attribution scale.

<u>Hypothesis 1(b)</u> It was predicted that scores on the self-efficacy scale would correlate positively with scores on the **stable** attribution scale.

<u>Hypothesis 1(c)</u> It was predicted that scores on the self-efficacy scale would correlate negatively with scores on the **external** control attribution scale.

<u>Hypothesis 1(d)</u> scores on the self-efficacy scale would correlate positively with scores on the **personal** control attribution scale.

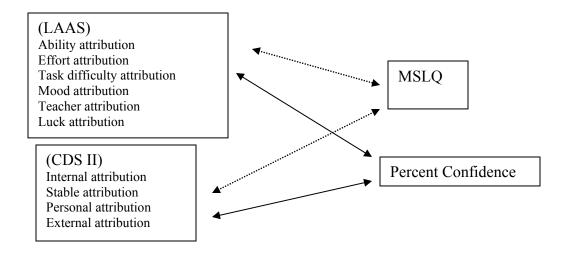


Figure 3. Correlation between Self-efficacy and Attribution.

Correlation between Self-efficacy and Attribution.

The hypotheses were tested using the Pearson's Product Moment correlation coefficient. The critical value for the test of significance of the correlation was set at p<.01. Results indicated that students' self-efficacy correlated positively with several types of attributions that students made. Students' self-efficacy scores correlated positively with internal, personal, and stable attributions (Tables 7 and 8).

Table 7

Correlation Matrix of All Students' Attribution (LAAS & CDS II) and Self-efficacy (MSLQ & % Confidence)

Time 1	Internal	External	Personal	Ability	Effort	Luck	Teacher
MSLQ	.278**	106*	.377**	.158**	N.S.	314**	136**
% Confidence	.203**	N.S.	.318**	.145*	.148*	139*	N.S.

^{*}*p* <.01, ***p* < .001

Table 8

Correlation Matrix of All Students' Attribution (LAAS & CDS II) and Self-efficacy (MSLQ & % Confidence)

Time 2	Internal	External	Stable	Personal	Ability	Effort	Task	Luck	Teacher
MSLQ	.250**	183*	.137**	.371**	.170**	.211**	151**	183**	119*
% Confidence	.139**	N.S.	.169**	.283**	.236**	N.S.	117*	N.S.	N.S.

^{*}p < .01, **p < .001

Consistent with the hypotheses, their self-efficacy scores correlated negatively with external attributions. These findings indicated that students who attributed causes to

either internal, personal, or stable reasons also had higher self-efficacy than those who made external attributions. Since self-efficacy is defined as one's beliefs about one's capabilities to complete a task, and capability is internally, personally, and stably interpreted, the positive correlation between students' self-efficacy and these attributions support the definition. Students with higher self-efficacy also took more personal responsibilities for their own successes and failures, believing that outcomes were within their control. Further examinations of these relationships were done using the scores on the LAAS. It was found that self-efficacy scores correlated positively with ability and effort attributions but negatively with luck and teacher factors. Again, students who took responsibility for their own successes and failures tended also to have higher self-efficacy beliefs.

With such a result examining all students, further analyses were conducted to see whether students who rated themselves as successful differed from those who rated themselves as unsuccessful. Findings indicated that for successful students, self-efficacy was positively related to ability, internal, personal attributions, and negatively related to luck, teacher factor, and external attributions at Time One (Table 9). Such results suggest that students who believe that they were responsible for the successful outcome of the test also had higher self-efficacy whereas students who did not believe they had any control over the successful outcome had lower self-efficacy. However, for unsuccessful students, findings were not significant.

Table 9
Correlation Matrix of Successful students' Attribution (LAAS & CDS II) and Self-efficacy (MSLQ & % Confidence) at Time One

	Internal	External	Stable	Personal	Ability	Luck	Teacher
MSLQ	.32*	18*	.14*	.43*	.25*	47*	26*
% Confidence	.33*	20*	.20*	.31*	.19*	28*	17*

^{*}*p* < .001

Research Question 2

What is the relationship between language learners' beliefs and attributions?

<u>Hypothesis 2</u>. There will be a significant relationship between learners' language learning beliefs and the ascriptions to causes of success and failure.

Hypothesis 2a: It was predicted that the more individuals report believing that learning a language depends on having a special talent or ability for that language, the higher would their scores be on a scale that measured their attribution of success or failure to ability.

Hypothesis 2b: Scores that measure the degree to which individuals believe that the foreign language they are learning is difficult will be positively correlated with the scale that measures attribution of success or failure to the difficulty of the task.

<u>Hypothesis 2c</u>: It was predicted that scores on the beliefs scale indicating the degree to which an individual believes that practice is an important aspect of success in foreign language learning would be positively correlated with attribution ratings of effort.

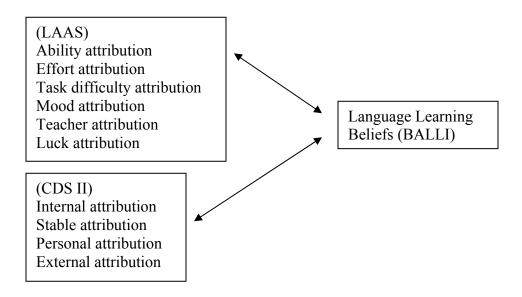


Figure 4. Correlation between Language Learners' Beliefs and Attributions.

Correlation between General Language Learning Beliefs and Attributions.

The BALLI, a 34-item inventory, was used to measure various language learning beliefs that students have. Because the BALLI does not yield a composite score, a factor analysis was run to see whether factors could be obtained so that analyses of the BALLI items could be done in categories. However, items were not intercorrelated and were found to load weakly on the factors that were extracted. Therefore, the BALLI was reanalyzed item by item. (Results of the factor analyses are presented in Appendix K.)

It was found that students' beliefs about having the aptitude to learn a foreign language correlated positively with attributing the test results to ability and personal attributions. All other items were not significant. This supports the hypothesis that students who believe that they have foreign language learning aptitude will attribute the

outcome of their tests to personally controllable and internal factors, giving more credit to themselves for success because they believe they are equipped with the ability (Table 10). However, the results did not support either hypotheses 2b or 2c.

Table 10 Correlation Matrix of Students' Language Learning Beliefs and Attributions

	I have foreign language aptitude
Ability (Time One)	.15*
Personal Factor (Time One)	.15*
Personal Factor (Time Two)	.16*
Personal Factor (Time Two)	.16**

^{*}p< .01

Research Question 3

What is the relationship between language learners' beliefs and self-efficacy and between beliefs and grades?

Hypothesis 3. There will be a significant relationship between learners' language learning beliefs and their self-efficacy beliefs. It was predicted that the more language learners believe that they have the aptitude to learn a foreign language the higher would be their self-efficacy scores. It was also predicted that the more language learners believe that they have the aptitude to learn a foreign language, the higher their grades.

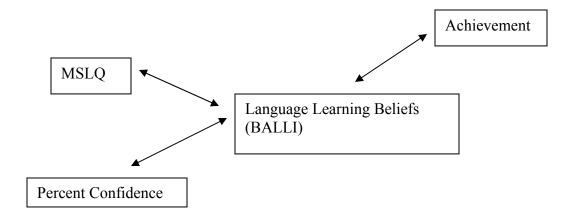


Figure 5. Correlation between General Language Learning Beliefs, Self-efficacy and Achievement.

Correlation between General Language Learning Beliefs and Self-efficacy.

Pearson's Product Moment correlation coefficients were calculated to measure the strength and direction of the relationship between language learner's beliefs and self-efficacy. The critical value for the test of significance of the correlation was p<.01. Results of this study indicated that there was a significant positive correlation between students' self-efficacy and their belief about having the aptitude to learn a foreign language. Consistent with self-efficacy theory, students who believed that they were capable had higher self-efficacy. Correlations appear in Table 11.

Table 11
Correlation Matrix of Students' Language Learning Beliefs and Self-efficacy

	I have foreign language aptitude
MSLQ (Time One)	.26*
Percent Confidence (Time One)	.24*
MSLQ (Time Two)	.38*
Percent Confidence (Time Two)	.34*

^{*}p< .01

Correlation between General Language Learning Beliefs and Grades.

Results indicated that there was a significant positive correlation between students' beliefs about having the aptitude to learn a foreign language and their test grades. That is, students who believed that they had the aptitude to learn a foreign language may have used this as a motivator to study the foreign language, thus getting better grades than those who doubted their ability. Or perhaps these students had positive past language learning experiences, thus believed that they had the aptitude to learn a foreign language, and therefore continued to receive good grades. Consistent with Schunk's self-efficacy theory, past experiences play an important role in shaping one's self-efficacy beliefs (Table 12).

Table 12
Correlation Matrix of Students' Language Learning Beliefs and Achievement

	I have foreign language aptitude
Grade (Time One)	.13*
Grade (Time Two)	.26*
<i>p</i> <.01	

Research Question 4

Do students' self-efficacy scores and their grades differ when they attribute success and failure differently?

<u>Hypothesis 4(a).</u> It was predicted that students who rated themselves as being successful would have **higher self-efficacy** when they attributed the **success to internal and/or stable causes** than when they attributed the **success to external and/or unstable causes**.

Hypothesis 4(b). It was predicted that students who rated themselves as being unsuccessful would have **higher self-efficacy** when they attributed the **failure to external and/or unstable causes** than when they attributed the **failure to** internal and /or stable causes.

<u>Hypothesis 4 (c).</u> It was predicted that students who attributed their success to **internal** and **personal** factors would have higher achievement than students who attributed their success to **external** and **non-personal** factors.

MANOVA (*Self-efficacy* and *Attribution*)

The two self-efficacy measures (MSLQ and percent confidence) were used as dependent variables, while students' group (successful or unsuccessful) and the internal and stable attributions were used as independent variables. To determine whether students rated more towards internal or external attributions and stable or unstable attributions, their scores were recoded. Scores for the internal attributions that were 6.3 or above (out of 9) were considered internal, and scores that were below 6.3 were

considered external attributions. For the stable attributions, scores that were above 5.67 were considered stable and any score lower than that were considered unstable attributions. These numbers were obtained by using the median of the scores on the CDSII

The multivariate F tests indicated that there were significant differences between students' self-efficacy levels depending on whether they attributed the outcome of their test to internal or external factors, F (2, 245) = 5.62, p < .01, eta² = .04 at Time One and F (2, 350) = 6.21, p < .01, eta² = .03 at Time Two. There was no significant main effect for stable and unstable factors at either Time One or Time Two. However, there was an interaction between students' group (success or failure) and whether they attributed the success or failure of their test to stable or unstable factors at Time One, F(2, 245) = 4.16, p < .01, eta² = .03. Results indicated, supporting the hypothesis, that students who made internal attributions for success had significantly higher self-efficacy beliefs than those who made external attributions for success. Results also indicated that students who attributed their success to stable factors had higher self-efficacy beliefs than those who made unstable attributions for their success. As indicated in the results, students' selfefficacy levels varied with how students interpret the successful and unsuccessful outcomes of their test. When students took more responsibility for their success, and believed that the successful outcome does not vary across time, that is, attributing success to internal and stable factors, they also reported higher self-efficacy, believing that they had the capability to be successful in foreign language learning. However, the hypothesis that students would have higher self-efficacy when attributing failure to external factors

was not supported by the results. Results indicated that students who made internal or unstable attributions for failure also had higher self-efficacy than those who attributed their failure to external or stable factors. This indicated that students who do not believe that failure is permanent have higher self-efficacy beliefs that they will succeed in the future than those who view the failure as something permanent. Perhaps students are attributing failure to lack of effort, an internal and unstable attribution, and therefore, still believing that they have the capabilities to succeed in the future and are not blaming the failure to an external factor (see Tables 13 and 14).

Table 13
Bonferroni Tests on Students' Self-efficacy Beliefs and Attributions for Success

Dependent Variables	Internal	External	Mean Difference	Stable	Unstable	Mean Difference
Mean (Self- efficacy from the MSLQ) Time One	4.33	4.15	.18*	4.37	4.11	.26**
Mean (Self- efficacy on % confident) Time One	78.34	73.75	4.59*	N.S.	N.S.	N.S.
Mean (Self- efficacy from the MSLQ) Time Two	4.54	4.19	.35**	N.S.	N.S.	N.S.
Mean (Self- efficacy on % confident) Time Two	79.00	74.05	4.95*	N.S.	N.S.	N.S.

^{*}*p*< .01, ***p*< .001

Table 14
Bonferroni Tests on Students' Self-efficacy Beliefs and Attributions Failure

Dependent Variables	Internal	External	Mean Difference	Stable	Unstable	Mean Difference
Mean (Self- efficacy from the MSLQ) Time One	4.03	3.60	.43*	3.67	3.95	28**
Mean (Self- efficacy on % confident) Time One	68.90	59.00	9.90**	61.90	66.24	-4.34*
Mean (Self- efficacy from the MSLQ) Time Two	3.96	3.77	.20*	N.S.	N.S.	N.S.
Mean (Self- efficacy on % confident) Time Two	N.S.	N.S.	N.S.	N.S.	N.S.	N.S.

^{*}*p*< .01, ***p*< .001

Figures 6, 7, 8, and 9 indicate that students who attribute success to internal factors have higher self-efficacy than those who attribute success to external factors. Students who view themselves as unsuccessful when attributing the failure to internal factors, such as lack of effort, have higher self-efficacy than those who attribute failure to external factors.

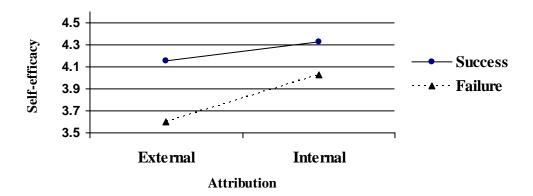


Figure 6. Self-efficacy (MSLQ) Mean When Attributing Success and Failure to Internal or External Factors at Time One.

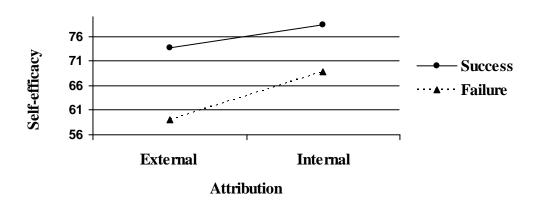


Figure 7. Self-efficacy (Percent Confidence) Mean When Attributing Success and Failure to Internal or External Factors at Time One.

