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Self-Determined Motivation in Foreign Language Learning: Examining the Effects on Students' Achievement

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SELF-DETERMINED MOTIVATION IN FOREIGN LANGUAGE LEARNING: EXAMINING THE EFFECTS ON STUDENTS' ACHIEVEMENT

by

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Yawo Badagbo
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ABSTRACT

This study investigated the relationship between foreign language motivation and self-determined motivation, as well as the issue of students' perceptions of strategies used to improve foreign language motivation and achievement among undergraduate students in the department of foreign language. This research was conducted in two mid-western universities among undergraduate foreign language learners. The participants were undergraduate foreign language learners. A total of 391 students from 18- 43 years old started the paper-and-pencil surveys in which they shared their views and perceptions about foreign language learning motivations and strategies to improve motivations and achievement. However, only 380 completed the majority of all sections. The study began on January 2, 2018 and concluded on February 5, 2018.

All data were analyzed using Statistical Package for the Social Sciences (SPSS) version 24.0, through which descriptive statistics were conducted to see normality among the variables. Correlations and regressions were conducted to examine the effects of each variable on students' perceived success in a foreign language learning. The results of the study indicated that autonomy and competence predicted students' intrinsic motivation and perceived success in learning a foreign language. The study also demonstrated that there were relationships between integrative and instrumental motivation with intrinsic and extrinsic motivation. Also, the emotional control improved students' motivation and perceived success in learning a foreign language. The autonomy competence, and integrative motivation contributed a significant

amount of variance in students' perceived success. Finally, the fear of speaking in a foreign language predicted students' motivation and academic success.

The results strongly suggested that promoting self-determined motivation was an avenue to attaining success in foreign language learning, and teachers