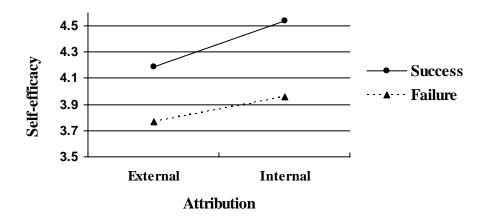


Figure 8. Self-efficacy (MSLQ) Mean When Attributing Success and Failure to Internal or External Factors at Time Two.

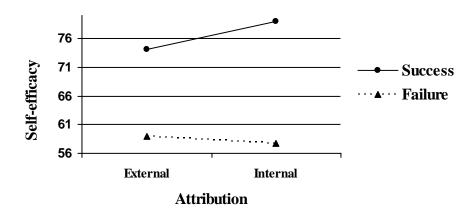


Figure 9. Self-efficacy (Percent Confidence) Mean When Attributing Success and Failure to Internal or External Factors at Time Two.

Figures 10 and 11 indicate that students who attribute success to stable factors have higher self-efficacy than those who attribute success to unstable factors. These students may also have higher expectations of future success than if they attributed the success to unstable causes. Students who view themselves as unsuccessful when

attributing the failure to unstable factors, such as lack of effort, have higher self-efficacy than those who attribute failure to stable factors. Therefore these students may believe that increased effort will produce more favorable outcomes.

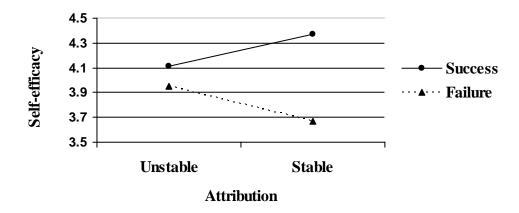


Figure 10. Self-efficacy (MSLQ) Mean When Attributing Success and Failure to Stable or Unstable Factors at Time One.

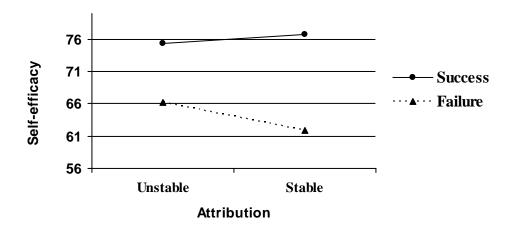


Figure 11. Self-efficacy (Percent Confidence) Mean When Attributing Success and Failure to Stable or Unstable Factors at Time One.

ANOVA (*Grade* and *Attribution*)

To see whether students' achievement differed when their attributions to success differ, an ANOVA was run. Results indicated that students who attributed their success to internal factors had higher achievement than students who attributed their success to external factors, F (1,269) = 14.82, p < .001, eta² = .05 at Time One and F (1, 189) = 17.57, p < .001, eta² = .09 at Time Two. Students' attributing their success to personal factors and non-personal factors were also compared. Results showed that students who had high achievement attributed the successful outcome more to personal factors than to non-personal factors, F (1,269) = 8.30, p < .01, eta² = .03 at Time One but no significant differences were found at Time Two (see Table 15).

Table 15
ANOVA Results on Students' Attributions for Success and Achievement

Dependent Variables	Internal	External	Mean Difference	Personal	Non- Personal	Mean Difference
Achievement (Time One)	92.67	90.24	2.43*	92.72	90.96	1.76**
Achievement (Time Two)	91.44	87.79	3.65**	N.S.	N.S.	N.S.

^{*}p<.05, **p<.01

Research Question 5

What is the relationship between students' self-efficacy, attribution beliefs, and their achievement?

Hypothesis 5(a). It was predicted that the higher students' self-efficacy, the higher would be their achievement.

<u>Hypothesis 5(b)</u>. It was predicted that the more students attributed outcomes to ability or effort, the higher would be their achievement.

Hypothesis 5(c). It was predicted that the more students attributed outcomes to internal and stable causes and less to unstable, external causes, the higher would be their achievement.

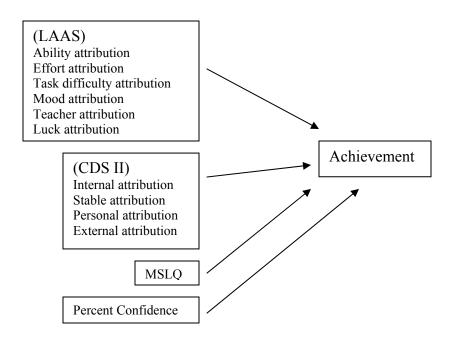


Figure 12. Relationships between Self-efficacy, Attributions, and Achievement.

Test grades at both times of the study are reported in Table 16. Overall, French students received the lowest grades.

Table 16
Students' Grades at Time 1 and Time 2

	Spanish Mean (SD)	German Mean (SD)	French Mean (SD)
Test Grade at Time 1	89 (7.4)	92 (6.5)	83 (10.5)
Test Grade at Time 2	86 (9.1)	81 (13.6)	77 (12.1)

5(a) Predicting language achievement from students' self-efficacy level

The correlation between students' self-efficacy level and their test grade at Time One was r = .40 for the MSLQ and .52 for the percent confidence measures. At Time Two, the r was .49 (MSLQ) and .60 (Percent confidence), all at p < .01. Because there were two sets of measures for self-efficacy, two correlations were calculated. However, because I hoped to examine how well self-efficacy predicts achievement, therefore, I correlated students' self-efficacy level at Time One with their test grades at Time Two. Results indicated that students' self-efficacy significantly correlated with their achievement, r = .38 (MSLQ) and .51 (percent confidence), at p < .01.

In order to determine the amount of unique variance, a regression procedure was performed with scores on students' test grades at Time Two as the criterion variable and the two sets of students' self-efficacy scores at Time One entered as predictor variables.

Whenever more predictors are included, the r-squared increases. So, to take into account

this inflation, the adjusted r-square was used. Results indicated that the adjusted r-square was .30, F (2,206) = 44.63, p < .001. Results indicated that the percent confidence was a better predictor of achievement than items on the MSLQ (Table 17). Perhaps this was due to the characteristics of the two scales. The range for the MSLQ was 1 to 5 whereas the percent confidence scale ranged from 1 to 100.

Table 17
Achievement Predicted by Self-efficacy

	Standardized Coefficients Beta	Т	Significance
MSLQ	.28	3.54	.000
Percent Confidence	.32	4.11	.000

5(b) Predicting language achievement from students' attribution (using the LAAS)

Again, because I hoped to examine the relationship between students' attributions and language achievement, students' attributions at Time One were correlated with their grades at Time Two. Results indicated that ability attributions had the strongest correlation with students' achievement, with an r of .26 (p< .01). Regression analyses were run with the LAAS at Time One as the predictor of language achievement. Results indicated that the adjusted r-square was .27, F (6, 353) = 22.65, p< .001. Of the predictors included in the model (ability, effort, task difficulty, mood, luck, and teacher), ability attribution was the best predictor for achievement, indicating that students who

attributed the outcome of their test to ability received higher grades on the second exam (Table 18).

Table 18
Achievement Predicted by Attribution (LAAS)

	Standardized Coefficients Beta	T	Significance
Ability	.51	11.08	.00
Task Difficulty	14	-2.90	.00

5(c) Predicting language achievement from students' attributions (using the CDS II)

From the results of the correlation analyses, internal (r = .15), stable (r = .17), and personal (r = .26) attributions positively correlated with grades (p < .01). From the results of the regression analyses, in which students' grades at Time Two were entered as the dependent variable and their attributions at Time One were entered as the predictor variables, the adjusted r-square was .09, F (4, 296) = 7.97, p < .001. Of the predictors included in the model, only stable, and personal attributions significantly predicted students' language achievement. Of the four predictors, personal attribution was the best predictor of achievement (Table 19). This indicated that achievement was predicted by how much students felt responsible for the outcome.

Table 19
Achievement Predicted by Attribution (CDS II)

	Standardized Coefficients Beta	Т	Significance
Stable	.16	2.71	.01
Personal	.27	4.34	.00

5(d) Predicting language achievement from students' self-efficacy and attribution

A multiple regression analysis was used to see how well students' language self-efficacy and attributional beliefs predicted their language achievement. Students' ability and task attributions using the LAAS and stable, personal factors using the CDS II questionnaire and students' self-efficacy beliefs using the MSLQ and percent confidence questions at Time One were entered as the predictor variables and students' test grades at Time Two were entered as the criterion variable. Only these six variables were used to predict achievement because previous regression analyses indicated that these were the best predictors of achievement. Results indicated that both students' self-efficacy and attributional beliefs significantly predicted their language achievement, F (6, 202) = 20.10, p < .001, where the adjusted r-square was .36. The separate contribution of the two predictor variables to the criterion variable was revealed by significant t statistic values as shown in Table 20. Results indicated that ability attribution and self-efficacy were the best predictors of language achievement. Therefore, students who have high self-efficacy and who make ability attributions are predicted to receive higher grades in their language

class than those who have low self-efficacy for language learning and who make external attributions, in general.

Table 20
Achievement Predicted by Attribution and Self-efficacy

	Standardized Coefficients Beta	t	Significance
Ability	.19	3.03	.00
Stable	.12	2.08	.04
Self-efficacy (MSLQ)	.25	3.24	.00
Self-efficacy (Percent Confidence)	.30	3.90	.00

Research Question 6

What is the relationship between students' attitude, motivation and language achievement?

<u>Hypothesis 6.</u> It was predicted that the more positive students' attitude and motivation were toward the language they were learning, the higher would be their language achievement.

Attitude and Motivation
Test Battery (AMTB)

- Interest in foreign language
- Positive attitudes toward target language
- Negative attitudes toward target language
- Integrative orientation
- Instrumental orientation
- Foreign language class anxiety

Figure 13. Relationship between Students' Attitude, Motivation and Language Achievement

Students' Grades and their Attitude and Motivation Toward Learning Foreign Languages.

The following table provides the means, standard deviations, and range of scores on each of the six measures of the AMTB.

Table 21 *Means, Standard Deviations, and Ranges on the AMTB Measures*

Name of Measure	Mean (SD)	Range
Interest in Foreign Languages	34.27 (6.51)	1 to 5
Attitudes toward Learning French (Spanish, German) Positively worded items	18.39 (4.12)	1 to 5
Attitudes toward Learning French (Spanish, German) Negatively worded items	10.15 (4.01)	1 to 5
Integrative Orientation	14.58 (3.02)	1 to 5
Instrumental Orientation	13.31 (2.58)	1 to 5
French (Spanish, German) Class Anxiety	13.28 (4.01)	1 to 5

In order to understand how students' motivation and attitude toward the language they were learning related to their grades, a correlation analysis was run. Grades were found to be positively correlated with students' positive attitudes toward the foreign language they were learning, yet negatively correlated with negative attitudes and anxiety about the language, either the structure of the class or speaking in class (see Table 22 for the Correlation Matrix).

Table 22
Correlation Matrix of the Relationship between Students' Grades and their Attitude and Motivation toward Learning Foreign Languages

	Average Grade	Interest	Positive Attitude	Negative Attitude	Integrative	Instrumental	Anxiety
AVG Grade	1.00						
Interest	.11	1.00					
PosAtt	.22**	.77**	1.00				
NegAtt	15**	69**	85**	1.00			
Integ	.07	.71**	.66**	58**	1.00		
Instrum	.000	.41**	.43**	30**	.49**	1.00	
Anx	29**	26**	32**	.37**	14*	.039	1.00

PosAtt = Positive Attitude, NegATT = Negative Attitude, Integ = Integrative orientation, Instrum = Instrumental Orientation, Anx = Anxiety p = .01, p = .001

Exploratory Research Questions

A multivariate analysis of variance (MANOVA) is a special case of analysis of variance in analyzing the data with more than two dependent variables. According to Stevens (1996), the strengths of using a MANOVA over separate univariate analyses include (a) the control of the overall α level; and (b) the greater sensitivity for detecting differences.

In the present study, several separate MANOVA procedures were used to address exploratory research questions.

Research Question 7: 7a) Do men and women differ on the attributions (LAAS) that they make? 7b) Do students who are successful and those who are unsuccessful differ on the attributions (LAAS) that they make?

<u>Hypothesis 7a</u>) It was predicted that there would be a significant difference between how women and men make attributions.

<u>Hypothesis 7b</u>) It was predicted that there would be a significant difference between how successful and unsuccessful students make attributions.

From the multivariate analyses, it was found that there were no significant gender differences at Time One but there was a significant difference between men and women at Time Two, F (6, 350) = 3.76, p < .001, eta² = .61 on the attributions that they made. From the Bonferroni procedures revealed in Table 23, it was found that men tended to make more effort attributions while women made more task difficulty attributions. Men

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tended to believe that their effort made a difference in what they obtained on their test but women may have felt less control over the outcome.

Table 23
Bonferroni Tests on LAAS by Gender at Time Two

Dependent Variables	Mean for men	Mean for women	Mean Differences
Effort	4.36	3.84	.51**
Task Difficulty	3.99	4.24	24*

^{*}p<.05, **p<.001

It was found from the analyses that there were significant differences between students' attributions depending on whether they regarded themselves as successful or not successful, F (6,351) = 24.48, p < .001, eta² = .3 at Time One and F (6,350) = 34.69, p < .001, eta² = .37 at Time Two. The Bonferroni procedures reported in Table 24 indicated that the two groups of students differed significantly on ability, effort, task, and teacher attributions at Time One and ability and effort attributions at Time Two.

Table 24
Bonferroni Tests on LAAS by Group (Time One and Time Two)

Dependent Variables	Mean at Time 1 (successful group)	Mean at Time 1 (unsuccessful group)	Mean Differences Time 1	Mean at Time 2 (successful group)	Mean at Time 2 (unsuccessful group)	Mean Differences Time 2
Ability Attribution	4.40	3.0	1.30***	4.41	2.92	1.49***
Effort Attribution	4.48	4.06	.430*	4.32	3.88	.45**
Task Attribution	3.98	3.09	.89***	N.S.	N.S.	N.S.
Teacher Attribution	2.73	2.32	.42*	N.S.	N.S.	N.S.

^{*}*p*<.05, ***p*<.01, ****p*<.0001

Results indicated that the successful students tended to attribute their success to ability and effort more than any other attributions, whereas the unsuccessful students attributed their failure to lack of effort. This type of attribution is theorized to be the best combination and has been the most valued attribution to increase students' self-efficacy in attribution retraining programs. According to the results, it seemed that students enrolled in these language courses had very positive beliefs about their learning and made attributions that helped sustain their learning motivation.

From the analyses at Time One, it was found that only unsuccessful men and unsuccessful women differed significantly on their attributions to ability. Results indicated that women tended to attribute their failure to lack of ability more than men. Although not significant, findings indicated that men attributed failure to lack of effort more than women, with a mean difference of .48. At Time Two, unsuccessful men

tended to attribute failure to lack of effort more than women with a mean difference of .79 (p< .001), and unsuccessful women tended to attribute failure to the difficulty of the task, with a mean difference of .4 (p< .05). Results are shown in Table 25.

Table 25
Bonferroni Tests on LAAS, Gender by Group

Dependent Variables	Mean at Time 1 (unsuccessful men)	Mean at Time 1 (unsuccessful women)	Mean Differences Time 1	Mean at Time 2 (unsuccessful men)	Mean at Time 2 (unsuccessful women)	Mean Differences Time 2
Ability	2.76	3.23	47*	N.S.	N.S.	N.S.
Effort	N.S.	N.S.	N.S.	4.27	3.48	.79**
Task	N.S.	N.S.	N.S.	3.39	4.33	40*

^{*}p<.05, **p<.001

Tables 26 and 27 present the differences between attributions of successful men and unsuccessful men. Successful women's and unsuccessful women's attributions were also compared at both times. It was found that successful men, as compared to unsuccessful ones, tended to believe that they were successful because of their high ability, whereas the unsuccessful men tended to believe that they were unsuccessful because the task was too difficult. The successful women tended to believe that they were successful because they had put in much effort. The unsuccessful women also believed strongly that effort is what determines the outcome, therefore attributed their

failure to lack of effort.

Table 26
Bonferroni Test on LAAS by Gender and Group at Time 1

Dependent Variables	Successful Men	Unsuccessful Men	Mean Differences	Successful Women	Unsuccessful Women	Mean Differences
Ability	4.44	2.76	1.68**	4.36	3.23	1.12**
Effort	N.S.	N.S.	N.S.	4.54	3.81	.73*
Task	3.91	2.95	.96**	4.05	3.23	.82**
Teacher	2.82	2.12	.70*	N.S.	N.S.	N.S.

^{*}*p*<.01, ***p*<.0001

At Time Two, the successful men still believed that they had succeeded because of their high ability, and the unsuccessful men also believed that ability played an important role in the outcome of their test. Women, on the other hand, differed between their views of success and failure. Those who were successful believed that high ability was the reason for success, whereas the unsuccessful women believed that lack of effort was the cause of the negative outcome. From the different beliefs found at Time One and Time Two, it is hypothesized that this discrepancy may be due to teachers' feedback and also to vicarious experience. Students at Time Two focused much more on ability, whether the outcome was successful or not. Perhaps these students realized that the task may have been a difficult one but that success is highly dependent on their own ability and personal factors such as effort.

Table 27
Bonferroni Test on LAAS by Gender and Group at Time 2

Dependent Variables	Successful Men	Unsuccessful Men	Mean Differences	Successful Women	Unsuccessful Women	Mean Differences
Ability	4.40	2.82	1.58**	4.42	3.03	1.39**
Effort	N.S.	N.S.	N.S.	4.21	3.48	.73*
Teacher	3.04	2.58	.49*	N.S.	N.S.	N.S.

^{*}p<.01, **p<.0001

Research Question 8: Are there any gender and group (successful and unsuccessful) differences on students' attributions (using the CDS II questionnaire)?

This research question is similar to research question 7. While research question 7 examined students' specific attributions such as ability, effort, task difficulty, and luck, research question 8 examined the dimensions of the attributions. Within the dimensions introduced by Weiner (1979), the CDS II measured internal, external, stable, and personal attributions.

Hypothesis 8a) It was predicted that there would be a significant difference between how women and men make attributions.

<u>Hypothesis 8b</u>) It was predicted that there would be a significant difference between how successful and unsuccessful students make attributions.

There were significant differences between the successful and unsuccessful groups, F (4, 353) = 10.54, p< .001, eta²= .11 at Time One and F (4, 352) = 22.24, p< .001, eta²= .2, at Time Two, but no gender differences were found. The most

endorsed attribution for success was the "personal" factor with 7.62, out of 9, (at Time One) and 7.57 (at Time Two) out of the four attributions (internal, external, stable, and personal), thus indicating that most students, whether successful or unsuccessful, felt personally responsible for their test results. The greatest difference between the successful and the unsuccessful group was on the stable attribution. The successful group had a mean of 5.68 and the unsuccessful group rated their failure to a stable cause with a mean of 4.66, p < .001 at Time One, indicating that the successful group felt that the successful test result was a stable factor, and thus were more likely to expect success on future tests. The failure group, however did not feel that the negative result was a stable factor but that it would change, perhaps as they put in more effort. As attribution theory states, failure attributed to unstable factors can increase learners' motivation because they know that it is something that can be changed, therefore students may still have expectancy for success in the future. At Time Two, the successful and unsuccessful group had a mean difference of 1.29, p < .001 on the stable factor where the successful students had a mean of 5.90 and the unsuccessful students had a mean of 4.61.

Results also showed a significant interaction effect between gender and group, F (4,353) = 2.90, p < .05, eta² = .03 at Time One but the interaction effect at Time Two was not significant. Both the successful men and successful women attributed their success to internal attributions more than the unsuccessful men and women. However, the successful women attributed their success more to personal factors than any other reasons.

Table 28
Results of the Interaction Effect between Gender and Group on Students' Attribution at Time One

Dependent Variables	Mean for Successful Men	Mean for Unsuccessful Men	Mean Differences	Mean for Successful Women	Mean for Unsuccessful Women	Mean Differences
Internal Attribution	6.64	6.01	.64*	6.42	5.76	.66**
Stable Attribution	5.86	4.27	1.59**	N.S.	N.S.	N.S.
Personal Attribution	N.S.	N.S.	N.S.	7.70	6.97	.72**

^{*}*p*<.01, ***p*<.001

Research Question 9: Are there group and gender differences on students' self-efficacy beliefs?

Hypothesis 9a) It was predicted that there would be a significant difference between the self-efficacy levels of the successful and unsuccessful students.

Hypothesis 9b) It was predicted that there would be a significant difference between the self-efficacy levels of men and women.

There were significant group differences at both Time One, F (2,248) = 15.48, p < .001, eta² = .11, and Time Two, F (2,354) = 45.90, p < .001, eta² = .21. Results indicated that successful students tended to have higher self-efficacy than those who were unsuccessful. Gender differences were only found at Time Two, F (2,354) = 3.18, p < .01, eta² = .01. Results indicated that men tended to have a slightly higher self-efficacy than

women in foreign language learning, although the difference was not very big (Tables 29 and 30). There were no significant interaction effects between gender and group.

Table 29
Results of the Group Differences on Students' Self-efficacy Beliefs at Time One and Time Two

Dependent Variables	Mean for Successful Students (Time 1)	Mean for Unsuccessful Students (Time 1)	Mean Differences	Mean for Successful Students (Time 2)	Mean for Unsuccessful Students (Time 2)	Mean Differences
Self- efficacy (MSLQ)	4.24	3.82	.43*	4.37	3.84	.52*
Self- efficacy (Percent Confident)	76.55	63.77	12.78*	76.69	57.96	18.73*

^{*}p<.001

Table 30 Results of the Gender Differences on Students' Self-efficacy Beliefs at Time Two

Dependent Variables	Men	Women	Mean Differences
Self-efficacy (MSLQ)	4.19	4.02	.18*

^{*}*p*< .01

Research Question 10: Do students learning different language have different self-efficacy beliefs?

<u>Hypothesis 10.</u> It was predicted that learners of different language would have different self-efficacy beliefs.

A further analysis was run using the ANOVA by adding language as another independent variable to see whether students learning different languages differed on their self-efficacy level. Because there was only one dependent variable (self-efficacy using the MSLQ) at Time One, ANOVA was used. At Time Two, two self-efficacy measures (MSLQ and percent confidence) were entered in the analyses as the dependent variables so a MANOVA was run. Results indicated that there were language differences, F(2, 348) = 9.19, p < .001, eta² = .50. It was found that overall, French students had the lowest self-efficacy among the three language groups, and the German students had the highest self-efficacy (Table 31).

Table 31
Results of the ANOVA on Different Language Groups at Time One

Dependent Variable	Mean for Spanish Students (1)	Mean for German Students (2)	Mean for French Students (3)	Mean Differences (1-3)	Mean Differences (2-3)
Self-efficacy (MSLQ)	4.13	4.38	3.85	.28*	.53**

^{*}p<.01, **p<.001

Results also indicated that there was a group by language interaction effect, F (2, 348) = 3.16, p< .01, eta² = .02 (Table 32). There were significant differences between unsuccessful students for each language but no differences were found for successful students.

Table 32
Results of the ANOVA on Language and Group Interaction Effect at Time One

Dependent Variable	Mean for Unsuccessful Spanish Students (1)	Mean for Unsuccessful German Students (2)	Mean for Unsuccessful French Students (3)	Mean Differences (1-3)	Mean Differences (2-3)
Self- efficacy (MSLQ)	3.98	4.43	3.58	.39*	.84**

^{*}*p*< .05, ***p*< .001

In the group of unsuccessful students, French students had the lowest self-efficacy and German students had the highest self-efficacy. Similar, though not significant, patterns were found with successful students.

At Time Two, a MANOVA was run with the two self-efficacy beliefs as dependent variables, examining how language, group, and gender interacted. There were again, differences in students' self-efficacy levels for different language groups, F (4, 692) = 4.13, p < .01, eta² = .02. It was found that French students had the lowest self-efficacy among the three language groups (Table 33). No other significant effect was found and there were no significant interactions between the independent variables.

Table 33
Results of the M ANOVA on Different Language Groups at Time Two

Dependent Variables	Mean for Spanish Students (1)	Mean for German Students (2)	Mean for French Students (3)	Mean Differences (1-3)	Mean Differences (2-3)
Self- efficacy (MSLQ)	4.15	4.19	3.90	.25	.29*
Self- efficacy (Percent Confidence)	70.13	68.87	59.44	10.69***	9.43**

^{*}*p*<.05, ***p*<.01, ****p*<.001

Research Question 11: Are there any differences between students' self-efficacy depending on their past experiences and heritage connection to the language they are learning?

Hypothesis 11. It was predicted that there would be a difference between students' self-efficacy levels depending on how much past experiences they had in the past and whether they had heritage connection to the language they were learning.

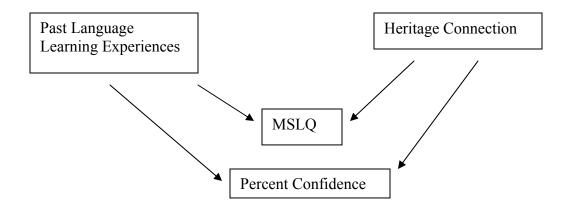


Figure 14. Relationship between Past Language Learning Experiences, Heritage Connection and Self-efficacy.

From the results of the MANOVA, it was found that there were significant differences between students' self-efficacy depending on their past experiences, F (4, 113) = 2.7, p < .05, eta² = .09. Those students who had had positive past experiences had a higher self-efficacy than those who reported negative past experiences (Table 34). However, there were no significant differences on self-efficacy levels between students with and without heritage connection to the language they were learning. Further analyses indicated that there was a significant interaction effect between students' past experiences and heritage connection on their self-efficacy level. It was also found that those who had positive past experiences had a higher self-efficacy when they had a heritage connection to the language that they are learning than those students who had positive past experiences but no heritage connection (Table 35).

Table 34
Results of the MANOVA on Students' Past Language Learning Experiences

Dependent Variable	Mean for Positive	Mean for Negative	Mean
	Past Experiences	Past Experiences	Differences
Self-efficacy (MSLQ)	4.54	3.98	.56*

^{*}*p*< .05

Table 35
Results of the MANOVA on Students' Past Language Learning Experiences and Heritage
Connection

Dependent Variable	Mean for Positive Past Experiences and have Heritage Connection	Mean for Positive Past Experiences but have no Heritage Connection	Mean Differences
Self-efficacy (MSLQ)	4.91	4.18	.72*

^{*}*p*< .05

Research Question 12: Are there any group or gender differences on students' beliefs about language learning?

<u>Hypothesis 12a</u>) It was predicted that successful and unsuccessful students would have different beliefs about language learning.

<u>Hypothesis 12b</u>) It was predicted that men and women would have different beliefs about language learning.

At Time One, both gender, F (34, 225) = 1.77, p < .01, eta²=.21, and group, F (34, 225) = 1.54, p < .05, eta²=.19, differences were found using the MANOVA (see Table 36). Overall, the unsuccessful students reported that if they heard someone speak the language

they were trying to learn, they would take the opportunity to talk to them and practice speaking with them more so than the successful students. Another belief that was significantly different between the successful and unsuccessful students was that unsuccessful students believed that it is important to be able to speak/learn a foreign language, though the mean was on average quite low, compared to the means on other items. Therefore, it seems that these students would value learning a language more than the more successful learners who did not strongly believe that speaking a foreign language is important.

Table 36
Group Differences on BALLI Items at Time One

Item	Mean for Successful Students	Mean for Unsuccessful Students	Mean Differences
(1) item 12 (If I heard someone speaking the language I am trying to learn, I would go up to them so that I could practice speaking the language)	2.79	3.10	31*
(2) item 30 (Americans think that it is important to speak a foreign language)	2.43	2.83	40*

^{*}*p*< .05

From results obtained by the MANOVA, it was found that there were many beliefs on which men and women differed. Men tended to believe that some people are born with a special ability to learn a foreign language and believed that people who are good at math and science are usually not good at foreign language learning more than the women. Women, however, tended to believe that it is important to practice in the

language laboratory more than men (Table 37), and as previous results indicated, tended to attribute successful learning to effort. Men also believed more strongly than women that it is o.k. to guess if they did not know a word in the foreign language.

Table 37
Gender Differences on BALLI Items at Time One

Item	Mean for Men	Mean for Women	Mean Differences
(1) item 2 (Some people are born with a special ability which helps them learn a foreign language)	3.47	3.08	.39*
(2) item 13 (It's o.k. to guess if you don't know a word in the foreign language)	3.33	3.04	.29*
(3) item 21 (It is important to practice in the language laboratory)	3.46	3.74	28*
(4) item 29 (People who are good at math and science are not good at learning foreign languages)	2.56	2.25	.31*
(5) item 30 (Americans think that it is important to speak a foreign language)	2.39	2.87	48*
(6) item 33 (Americans are good at learning foreign languages)	2.38	2.66	28*

^{*}*p*< .05

From the results of the MANOVA, there were no significant differences in the interaction between group and gender, F (34, 225) = .87, p=.68. However, looking at the univariate analyses item by item, it was found that men who rated themselves as successful differed significantly on their beliefs about language learning from successful women. For the unsuccessful group, men and women also differed on several of the

belief items. For the successful group, men believed more strongly than women that some languages are easier to learn than others. However, successful women tended to believe more strongly than men that it is important to practice in the language lab. For the unsuccessful group, men more than women tended to believe that some people are born with a special ability to learn a foreign language, they thought it is more acceptable to guess if they did not know a word, and thought that people who are good at math and science are not good at foreign language learning (see Table 38).

Table 38
The Interaction Effect between Group and Gender at Time One

Item	Mean for Successful Men	Mean for Successful Women	Mean Differences	Mean for Unsuccessful Men	Mean for Unsuccessful Women	Mean Differences
(1) item 2 (Some people are born with a special ability which helps them learn a foreign language)	N.S.	N.S.	N.S.	3.63	2.94	.69*
(2) item 3 (Some languages are easier to learn than others)	4.37	4.02	.35*	N.S.	N.S.	N.S.
(3) item 5 (The language I am trying to learn is structured in the same way as English)	2.97	2.6	.37*	N.S.	N.S.	N.S.
(4) item 13 (It's o.k. to guess if you don't know a word in the foreign language)	N.S.	N.S.	N.S.	3.41	2.92	.49*
(5) item 21 (It is important to practice in the language laboratory)	3.48	3.74	26*	N.S.	N.S.	N.S.
(6) item 27 (If I learn to speak this language very well, it will help me get a good job)	3.28	3.59	31*	N.S.	N.S.	N.S.
(7) item 29 (People who are good at math and science are not good at learning foreign languages)	N.S.	N.S.	N.S.	2.66	2.25	.41*
(8) item 30 (Americans think that it is important to speak a foreign language)	2.27	2.58	31*	2.5	3.17	67*
(9) item 33 (Americans are good at learning foreign languages)	N.S.	N.S.	N.S.	2.25	2.64	39*

^{*}p<.05

Table 39 present the differences between successful and unsuccessful men and the differences between successful and unsuccessful women.

Table 39
The Interaction Effect between Gender and Group at Time One

Item	Mean for Successful Men	Mean for Unsuccessful Men	Mean Differences	Mean for Successful Women	Mean for Unsuccessful Women	Mean Differences
(1) item 5 (The language I am trying to learn is structured in the same way as English)	2.97	2.53	.44*	N.S.	N.S.	N.S.
(2) item 12 (If I heard someone speaking the language I am trying to learn, I would go up to them so that I could practice speaking the language)	2.68	3.25	57*	N.S.	N.S.	N.S.
(3) item 20 (Learning a foreign language is mostly a matter of learning a lot of grammar rules)	N.S.	N.S.	N.S.	3.02	3.42	40*
(4) item 23 (If I get to speak this language very well, I will have many opportunities to use it)	3.68	4.09	41	N.S.	N.S.	N.S.

^{*}*p*< .05

Results indicated that the less successful students tended to want to go up to people speaking the language they were trying to learn in order to practice speaking the language. However, this was only true for men. Successful and unsuccessful women did not differ on this belief. The unsuccessful men tended to believe strongly that they would have many opportunities to use the language if they learned it well compared to the successful

men. Unsuccessful women tended to believe that learning a foreign language is mostly learning grammar rules compared to the successful women, and perhaps this being the case, the less successful women were relying too much on rote memory and not actively learning the language.

At Time Two, both group, F (34, 229) =1.48, p<.05, eta²=.18, and gender differences, F (34, 229) =1.98, p<.01, eta²=.23, were found using the MANOVA (Table 40). The greatest difference among the successful and unsuccessful students was that the successful students believed that they would ultimately learn the foreign language very well while the unsuccessful students were less confident about learning it well. Another belief on which successful and unsuccessful students differed significantly was the belief that they had foreign language aptitude. Successful students rated this belief significantly higher than the unsuccessful students by .28 out of the five-point scale. The unsuccessful students believed more strongly than the successful students that it is easier to speak than understand a foreign language and that people who are good at math and science are usually not as good at learning a foreign language. Perhaps teachers can help these less successful students to focus more on their oral skills with this belief so that they can be more competent in this particular area as opposed to giving up learning a language.

Table 40
Group Differences on BALLI Items at Time Two

Item	Mean for Successful Students	Mean for Unsuccessful Students	Mean Differences
(1) item 6 (I believe that I will ultimately learn to speak this language very well)	3.75	3.37	.38*
(2) item 15 (I have foreign language aptitude)	3.23	2.95	.28*
(3) item 24 (It is easier to speak than understand a foreign language)	2.22	2.59	37*
(4) item 29 (People who are good at math and science are not good at learning foreign languages)	2.21	2.53	32*

^{*}p<.05

Results indicated that men and women had different beliefs about language learning at the end of the course. One of the most significant difference was item 18. Women tended to feel more self-conscious speaking in front of other people than men and believed that it is important to practice in the language laboratory. Men quite strongly believed that some languages are easier to learn than others, but women, perhaps believing that their success was dependent not on the language but on their own effort, did not as strongly agree with this statement as did the men. Women, however, believed more strongly than men that people who speak more than one language well are very intelligent (see Table 41).

Table 41
Gender Differences on BALLI Items at Time Two

Item	Mean for Men	Mean for Women	Mean Differences
(1) item 3 (Some languages are easier to learn than others)	4.22	4.06	.16*
(2) item 18 (I feel self-conscious speaking the foreign language in front of other people)	3.03	3.42	39*
(3) item 21 (It is important to practice in the language laboratory)	3.24	3.50	26*
(5) item 30 (Americans think that it is important to speak a foreign language)	2.29	2.65	36*
(6) item 32 (People who speak more than one language well are very intelligent)	3.26	3.53	27*

^{*}*p*< .05

Although the Group by Gender interaction was not significant, F (34, 229) = .83, p=.70, eta²=.10, results indicated that unsuccessful men and unsuccessful women differed on several beliefs. One belief that was significantly different for the two genders was their feelings of self-consciousness when speaking in front of people in a foreign language. Unsuccessful women, again, were more self-conscious than unsuccessful men. The unsuccessful women believed more strongly than the unsuccessful men that it they learned to speak another language well, it would help them get a good job, so the women may have been more instrumentally motivated than men (see Table 42).

Table 42
The Interaction Effect between Group and Gender at Time Two

Item	Mean for Successful Men	Mean for Successful Women	Mean Differences	Mean for Unsuccessful Men	Mean for Unsuccessful Women	Mean Differences	
(1) item 18 (I feel self-conscious speaking the foreign language in front of other people)	N.S.	N.S.	N.S.	3.00	3.60	60*	
(2) item 27 (If I learn to speak this language very well, it will help me get a good job)	N.S.	N.S.	N.S.	3.19	3.60	41*	
(8) item 30 (Americans think that it is important to speak a foreign language)	N.S.	N.S.	N.S.	2.22	2.87	65*	
(9) item 32 (People who speak more than one language well are very intelligent)	3.18	3.51	33	N.S.	N.S.	N.S.	

^{*}p< .05

Another finding from the BALLI was that successful and unsuccessful men, and successful and unsuccessful women differed significantly on several language learning beliefs. Again, successful men believed that they will ultimately learn to speak the language well while unsuccessful men did not have as strong a belief, though still quite high (Table 43).

Table 43 The Interaction Effect between Gender and Group at Time Two

Item	Mean for Successful Men	Mean for Unsuccessful Men	Mean Differences	Mean for Successful Women	Mean for Unsuccessful Women	Mean Differences	
(1) item 6 (I believe that I will ultimately learn to speak this language very well)	3.83	3.39	.44*	N.S.	N.S.	N.S.	
(2) item 15 (I have foreign language aptitude)	3.17	2.85	.32*	N.S.	N.S.	N.S.	
(3) item 24 (It is easier to speak than understand a foreign language)	N.S.	N.S.	N.S.	2.19	2.73	54*	
(4) item 29 (People who are good at math and science are not good at learning foreign languages)	2.30	2.64	34*	N.S.	N.S.	N.S.	
(5) item 30 (Americans think that it is important to speak a foreign language)	N.S.	N.S.	N.S.	2.43	2.87	44	

Successful men believed that they had foreign language learning aptitude whereas unsuccessful men did not have that belief. However, these differences were not found between successful and unsuccessful women.

Research Question 13: What are the most common attributions among each group and gender?

- 1) Overall, for the successful group at Time One, ability and effort were the most common attribution. That is, students attributed their success to ability and effort more than to the other six attributions. The mean for ability attribution was 4.40 and the mean for effort was 4.47 (on a six-point scale)
- 2) At Time Two, again, the successful students attributed their success to the amount of ability they have and the amount of effort expended on the task more than to the other six attributions. The mean for ability attribution was 4.41 and the mean for effort was 4.34.
- 3) Overall, for the unsuccessful group at Time One, lack of effort was the most common attribution out of the six attributions on the LAAS. The mean for effort attribution was 4.04.
- 4) Overall, for the unsuccessful group at Time Two, the difficulty of the task was the most common attribution out of the six attributions on the LAAS. The mean for task difficulty was 4.13.

Results indicated that students attributed success to internal factors and took responsibility for their outcome. For those who were unsuccessful, students first attributed their failure to their lack of effort for studying. However, when asked what they attributed their failure to after their 3rd exam, the unsuccessful students attributed the failure to the difficulty of the task.

Research Question 14: What are the most common beliefs students have about foreign language? How are the results obtained in this study similar to Horwitz's findings in 1988?

Descriptive Analyses of the Beliefs about Language Learning Inventory

Descriptive statistics were computed on the belief items. Because the BALLI does not yield a composite score, overall comparisons across the language classes (Spanish, German, and French) were made using frequency tables of the responses.

Tables 44 through 48 illustrate the five major areas in the BALLI: 1) the difficulty of language learning; 2) foreign language aptitude; 3) the nature of language learning; 4) learning and communication strategies; and 5) motivations and expectations. The tables present the frequency of student responses in percentages, means, and standard deviations in each area of learner beliefs about language learning. The results of the three language groups were reported together because there were few significant language differences across languages. Each item in the rows indicates the responses of Spanish, German, and French students together.

Descriptive analyses of the BALLI looking at the frequency of students' language learning beliefs indicated that students' beliefs about learning a foreign language varied widely. However, in the five major areas in the BALLI, there were still some beliefs with which students readily agreed strongly and others with which they disagreed.

In the area of the difficulty of language learning, a large majority of the participants (89%) believed that certain languages are easier to learn than others, where 36% of the Spanish learners believed Spanish to be an easy language to learn, 32% of the

French learners believed that French was easy to learn, whereas 57% of the German learners believed German to be a difficult to learn. Most students leaned towards believing that it is harder to speak a language than to understand it. From the results of Horwitz's (1988) study, an average of 87% of the students believed that some languages are easier to learn than others. About 64% of the students believed that they will ultimately speak the language very well, whereas Horwitz (1988) found an average of 53% of the students she tested to believe so. Asked how long it would take one to speak the language fluently if someone spent one hour a day learning a language, most students believed that it was possible to learn the language within two to five years. From the results of the analyses, the beliefs that students held are encouraging and optimistic. However, unless these optimistic beliefs are congruent with reality, students will find that the beliefs they hold are not realistic and may fail to meet the goal and standards that they set for themselves, which can ultimately lead to lower motivation. As Horwitz (1987, 1988) warned, because language learners have their own expectations and beliefs about language learning, when language classes fail to meet their expectations, students can lose confidence or interest.

Table 44

BALLI Responses – The Difficulty of Language Learning

Item	1 (freq)	2 (freq)	3 (freq)	4 (freq)	5 (freq)	M	SD
3. Some languages are easier to learn than others.	1.1 (4)	.5 (2)	8.7 (32)	55.2 (202)	34.4 (126)	4.21	.71
4. The language I am trying to learn is: 1) a very difficult language, 2) a difficult language, 3) a language of medium difficulty, 4) an easy language, 5) a very easy language.	2.5 (9)	26.2 (96)	42.3 (155)	20.2 (74)	8.7 (32)	3.07	.95
6. I believe that I will ultimately learn to speak this language very well.	1.1 (4)	10.1 (37)	25.4 (93)	45.4 (166)	18 (66)	3.69	.92
14. If someone spent one hour a day learning a language, how long would it take him/her to become fluent? 1) less than a year, 2) 1-2 years, 3) 3-5 years, 4) 5-10 years, 5) You can't learn a language in 1 hour a day.		37.8 (138)	36.7 (134)	8.8 (32)	7.7 (28)	2.68	1.02
24. It is easier to speak than understand a foreign language.	18.9 (69)	40.7 (149)	21.6 (79)	15.3 (56)	3.6 (13)	2.44	1.07
28. It is easier to read and write this language than to speak and understand it.	4.9 (18)	18 (66)	38.8 (142)	28.4 (104)	9.8 (36)	3.2	1.01

1 = Strongly Disagree, 2= Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree

In the "Foreign Language Aptitude" category, 92% of the students most strongly believed that it is easier for children than adults to learn a foreign language, with a mean of 4.43, followed by 54% of the students holding a strong belief that everyone can learn to speak a foreign language. Whereas the first belief that only children can learn a foreign language easily may hinder these college students from being motivated to learn and take up the challenge believing that it is too late to learn a new language, a belief that everyone can learn may counterbalance the negative self-sabotaging belief that they hold. About 40% of the students believed that some people are born with a special ability to

learn a foreign language, whereas Horwitz (1988) found an average of 50% of the students to believe so. Strikingly only 27% of them believed that they had the aptitude to learn a foreign language whereas in Horwitz's sample, 41% of the students believed that they had a special ability for learning foreign languages. Perhaps with such a low percent of students believing that they had the aptitude to learn a foreign language, the group would not put as much effort into learning because they generally did not view themselves as being capable of succeeding in a language class. However, responses from the attribution scale indicated that for an unsatisfied test grade, students tended to attribute failure to lack of effort and not to lack of ability. Of the students, 74% believed that everyone can learn to speak a foreign language. According to Schunk's (1991) self-efficacy theory, vicarious experiences can have strong influence over one's self-efficacy towards a task. Therefore, perhaps this belief that everyone can learn to speak a foreign language was developed through observation. Believing strongly so can lead to students' positive expectation about their own ability to learn a language.

It was found that 54% of the students believed that it would be easier for someone who already speaks a foreign language to learn another one. Therefore, of the 366 students, 78% who had had past language learning experiences should readily assume that it would be easier for them to learn another language. With a positive belief such as this and a high expectancy for success, students may put in more effort and persist in the face of failure when learning a foreign language. As Bandura (1977) stated, learners with positive beliefs about their capabilities are more likely to expend effort and persist in a task because they have a higher expectancy that they will succeed. Therefore,

language learners who have positive beliefs about language learning will have more motivation to learn the language and their motivation will be sustained through their effort and persistence.

Table 45
BALLI Responses – Foreign Language Aptitude

Item		2 (freq)	3 (freq)	4 (freq)	5 (freq)	M	SD
1. It is easier for children than adults to learn a foreign language.		2.2 (8)	4.9 (18)	38.8 (142)	53.6 (196)	4.43	.74
2. Some people are born with a special ability which helps them learn a foreign language.		18.6 (68)	29.5 (108)	37.2 (136)	9.8 (36)	3.28	1.03
10. It is easier for someone who already speaks a foreign language to learn another one.		12 (44)	30.1 (110)	43.7 (160)	10.7 (39)	3.46	.96
15. I have foreign language aptitude.		17.8 (65)	49.2 (180)	24 (88)	3.6 (13)	3.02	.88
22. Women are better than men at learning foreign languages.		27.3 (100)	49.5 (181)	4.1 (15)	.5 (2)	2.41	.85
29. People who are good at math and science are not good at learning foreign languages.		34.7 (127)	44.5 (163)	4.4 (16)	.8 (3)	2.4	.83
32. People who speak more than one language well are very intelligent.	2.7 (10)	10.9 (40)	45.9 (168)	36.1 (132)	4.4 (16)	3.28	.82
33. Americans are good at learning foreign languages.		28.7 (105)	57.1 (209)	3.3 (12)	.5 (2)	2.55	.75
34. Everyone can learn to speak a foreign language.		6.3 (23)	18.3 (67)	46.4 (170)	27.6 (101)	3.93	.91

^{1 =} Strongly Disagree, 2= Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree

In the area of "The Nature of Language Learning", few participants felt it necessary to know about the foreign cultures in order to speak the language well (41%),

yet 71% of the participants believed that it is better to learn the language in the foreign country. However, because the participants of this study were all enrolled in foreign language courses in the U.S. and not in an environment they would likely see as advantageous, it is hoped that this belief would not sabotage their learning. Without the guidance of teachers, students may find it depressing and over-challenging to learn a foreign language. Results indicated that 51% of the students did not believe strongly that learning a foreign language is just a matter of learning vocabulary words or translation although they are frequently tested on translation. However, 36% of the students recognized that learning a foreign language is not just learning grammar. 77% of the students believed that learning a foreign language is different from learning other school subjects, which supports the purpose of this study, to look at students' beliefs and motivation in foreign language learning. Students in Horwitz's study in 1988 also believed that learning a foreign language is different from learning other academic subjects, with an average of 80% believing so. Because learning a foreign language is such a unique learning experience, it would be useful to look at students' motivational beliefs under this learning situation in order to help students identify their learning beliefs and help them become motivated learners.

Table 46

BALLI Responses – The Nature of Language Learning

Item		2 (freq)	3 (freq)	4 (freq)	5 (freq)	M	SD
5. The language I am trying to learn is structured in the same way as English.	10.4 (38)	33.1 (121)	33.6 (123)	19.4 (71)	3.6 (13)	2.73	1.01
8. It is necessary to know the foreign culture in order to speak the foreign language.		26.8 (98)	27.6 (101)	34.2 (125)	6.8 (25)	3.12	1.03
11. It is better to learn a foreign language in the foreign country.	1.4 (5)	7.4 (27)	20.5 (75)	41 (150)	29.8 (109)	3.9	.96
16. Learning a foreign language is mostly a matter of learning a lot of new vocabulary words.	7.9 (29)	44.8 (164)	24.9 (91)	19.4 (71)	3 (11)	2.65	.98
20. Learning a foreign language is mostly a matter of learning a lot of grammar rules.	2.7 (10)	24.4 (89)	35.9 (131)	32.3 (118)	4.7 (17)	3.12	.92
25. Learning a foreign language is different from learning other school subjects.	1.1 (69)	6.6 (149)	15 (79)	54.6 (56)	22.7 (13)	3.91	.86
26. Learning a foreign language is mostly a matter of translating from English.	16.9 (62)	44.3 (162)	27.6 (101)	10.7 (39)	.5 (2)	2.34	.90

1 = Strongly Disagree, 2= Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree

Regarding the "Learning and Communication Strategies" category, consistent with what Horwtiz (1988) found, 98% of the students strongly believed that it is important to repeat and practice extensively, with 58% of them endorsing the belief that it is important to practice in the language labs. This is a "good" belief that students hold because these students reported believing that successful language learning depends on effort and hard work, an attributional feedback that teachers should constantly give to students. Giving value to hard work and emphasizing the importance of effort in the contribution to success is one of the key elements in attribution retraining programs (Schunk, 1981), giving students the sense of autonomy for successful outcomes. Quite a

large number of students (47%) believed that it is important to speak a foreign language with an excellent accent but 73% of the students also held enabling beliefs such as disagreeing strongly that they should not say anything in the foreign language until they can say it correctly, consistent with Horwitz's (1988) finding that 78% of the students disagreed with this belief also. In this case, if students are willing to try to speak, they may also find more opportunities to speak the language. However, at the end of the semester when the BALLI was given as a post-test, frequency results indicated that students started to shy away from finding opportunities to speak the target language if they hear someone speaking the language they are trying to learn. Perhaps at the beginning of the semester, students believed that it was the only way for them to use the language, but as they were more immersed into language learning, they found they had opportunities with which to practice the language and that walking up to a stranger may not seem to them as the only option. However, 54% of the students reported feeling selfconscious when speaking in front of other people, which can be the reason for them not to find people with whom to practice speaking the language. While a majority of the students rejected the importance of correctness in speaking, 60% of them believed that if one is allowed to make mistakes in the beginning, it will be hard to get rid of them later on. As the semester progressed, students more strongly believed that it is acceptable to guess if one does not know a word in the foreign language. At the beginning, students may be reluctant to guess but knowing that they are in a comfortable learning environment and that their teachers encourage them to guess, their beliefs seemed to have changed. Therefore, the teacher's role in language learning is very important and can shape many of the beliefs that students hold.

Table 47

BALLI Responses – Learning and Communication Strategies

Item	1 (freq)	2 (freq)	3 (freq)	4 (freq)	5 (freq)	M	SD
7. It is important to speak a foreign language with an excellent accent.	3 (11)	17.8 (65)	32 (117)	37.2 (136)	10.1 (37)	3.34	.98
9. You shouldn't say anything in the foreign language until you can say it correctly.	25.7 (94)	48.1 (176)	18 (66)	6.3 (23)	1.9 (7)	2.11	.92
12. If I heard someone speaking the language I am trying to learn, I would go up to them so that I could practice speaking the language.	10.4 (38)	34.4 (126)	24.3 (89)	24.6 (90)	6.3 (23)	2.82	1.11
13. It is o.k. to guess if you don't know a word in the foreign language.	3.3 (12)	23.2 (85)	28.1 (103)	38.5 (141)	6.8 (25)	3.22	.99
17. It is important to repeat and practice a lot.	(0)	.3 (1)	2.2 (8)	42.6 (156)	54.9 (201)	4.52	.56
18. I feel self-conscious speaking the foreign language in front of other people.	4.6 (17)	17.2 (63)	24.9 (91)	35.8 (131)	17.5 (64)	3.44	1.11
19. If you are allowed to make mistakes in the beginning it will be hard to get rid of them later on.	4.4 (16)	21 (77)	14.5 (53)	45.5 (166)	14.8 (54)	3.45	1.11
21. It is important to practice in the language laboratory.	.8 (3)	5.7 (21)	35.5 (130)	45.5 (166)	12.6 (46)	3.63	.81

^{1 =} Strongly Disagree, 2= Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree

The area of "Motivation and Expectations" indicated that students did not have a strong belief in any particular belief but overall believed that if they speak the language well, they (67% of the students) will have many opportunities to use it. However, only 46% believed that a foreign language would help them get a good job. It seems that these language learners were not learning the language for utilitarian reasons because they were

not expecting the language to get a good job. Perhaps, there are more intrinsic or integrative motivation involved in their language learning than there are instrumental motivation.

Table 48
BALLI Responses - Motivation and Expectations

Item	1 (freq)	2 (freq)	3 (freq)	4 (freq)	5 (freq)	M	SD
23. If I get to speak this language well, I will have many opportunities to use it.	2.2 (69)	8.2 (149)	21.9 (79)	41.3 (56)	26.5 (13)	3.82	.99
27. If I learn to speak this language very well, it will help me get a good job.	4.6 (17)	14.5 (53)	35.2 (129)	28.4 (104)	17.2 (63)	3.39	1.07
30. Americans think that it is important to speak a foreign language.	21.9 (80)	31.7 (116)	20.2 (74)	23.2 (85)	3 (11)	2.54	1.16
31. I would like to learn this language so that I can get to know its speakers better.	3 (11)	18 (66)	28.1 (103)	38 (139)	12.8 (47)	3.4	1.02

1 = Strongly Disagree, 2= Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree

Research Question 15: Do students' beliefs about foreign language learning differ after taking a semester of the language course?

From results of the paired sample t-test, it was found that there was a significant difference between students' general language learning beliefs, assessed through the BALLI, at the first day of class and at the last day of class. The beliefs that changed are listed in the table below.

Table 49
Changes in Students' Language Learning Beliefs

Item	Mean at T1	Mean at T2	Mean Difference
2. Some people are born with a special ability which helps them learn a foreign language.	3.28	3.13	.15*
4. The language I am trying to learn is: 1) a very difficult language, 2) a difficult language, 3) a language of medium difficulty, 4) an easy language, 5) a very easy language.	4.12	4.10	.12*
12. If I heard someone speaking the language I am trying to learn, I would go up to them so that I could practice speaking the language.	2.85	2.68	.16*
13. It is o.k. to guess if you don't know a word in the foreign language.	3.17	3.35	18**
16. Learning a foreign language is mostly a matter of learning a lot of new vocabulary words.	2.66	2.89	22**
18. I feel self-conscious speaking the foreign language in front of other people.	3.49	3.24	.25**
19. If you are allowed to make mistakes in the beginning it will be hard to get rid of them later on.	3.46	3.61	15*
21. It is important to practice in the language laboratory.	3.57	3.31	.26*
22. Women are better than men at learning foreign languages.	2.43	2.29	.14*
23. If I get to speak this language well, I will have many opportunities to use it.	3.81	3.60	.21*
25. Learning a foreign language is different from learning other school subjects.	3.94	4.16	22**
28. It is easier to read and write this language than to speak and understand it.	3.15	3.44	29**
33. Americans are good at learning foreign languages.	2.55	2.65	11*

^{*}*p*<.05, ***p*<.01

Results indicated that as the semester progressed, students started to believe more strongly that it was allowed to guess if they did not know a word in the foreign language.

They also believed more strongly towards the end of the semester that it is easier to read

^{1 =} Strongly Disagree, 2= Disagree, 3 = Neither Agree Nor Disagree, 4 = Agree, 5 = Strongly Agree

and write than to speak the language, and that if they were allowed to make mistakes at the beginning, it would be hard to get rid of them later on. They also believed more strongly towards the end of the course that learning a language is mostly learning the vocabulary. As they were more involved in the language they were learning, they more strongly believed that language learning is different from other subjects learned in school. Among those questions in which students agreed less to at the end of the course were beliefs that some people are born with the ability to learn a foreign language, although the difference was very minimal. Students also believed that they would not practice speaking if they saw someone speaking the language they were learning. They also did not believe it to be important to practice in the lab. However, as students became more familiar with the language, they began to feel less self-conscious about speaking in front of others.

Chapter 5

Discussion

Reflecting on the findings of the study, what can we say was found about students' foreign language learning beliefs, attributions, and self-efficacy? In this chapter, I will describe the most important findings of this study, synthesize these findings with the published literature, and evaluate them based on limitations that applied in this study. Finally, implications for research and education practice will be discussed.

Important Findings

Relationship Between Self-Efficacy and Attribution in a Foreign Language Learning

Environment

Individuals with high self-efficacy tend to have strong beliefs about their competency, however, self-efficacy does not necessarily mean the amount of skill the individual actually has but rather what the individual believes he or she can do with what he or she has (Bandura, 1997). Attribution is one's belief for why an outcome occurred and is often based on the beliefs about their abilities, effort, the difficulty of the task, or luck. Having high self-efficacy gives an individual more confidence to approach the task and positive beliefs about one's capabilities to lead to positive results, which in turn, lead the individual to believe that it is his or her effort and ability that led to success. Therefore, students who have higher self-efficacy would also take more responsibility for the outcomes of their grades. Research on the relationship between self-efficacy and

attribution have been investigated in areas such as general academic performance and sports (Bond, Biddle, & Ntoumanis, 2001; Lane & Lane, 2001; Lynden, Chaney, Danehower, & Houston, 2002). Based on this premise, the relationship between self-efficacy and attribution in a foreign language learning environment was examined.

There appeared to be a significant relationship between students' self-efficacy beliefs and attributions. Scores on the self-efficacy scales were positively correlated with internal, stable, and personal attributions such as ability and effort. Conversely, the scores on the self-efficacy scales were negatively correlated with external attributions such as teacher, luck, and the difficulty of the task. Figure 9 depicts the relationship between students' attribution and self-efficacy. Dotted lines in the model indicate negative correlations between the two variables, attribution and self-efficacy.

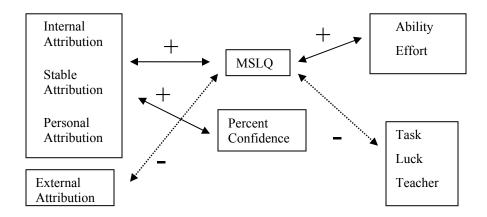


Figure 9. Partial relationship derived from the conceptual framework indicating the relationship between attribution and self-efficacy.

Thus, foreign language students with higher self-efficacy tended to make attributions that were more within their control and to hold stronger beliefs about their

ability. Although these correlations were not large and ranged from 0.11 to .40, it does appear that one's self-efficacy for learning a foreign language is related to attributions. Also, when students' attributions at Time One were correlated with their self-efficacy at Time Two, results indicated that there were also significant correlations between students' self-efficacy beliefs and internal (r = .33 on MSLQ, r = .16 on percent confidence) and personal (r = .42 on MSLQ, r = .26 on percent confidence), p< .001, attributions, indicating that attributions may have influence over one's self-efficacy, the belief that one has the capability to perform a task successfully. That is, when students attribute a successful outcome to internal and stable factors, they are attributing success to high ability, meaning that they have confidence that they have the ability to successfully complete future tasks. When students attribute success to external factors, they are attributing the outcome to something out of their control, which may not be a good indicator for their confidence about future success.

It is important to remember that an important limitation of any correlational study is that even when two variables are clearly significantly related, the issue of causality cannot be assumed. Thus, although attributions and self-efficacy were related in interesting patterns, we cannot assume to have determined whether certain attributions necessarily lead to certain levels of self-efficacy, whether the reverse is true, or whether a third unnamed construct is at the root of both self-efficacy levels and attributions.

Students' Interpretation of Success and Failure and How it is Related to Self-Efficacy

After investigating the relationship between students' attributions and selfefficacy, I wished to examine how self-efficacy would differed when attributions for the

same outcome differs. Further analyses indicated that students who rated themselves as successful and who attributed the success to either internal or stable factors tended to also rate themselves as having higher self-efficacy than those who attributed the success to either external or unstable factors, that is, factors that were not under their control. However, the hypothesis that students who attributed their failure to either external or unstable factors would rate themselves as having higher self-efficacy than those who rated the failure as either internal or stable factors was not supported by the result. Results, instead, indicated that students who rated themselves as unsuccessful and who attributed the failure to either internal or unstable factors were the ones that tended to rate themselves as having higher self-efficacy, indicating that their failure was due to lack of effort and not due to lack of ability, than those who rated the failure as either external or stable factors (Table 50). Skaalvik (1994) found that low self-esteem was associated with students attributing poor results to ability. However overall, these language learners had what motivation theorists would call "good attributions." That is, the students frequently attributed failure to internal, but unstable factors, explaining that their unsuccessful outcome was due to lack of effort and therefore, such an unwelcomed outcome did not hurt their self-efficacy.

Table 50
Students' Attributions for Success and Failure and How it is Related to Their Self-efficacy

	Successful Outcome	Unsuccessful Outcome
High Self-efficacy	Internal or Stable	Internal or Unstable
Low Self-efficacy	External or Unstable	External of Stable

Another way to interpret the relationship between students' self-efficacy and attribution is by looking at whether students' attributions would differ when their selfefficacy is different. In these foreign language classes, students who had high selfefficacy tended also to attribute success to internal and stable factors such as high ability, whereas those who had low self-efficacy tended to attribute success to external and unstable factors such as luck. The findings that individuals with high self-efficacy hold stronger personal beliefs about their ability to complete a task successfully and, therefore would make internal attributions for success support Bandura's (1986 and 1997) claim and also Stajkovic and Sommer's (2000) findings. My study also revealed that foreign language learners who had high self-efficacy tended to attribute failure to internal but unstable factors such as lack of effort, while students who had low self-efficacy tended to attribute failure to external and stable factors such as difficulty of the task. Stajkovic and Sommer (2000) found that students with high self-efficacy tended to attribute failure to external factors and success to internal factors, suggesting that students had self-serving biases (Jones & Davis, 1965), taking credit for success but attributing failure to causes beyond their control. In my study, only the students with low self-efficacy showed this

pattern of attribution for failure. Although this protects a student's ego, it may also lead to feelings of helplessness because of the uncontrollable and unpredictable outcomes, which can be detrimental to motivation. Students in this study who had low self-efficacy did not engage in self-serving bias when they were successful. They attributed the success to factors that were also beyond their control, indicating a lack of confidence to complete future tasks successfully, which can also decrease their motivation to approach similar tasks in the future because success is attributed to an external, unstable, and unpredictable factor.

As depicted in Figure 10, when students attributed a successful outcome to internal and stable factor, their self-efficacy tended also to be higher which led to higher achievement, and which may have led to a higher expectancy for future success, knowing that they had the ability. Figure 11 indicates that when students attributed failure to internal but unstable factors, they tended also to maintain high self-efficacy because it was their lack of effort that had caused them to be unsuccessful. Therefore, their expectancy for success continued to be high. Such beliefs can help students sustain motivation and persist in the face of difficulty because effort is highly valued. Perhaps teachers have enforced positive attributional feedback to foreign language learners knowing that such learners are vulnerable to beliefs about themselves that can stop them from learning the language.

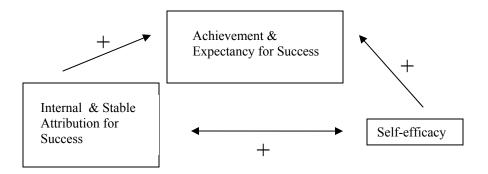


Figure 10. Relationship between attribution, self-efficacy, and achievement derived from the conceptual model for successful students.

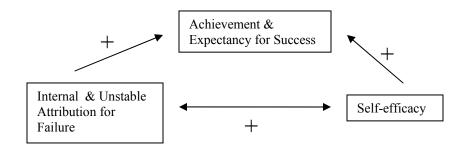


Figure 11. Relationship between attribution, self-efficacy, and achievement derived from the conceptual model for unsuccessful students.

Does Success and Failure Make a Difference on Attributions?

Consistent with past findings, students' attributions in language learning differed depending on whether the outcome of a test was judged to be a success or a failure. However, inconsistent with past findings that individuals tend to attribute failure to external factors and take on more responsibility for success, language learners who participated in this study had overall "productive attributions." That is, these language

learners made internal, stable attributions, such as attributing success to ability, and internal, unstable attributions, such as to lack of effort, for failure, something over which they had control. Although many studies have mentioned individuals' self-serving biases (Jones & Davis, 1965; Miller & Ross, 1975) when making attributions, such biases were seldom found in these language learners. However, slight ego-serving biases were found in unsuccessful students when their self-efficacy was taken into account. Thus, these language learners seemed to have positive beliefs that they could succeed with more effort because they viewed failure as unstable, especially those with high self-efficacy. The importance of learner autonomy and control is one of the determining factors for student motivation. Teachers should help learners develop the value of effort and ability. When students feel they are responsible for the outcome of events or grades, they tend to become more involved and active in the learning process.

Gender Differences for Attributions

Past research suggests that women tend to have less favorable attributions than men for computer-related failure, when given computer-related scenarios (Dickhauser & Steinsmeier-Pelster, 2002). Riordan, Thomas, and James (1985) suggested that for unsuccessful outcomes, male athletes tended to be less ego-serving than were female athletes. However, Nelson and Cooper (1997) found contrasting results, indicating that boys as compared to girls were more ego-protective in failure situations, whereas girls as compared to boys made self-defeating attributions for success, by attributing success to unstable, external factors. Beyer (1999) found that college men as compared to women tended to engage in ego-enhancing attributions for success, such as making internal and

stable attributions. To expand on the investigation of students' attributions for their achievement and to help shed light on prior inconsistent findings regarding gender difference, I looked at gender differences in the attributions made by foreign language students. In this study, results indicated that the unsuccessful men tended to attribute failure to lack of effort more than the unsuccessful women, who tended to ascribe failure to the difficulty of the task. This supports Miller and Ross' (1975) self-serving bias theory that individuals would want to protect their ego when it comes to an unsuccessful situation, with men and women differing on the kind of self-serving bias they displayed. By attributing failure to lack of effort rather than to lack of ability on the one hand protects a student's ego, but on the other hand gives a student more control over the outcome and allows him or her to take more responsibility for failure. However, women ascribed failure to a factor that was external, indicating that they believed that they had no control over the outcome and thus no responsibility for failure. This belief is another way to protect one's ego, though the result may be learned helplessness due to the inability to control for or predict future outcomes. Results also indicated that men tended to attribute successful outcomes to having high ability, whereas women tended to attribute success to effort. Both are internal and personal "positive" attributions for success and therefore do not indicate a strong difference between men and women. However, because men tended to attribute success to ability, results also indicated that they had higher self-efficacy beliefs for foreign language learning than females. Although some gender differences for foreign language attributions were found,

differences in whether the attributions were ego-serving or not were not as apparent as compared to previous research findings.

Relationship of Attribution and Self-efficacy Beliefs to Foreign Language Achievement

As reported in this study, students who made internal, stable, and personal attributions for success had higher self-efficacy than those who made external attributions. Higher achievement was also found to be related to these attributions, with ability and stable attributions being the best predictor of future success. Results also indicated that students' self-efficacy also predicted their language learning achievement (Figure 12). These results explain that students who attributed success to stable and personal factors took responsibility for the outcome, which is why they have high levels of self-efficacy, believing that it is their high abilities that resulted in high achievement.

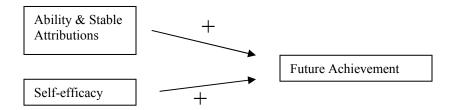


Figure 12. Conceptual model indicating that attributions and self-efficacy predicts future achievement.

These results are consistent with findings of previous studies such as Murray and Jackson (1983), Pomerantz and Saxon (2001), and Weiner (1984) who suggested that students who have the highest expectancies for future success and the highest self-efficacy are the

ones who attribute their successes to stable and dependable factors such as high innate ability and, in turn, also have higher achievement.

Learners' Past Language Learning Experiences and Heritage Connection

Within the self-efficacy literature, Schunk (1991) suggested that there are four leading sources for how learners develop their self-efficacy level for a given achievement and one of them is learners' past performance accomplishments. Schunk explained that learners who have had positive past experiences with a learning task tend to develop higher self-efficacy levels than those with negative experiences. Consistent with Schunk's theory, results in this study indicated that students who reported having more positive past language learning experiences also reported having higher self-efficacy beliefs than those with less positive experiences in the past. When students' heritage connection to the language they were learning was examined in combination with students' past learning experiences, it was found that those with heritage connections and positive past experiences reported having the highest self-efficacy level as compared to students with positive past experiences but have no heritage connection (Figure 13).

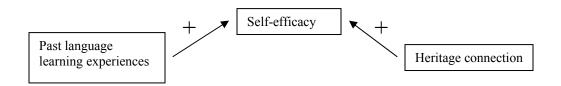


Figure 13. Relationship between students' past experiences, heritage connection, and self-efficacy.

Learning a language to which one has a heritage connection seems to serve to support language learning. Perhaps this is due to the integrative orientation that these language learners have. Integrative orientation, as defined by Gardner and Lambert (1972) and measured by the AMTB, is one's desire to learn a language so as to become integrated with the target culture. According to Gardner and Lambert, integratively motivated learners are seen as having more enduring motivation for language learning and are therefore more likely to develop better communicative skills. In my study, students who were studying a language because they wished to integrate into their own heritage culture may have had more motivation to learn and more confidence in learning the language successfully, which may have led to actual achievement. Although this study looked at students' self-efficacy and whether or not they had heritage connection to the language they were studying, and examined the relationship between integrative orientation and achievement, future research should investigate the relationship between integrative orientation, self-efficacy, and heritage connection to see how learners' motives influence their beliefs about language learning.

According to self-efficacy theory, learners' past experiences have an overriding influence over their self-efficacy. Learners with more positive past experiences for a particular task tend to develop a higher sense of self-efficacy for that task. Self-efficacy then influences how learners approach the task, including the strategies they use, the amount of effort they put into completing the task, and whether or not they take on challenging tasks. Results of this study indicated that, overall, German learners had had

the most positive past language learning experiences as compared to other language learners and they also indicated having higher self-efficacy in foreign language learning than their counterparts. Not surprisingly, these learners also had higher language achievement scores. However, when asked how difficult they believed the language they were learning was, German learners indicated that German was a rather difficult language to learn, whereas the French and Spanish learners believed that the language they were learning was fairly easy. Consistent with self-efficacy theory, German learners who had a high sense of self-efficacy believed in their ability to learn a foreign language and therefore, enrolled in learning a language they believed to be difficult to learn, perhaps thinking it would be a challenge for them, one they were willing to tackle. Figure 14 depicts the multifaceted relationship among these variables.

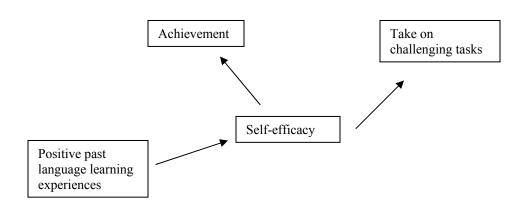


Figure 14. The relationship between students' past language learning experiences, their self-efficacy, achievement, and the challenges that these German learners are willing to take.

Students' Beliefs about Language Learning

Students' beliefs and expectations of a language class, if incongruent with reality, can hinder their motivation and interfere with language performance. Therefore, identifying their beliefs is one of the first steps in understanding these learners. Although literature in the foreign language field has reported that learners' beliefs are quite stable and seldom change over time, results of this study indicated that several of the students' beliefs identified by the BALLI had changed over the course of the semester. Students, perhaps with teachers' feedback and reinforcement, believed more strongly at the end of the semester that it is acceptable to guess if they do not know a word in the foreign language. Although foreign language teachers do not wish to see students simply memorizing the language and hope that students can be immersed in the foreign language environment, students believed more strongly at the end of the semester that learning a language is mostly a matter of knowing vocabulary. As beginning learners of a foreign language, learners may feel a sense of inadequacy when vocabulary is limited. Therefore, the belief about the emphasis on knowing vocabulary terms may become stronger at the end of the semester. Other beliefs that were stronger at the end of the semester were that learning a foreign language is different from learning other school subjects, that it is easier to read and write than to speak and understand, and that if one is allowed to make mistakes in the beginning it will be hard to get rid of them later on. These beliefs may have been reinforced because of students' own learning experiences, because of teacher messages, or perhaps were ideas that they had stumbled across.

Limitations

Several limitations should be considered when interpreting the results:

Although the several scales used in this study, the BALLI, LAAS, CDS II, MSLQ self-efficacy items, percent confidence scale, and the AMTB, were considered useful tools for assessing learners' beliefs about language learning, attributional and self-efficacy beliefs, and motivation for foreign language learning, cautions are required to interpret the results due to the difficulties associated with retrospective self-report scales. The results may depend on the students' ability and willingness to respond accurately to survey questions.

One limitation regarding the questionnaire being used was the characteristics of the BALLI. Because the BALLI examines language learners' general beliefs, only two items measured beliefs about personal ability, and thus, the BALLI yielded very limited information about the relationship between students' general language learning beliefs and attribution and self-efficacy.

In addition, learners' language learning beliefs and motivational beliefs may change due to different learning stages, environments, atmosphere, teachers' feedback, and the specific learning tasks. Perhaps at the beginning of a course, how much time students spend on studying the foreign language may rely heavily on their language learning beliefs, their assumptions about what language learning is like. However, later on in the course, how much effort and time students spend on the language they are learning may depend more on their attributions and the evaluation of their self-efficacy

beliefs, or on teachers' feedback. Therefore, beliefs, motivation, and achievement may change accordingly.

Although the self-efficacy scales used in this study were modified for the language learning course, having a self-efficacy scale that is made for foreign language learning may better capture students' beliefs about their capabilities to perform specific tasks. Such a questionnaire may ask students how confident are they in translating a particular sentence or how confident are they in conjugating verbs. Additionally, because the questionnaires were given at four different times during the semester, I was not able to get data from some of the language learners and this resulted in having some missing data.

One final area for future research would be to add a qualitative component to this study, which may give us more information about students' beliefs, attributions, and self-efficacy. Talking to students and teachers might have provided more insight into students' beliefs and motivation at a level that questionnaires may not be able to capture.

Implications for Research

In my study, the relationships among students' language learning, self-efficacy, and attributional beliefs, and achievement were investigated using correlation analyses. However, no causal relationships can be assumed using this method. Future research on attributions and self-efficacy can use path analyses so that a model can be developed to represent fully the structural relationship among the variables of interest. Using path analyses, more relationships, the mediating roles of the variables, and other reciprocal links can be examined between these variables of interest.

Another area for future research is to replicate this study in other foreign language courses, such as the less commonly taught languages (e.g., Chinese, Arabic, Korean). It would be interesting to study whether students enrolled in these languages may perhaps have beliefs that are not found in this current study. Students enrolled in the less commonly taught languages may have less opportunities to use the language, they may also find it harder to learn, and thus their self-efficacy beliefs and attributions may differ and may be their primary basis for evaluating their achievement. Students' motivation and attitudes may play an important role in their language achievement under this specific setting. Future research could also be done in a country where a particular foreign language is required of the student. Perhaps students' motivation beliefs would differ between those who are given a chance to choose a foreign language to study versus those who have no opportunity to choose which foreign language they wish to study. Examining students' beliefs in these learning environments may lead to very different results due to the combination of students' learning motives and cultural differences.

The study of learners' language learning beliefs, attributions, and self-efficacy should also be carried out in a setting where students are true beginners of foreign languages, for example, in middle school settings. Because of the critical role that beliefs of competence and control play, learners' beliefs should be identified, and if possible, corrected if incongruent with reality and reinforced if accurate. Beliefs have an impact on the effort one expends and on achievement, and therefore, it is important to understand what beginning learners, at a fairly young age, believe about the language they are learning, the amount of time needed to learn the language successfully, about their ability

to learn the language, and what they believe to be the causes of their language grades. Precautions and preventions can be implemented when beliefs are identified to be sabotaging students' learning.

As it has been found in this study, internal, stable, and personal attributions have significant positive correlations with students' self-efficacy, future research on students' attribution and self-efficacy can be conducted to examine how self efficacy can be changed when attributions are retrained, examining pre and post self-efficacy beliefs for learning.

As important as students' beliefs are, teachers' beliefs and actions also play an important part in shaping students' beliefs, either about themselves as learners or the task that they are performing. Therefore, understanding teachers' beliefs and the way they convey their beliefs can guide researchers to a new level of understanding of how students develop language learning beliefs and beliefs about their competency.

One final area for future research would be to follow individual students and examine their attributions and self-efficacy for different courses that they are taking.

Because students have different levels of self-efficacy beliefs for different areas of learning, it would be interesting to see how their attributions would differ accordingly.

Implications for Practice

Importance of Self-Efficacy Beliefs and Attributions

Because self-efficacy strongly predicts achievement (Bandura, 1986, 1997) and was found to be positively related to internal attributions, it is important for teachers to recognize the influencing role that the combination of these two beliefs play. Because self-efficacy beliefs grow out of personal performance, verbal persuasion, observation of others, and can be influenced by learners' own attributions to success and failure, teachers need to understand how they can help students develop strong feelings of self-efficacy and make appropriate attributions for success and failure. As important as self-efficacy is to learning and achievement, attributions not only influence achievement but can also influence one's willingness to persist on future tasks, and one's expectancy for future success.

As research suggests, students are most likely to be motivated and have higher achievement if they attribute success to factors over which they have control. Emphasizing uncontrollable causes, such as ability and task difficulty can decrease students' willingness to learn or seek challenges and can increase anxiety. Given that language learners have their own assumptions of whether they have foreign language learning aptitude, language teachers should emphasize the value of students' effort.

Attributions also have important effects on how students feel about themselves, which can lead to higher or lower self-efficacy. From the results gathered in this study, it can be suggested that a more fruitful approach to enhancing the development of positive

self-efficacy beliefs is likely to result from attribution retraining procedures that are used in conjunction with appropriate language skills training. Attribution retraining that promotes students' positive self-efficacy involves specific teacher feedback confirming students' adequate ability and emphasizing the effort and perseverance that is required to complete the task successfully. For failure experiences, teachers should focus on the incorrect use of an appropriate strategy, lack of prior knowledge, monitoring skills (Brunning, Schraw, Norby, & Ronning, 2004), and affirmation to the student that he or she has sufficient ability to complete the task but has inadequate effort or perseverance. The goal of such feedback is to help students develop beliefs that unsuccessful outcomes are not due to lack of ability, which is usually perceived as stable, and a factor that is uncontrollable by the student. Learned helpless students believe that success has little to do with how much effort they put in. Therefore, recognizing how students attribute success and failure is important and emphasizing the use of strategies and effort, which are more controllable by the student, is one way to shape learners' beliefs in a positive way, leading to higher expectancy for future success, sustaining students' motivation to learn a foreign language and ultimately having positive impact on students' achievement.

Importance of Identifying Students' Language Learning Beliefs

Although the BALLI does not yield a composite score, it can still be used as a powerful tool to identify learners' beliefs. Teachers should use the BALLI at the beginning of the semester to see what various beliefs students hold. Especially any self-sabotaging beliefs should be identified early on in the semester so that realistic and

enabling beliefs can be introduced to students. Self-sabotaging beliefs can hurt students' motivation, making them less willing to put in effort or persist in the face of difficulty. Therefore, it is important to understand the various beliefs that students hold and identify unrealistic beliefs so that students will not develop expectations that are incongruent with reality.

Conclusion

Students seek information about their foreign language learning experiences and work to build meaning of their achievement outcomes. One way they do is either to use the process of ascribing causes for their achievement to come up with an interpretation of their capabilities or to make causal attributions depending on the beliefs they have about their abilities for language learning. Students also have presumptions about language learning, about who has the aptitude to learn a language successfully, and about ways to study a language in order to be successful. All of these beliefs have been examined and discussed in this study to give researchers and educators a better picture of what language learning involves.

This study explored a rare, but important topic – foreign language learners' attributions and self-efficacy beliefs and achievement, in an actual achievement setting. Three languages, with a total of 18 classes of students participated, which produced abundant information about students' general language learning beliefs, their attributions for self-rated success and failure, their self-efficacy beliefs, and their foreign language achievement. Differences in attributions and self-efficacy between learners who thought of their grades as successful or unsuccessful were found.

With the information gathered, this study confirms that students' self-efficacy beliefs are associated with their past experiences, current outcomes, and how the outcomes are perceived by looking at their attributions. Students' attributions support their motivation to engage in behaviors needed for achievement and allow us to understand how self-efficacy complements attribution in predicting language learners' achievement. Studies of the relationship between students' self-efficacy and attributions can help researchers and educators understand the important effects students' beliefs have on their achievement outcomes.

By bringing in concepts of attribution and self-efficacy, and by elucidating other language learners' beliefs, this study represents a new direction for research on language learning beliefs and motivation and contributes to research literature in both second language learning and educational psychology.

Appendix A

Consent Form

An Investigation of Learner Beliefs, Attributions, and Self-Efficacy in Foreign Language Learning

As a representative of this study, I have explained the purpose, the procedures, the

Signature and printed name of person obtaining consent

Date

You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this Form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time. You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights.

Printed Name of Subject

Date

Date

Signature of Principal Investigator

Appendix B

Demographics Questionnaire

Please fill in the following information.

1. Nickname:	
2. Gender: Female Male	
3. Major:	
4. Have you ever taken a foreign language course prior to this course? Yes No	
If no, skip to number 9.	
5. If yes, what was the language you took?	
6. How many semesters of that foreign language did you take? Semesters	
7. What grade did you make in your previous foreign language course? A B C D	F
8. How do you feel about your previous language learning experience?	
Very Unsatisfied Unsatisfied Neutral Satisfied Very satisfied	
9. Do you have heritage connection to the language you are taking now?YesNe	o
(That is, is the language you are learning part of your family's tradition or background	10
e.g., the language spoken by one parent or grandparent?)	

Appendix C

Beliefs About Language Learning (BALLI)

Directions: Please read each item carefully and indicate the extent to which you agree or disagree with each of the following statements about your beliefs about foreign language learning in the spaces provided in front of each statement.

1 = Strongly Disagree 2= Disagree 3 = Neither Agree Nor Disagree 4 = Agree 5 = Strongly

Agree _____ 1. It is easier for children than adults to learn a foreign language. _____ 2. Some people are born with a special ability which helps them learn a foreign language. ____ 3. Some languages are easier to learn than others. 4. The language I am trying to learn is: 1) a very difficult language, 2) a difficult language, 3) a language of medium difficulty, 4) an easy language, 5) a very easy language. _____ 5. The language I am trying to learn is structured in the same way as English. _____ 6. I believe that I will ultimately learn to speak this language very well. ____ 7. It is important to speak a foreign language with an excellent accent. ____ 8. It is necessary to know the foreign culture in order to speak the foreign language. 9. You shouldn't say anything in the foreign language until you can say it correctly. ____ 10. It is easier for someone who already speaks a foreign language to learn another one. ____ 11. It is better to learn a foreign language in the foreign country. 12. If I heard someone speaking the language I am trying to learn, I would go up to them so that I could practice speaking the language. 13. It's o.k. to guess if you don't know a word in the foreign language. 14. If someone spent one hour a day learning a language, how long would it take him/her to become fluent? 1) less than a year, 2) 1-2 years, 3) 3-5 years, 4) 5-10 years, 5) You can't

learn a language in 1 hour a day.

15. I have foreign language aptitude.

1 = Strongly Disagree 2= Disagree 3 = Neither Agree Nor Disagree 4 = Agree 5 = Strongly Agree

16.	Learning a foreign language is mostly a matter of learning a lot of new vocabulary words
17.	It is important to repeat and practice a lot.
18.	I feel self-conscious speaking the foreign language in front of other people.
19.	If you are allowed to make mistakes in the beginning it will be hard to get rid of them
	later on.
20.	Learning a foreign language is mostly a matter of learning a lot of grammar rules.
21.	It is important to practice in the language laboratory.
22.	Women are better than men at learning foreign languages.
23.	If I get to speak this language very well, I will have many opportunities to use it.
24.	It is easier to speak than understand a foreign language.
25.	Learning a foreign language is different from learning other school subjects.
26.	Learning a foreign language is mostly a matter of translating from English.
27.	If I learn to speak this language very well, it will help me get a good job.
28.	It is easier to read and write this language than to speak and understand it.
29.	People who are good at math and science are not good at learning foreign languages.
30.	Americans think that it is important to speak a foreign language.
31.	I would like to learn this language so that I can get to know its speakers better.
32.	People who speak more than one language well are very intelligent.
33.	Americans are good at learning foreign languages.
34.	Everyone can learn to speak a foreign language.

Appendix D

Causal Dimension Scale (CDS II)

Directions: You have just received your test grade. The items below concern your impressions or opinions of the cause or causes of your performance. Circle one number for each of the following questions. (The higher the number, the more you are leaning towards the left column in each pair.)

The grade...

1. Reflects an aspect of yourself	9 8 7 6 5 4 3 2 1	reflects an aspect of the situation
2. Is manageable by you	9 8 7 6 5 4 3 2 1	is not manageable by you
3. Is permanent	9 8 7 6 5 4 3 2 1	is temporary
4. Can be regulated by you	9 8 7 6 5 4 3 2 1	cannot be regulated by you
5. Is something over which others have control	9 8 7 6 5 4 3 2 1	is not something over which others have control
6. Is inside of you	9 8 7 6 5 4 3 2 1	is outside of you
7. Is stable over time	9 8 7 6 5 4 3 2 1	is variable over time
8. Is under the power of other people	9 8 7 6 5 4 3 2 1	is not under the power of other people
9. Is something about you	9 8 7 6 5 4 3 2 1	is something about others
10. Is something over which you have power	9 8 7 6 5 4 3 2 1	is not something over which you have power
11. Is unchangeable	9 8 7 6 5 4 3 2 1	is changeable
12. Is regulated by other people	9 8 7 6 5 4 3 2 1	is not regulated by other people

Appendix E

Motivated Strategies Learning Questionnaire (MSLQ) Self-efficacy Items

Directions: You have just received your test grade. Please read each item carefully and indicate the extent to which the statement describes you on the line provided in front of each statement.

1 = Not at a	ll true of me
2= Not very	true of me
3 = Neutral	
4 = Somewh	nat true of me
5 = Very Tr	rue of me
1.	I believe I will receive an excellent end-of-semester grade in this class.
2.	I am certain I can understand the most difficult material presented in this
cour	se.
3.	I am confident I can learn the basic concepts taught in this course.
4.	I am confident I can do an excellent job on the assignments in this course.
5.	I expect to do well in this class.
6.	I am certain I can master the skills being taught in this class.

Appendix F

Self-efficacy Questionnaire (Percent Confident)

Directions: For each of these scores, please circle either "yes" or "no" according to whether you feel you are able to score this on your next test. Then, for each of the 7 you responded "yes" to, indicate how certain you are of scoring each score.

Your certainty score can range from 0 (very uncertain) to 100 (very certain)

Your next test score			Certainty (0-100)
100	Yes	No	
95	Yes	No	
90	Yes	No	
85	Yes	No	
80	Yes	No	
75	Yes	No	
70	Yes	No	

Appendix G

Language Achievement Attribution Scale (LAAS)

For each of the following scales you are providing a rating of the degree to which your grade on this test is due to different reasons.

1.	What was you	r test res	ult? (Plea	ase write	your test	grade in the l	blank space)			
2.	Rate the degre	e to whi	ch you are	e satisfied	with the	grade.				
	1	2	3	4	5	6				
	Very Unsatisfie	ed				Very Satisfi	ied			
3.	My grade on tl	My grade on this test is what it is because of my ability in learning the language.								
	1	2	3	4	5	6				
	Strongly Disagr	ree			;	Strongly Agree	e			
4.	My grade on the	his test is	s what it i	s because	of the ar	nount of effo	ort I put into stu	dying for this test.		
	1	2	3	4	5	6				
	Strongly Disagn	ree			S	trongly Agree				
5.	My grade on the	his test is	s what it i	s because	of the le	vel of difficu	alty of the test.			
	1	2	3	4	5	6				
	Strongly Disagn	ree			Stro	ngly Agree				
6.	My grade on thi	My grade on this test is what it is because of my mood on the day of the test.								
	1	2	3	4	5	6				
	Strongly Disagr	ree			Stro	ngly Agree				
7.	My grade on th	nis test is	what it is	because	of luck.					
	1	2	3	4	5	6				
	Strongly Disag	gree			Stro	ngly Agree				
8.	My grade on th	nis test is	s what it is	because	of the wa	ay my teache	r grades.			
	1	2			5					
	_		3	4		6				
	Strongly Disagr	166			Suron	gly Agree				

Appendix H

Attitude/Motivation Test Battery (AMTB) French

Directions: Please read each item carefully and indicate the extent to which you agree or disagree with each of the following statements on the line provided in front of each statement.

1 = Stroi	igly Disagree 2= Disagree 3 = Neither Agree Nor Disagree 4 = Agree 5 = Strongly Agre
1.	Studying a foreign language is an enjoyable experience.
2.	I would really like to learn a lot of foreign languages.
3.	I really enjoy learning French.
4.	I always feel that the other students speak French better than I do.
5.	If I were visiting a foreign country I would like to be able to speak the language of the people.
6.	Studying French can be important to me because I think it will someday be useful in getting a good job.
7.	I plan to learn as much French as possible.
8.	I think that learning French is dull.
	Studying French can be important for me because it will allow me to meet and converse with more and varied people.
10.	I get nervous and confused when I am speaking in my French class.
11.	Studying French can be important for me because I will be able to participate more freely in the activities of other cultural groups.
12.	I would rather spend my time on subjects other than French.
13.	Studying French can be important for me because it will make me a more knowledgeable person.
14.	It embarrasses me to volunteer answers in our French class.
15.	Studying French can be important for me because other people will respect me more if I have knowledge of a foreign language.

16.	I am afraid the other students will laugh at me when I speak French.
17.	I often wish I could read newspapers and magazines in another language.
18.	I wish I could speak another language perfectly.
19.	Studying French can be important to me because it will allow me to be more at ease with people who speak French.
20.	I enjoy meeting and listening to people who speak other languages.
21.	If I planned to stay in another country, I would make a great effort to learn the language even though I could get along in English.
22.	Learning French is really great.
23.	I would study a foreign language in school even if it were not required.
24.	I hate French.
25.	Studying French can be important for me only because I'll need it for my future career.
26.	I never feel quite sure of myself when I am speaking in our French class.
27.	French is an important part of the school program.
28.	I want to read the literature of a foreign language in the original language rather than a translation.
29.	Learning French is a waste of time.
30.	Studying French can be important for me because it will enable me to better understand and appreciate French art and literature.
31.	I love learning French.
32.	When I leave school, I shall give up the study of French entirely because I am not interested in it.

Appendix I

Attitude/Motivation Test Battery (AMTB) Spanish

Directions: Please read each item carefully and indicate the extent to which you agree or disagree with each of the following statements on the line provided in front of each statement.

1 = Strongly Disagree 2= Disagree 3 = Neither Agree Nor Disagree 4 = Agree 5 = Strongly Agree
1. Studying a foreign language is an enjoyable experience.
2. I would really like to learn a lot of foreign languages.
3. I really enjoy learning Spanish.
4. I always feel that the other students speak Spanish better than I do.
5. If I were visiting a foreign country I would like to be able to speak the language of the people.
6. Studying Spanish can be important to me because I think it will someday be useful in getting a good job.
7. I plan to learn as much Spanish as possible.
8. I think that learning Spanish is dull.
9. Studying Spanish can be important for me because it will allow me to meet and converse with more and varied people.
10. I get nervous and confused when I am speaking in my Spanish class.
11. Studying Spanish can be important for me because I will be able to participate more freely in the activities of other cultural groups.
12. I would rather spend my time on subjects other than Spanish.
13. Studying Spanish can be important for me because it will make me a more knowledgeable person.
14. It embarrasses me to volunteer answers in our Spanish class.
15. Studying Spanish can be important for me because other people will respect me more if I have knowledge of a foreign language.

16.	I am afraid the other students will laugh at me when I speak Spanish.
17.	I often wish I could read newspapers and magazines in another language.
18.	I wish I could speak another language perfectly.
19.	Studying Spanish can be important to me because it will allow me to be more at ease with people who speak Spanish.
20.	I enjoy meeting and listening to people who speak other languages.
21.	If I planned to stay in another country, I would make a great effort to learn the language ever though I could get along in English.
22.	Learning Spanish is really great.
23.	I would study a foreign language in school even if it were not required.
24.	I hate Spanish.
25.	Studying Spanish can be important for me only because I'll need it for my future career.
26.	I never feel quite sure of myself when I am speaking in our Spanish class.
27.	Spanish is an important part of the school program.
28.	I want to read the literature of a foreign language in the original language rather than a translation.
29.	Learning Spanish is a waste of time.
30.	Studying Spanish can be important for me because it will enable me to better understand and appreciate Spanish art and literature.
31.	I love learning Spanish.
32.	When I leave school, I shall give up the study of Spanish entirely because I am not interested in it.

Appendix J

Attitude/Motivation Test Battery (AMTB) German

Directions: Please read each item carefully and indicate the extent to which you agree or disagree with each of the following statements on the line provided in front of each statement.

1 = Strong	gly Disagree 2= Disagree 3 = Neither Agree Nor Disagree 4 = Agree 5 = Strongly Agree
1. S	Studying a foreign language is an enjoyable experience.
2. I	would really like to learn a lot of foreign languages.
3. I	really enjoy learning German.
4. I	always feel that the other students speak German better than I do.
5. I	f I were visiting a foreign country I would like to be able to speak the language of the people.
	Studying German can be important to me because I think it will someday be useful in getting a good job.
7. I	plan to learn as much German as possible.
8. I	think that learning German is dull.
	Studying German can be important for me because it will allow me to meet and converse with nore and varied people.
10.	I get nervous and confused when I am speaking in my German class.
	Studying German can be important for me because I will be able to participate more freely in the activities of other cultural groups.
12.	I would rather spend my time on subjects other than German.
	Studying German can be important for me because it will make me a more knowledgeable person.
14.	It embarrasses me to volunteer answers in our German class.
	Studying German can be important for me because other people will respect me more if I have knowledge of a foreign language.

16.	I am afraid the other students will laugh at me when I speak German.
17.	I often wish I could read newspapers and magazines in another language.
18.	I wish I could speak another language perfectly.
19.	Studying German can be important to me because it will allow me to be more at ease with people who speak German.
20.	I enjoy meeting and listening to people who speak other languages.
21.	If I planned to stay in another country, I would make a great effort to learn the language even though I could get along in English.
22.	Learning German is really great.
23.	I would study a foreign language in school even if it were not required.
24.	I hate German.
25.	Studying German can be important for me only because I'll need it for my future career.
26.	I never feel quite sure of myself when I am speaking in our German class.
27.	German is an important part of the school program.
28.	I want to read the literature of a foreign language in the original language rather than a translation.
29.	Learning German is a waste of time.
30.	Studying German can be important for me because it will enable me to better understand and appreciate German art and literature.
31.	I love learning German.
32.	When I leave school, I shall give up the study of German entirely because I am not interested in it.

Appendix K

Factor Analysis

Factor analysis was performed to identify the underlying variables in the beliefs about language learning. A principal axis factoring was used for the BALLI.

Principal Axis Factoring of the BALLI

Because the BALLI examined a wide range of learner beliefs and does not yield a composite score, the PAF was used to find the set of variables that account for the maximum of the total variance, assuming that the items on the BALLI have no correlations. A varimax rotation was applied to increase the interpretability of each factor, transforming the factor matrix into simple orthogonal structure. The rotated factor matrix was used to decide which item goes with which factor and the loading was set to .3 to define the six factors. In the initial solution, three items were thrown out of the analysis because their communalities were less than .2. The items that were taken out were 5, 19, and 25. When the data were rerun with the PAF, setting the criterion of the eigenvalues at greater than 1.0, the principal axis factoring yielded 12 factors. Results of the scree plot indicated that there may be at least six underlying factors to the 31 items. Upon looking at the items, it was decided that another 9 items would be taken out of the BALLI for this analysis because they did not cluster with other items. The cumulative percentage of the total variance accounted for by the six factors was 38.9%. Appendix K presents the loadings of each item on six factors. Due to the fact that the BALLI was developed from free-recall protocols of foreign language and ESL teachers, students, and focus groups, items on the BALLI measure a wide range of beliefs that language learners

have. Therefore, items on the BALLI have very weak correlations with each other and loading on the factors. Using factor analysis to extract factors for this study has been somewhat difficult because of the make-up of the questionnaire. Therefore, descriptive analyses of the BALLI looking at the frequency of students' language learning beliefs were used.

The first factor of the BALLI is correlated with items concerning learners' beliefs about speaking. Items loaded on this factor deal with the beliefs that speaking is an important part of learning a foreign language. Therefore, speaking with an excellent accent and speaking with people of the target culture are all part of learners' beliefs in this area. The second factor is labeled as beliefs about the usefulness of the foreign language. Beliefs under this factor deal with how students can use the language that they are learning. The third factor asks about students' beliefs about how the language should be learned. The more strongly students agree with the three items under this factor, the less active they are as learners because they focus on learning the vocabulary, grammar, and simple translation. The fourth factor deals with learners' beliefs about what to do and what not to do when learning a foreign language. Two items negatively correlated with each other, indicating that the stronger the learner believes that it is o.k. to guess a word, the less he or she believes that one should not say anything in the foreign language until it can be said correctly. The fifth factor asks about beliefs about the self as a learner, whether they believe they have the aptitude to learn a foreign language and whether or not they are self-conscious when speaking in front of others. The sixth factor deals with the belief about who learns a foreign language more easily.

Item Factors

Item	raciois					
	Speaking	Use of language	Traditional learning	Learning	Self	Who learns more easily
1. I believe that I will ultimately learn to speak this language very well.	.61					, , , , , , , , , , , , , , , , , , ,
2. It is important to speak a foreign language with an excellent accent.	.51					
3. It is necessary to know the foreign culture in order to speak the foreign language.	.47					
4. If I heard someone speaking the language I am trying to learn, I would go up to them so that I could practice speaking the language.	.40					
5. I would like to learn this language so that I can get to know its speakers better.	.56					
6. People who speak more than one language well are very intelligent.	.42					
7. If I learn to speak this language very well, it will help me get a good job.		.80				
8. If I get to speak this language very well, I will have many opportunities to use it.		.54				
9. Learning a foreign language is mostly a matter of learning a lot of new vocabulary words.			.81			
10. Learning a foreign language is mostly a matter of learning a lot of grammar rules.			.56			
11. Learning a foreign language is mostly a matter of translating from English.			.36			
12. You shouldn't say anything in the foreign language until you can say it correctly.				.51		
13. It's ok to guess if you don't know a word in the foreign language.				42		
14. Everyone can learn to speak a foreign language.				35		
15. I have foreign language aptitude16. I feel self-conscious speaking the foreign					39	
language in front of other people. 17. It is easier for children than adults to					.56	.46
earn a foreign language.						.31
18. Some people are born with a special ability which helps them learn a foreign language.						.31
19. Some languages are easier to learn than others.						.49

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Vita

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This dissertation was typed by the author.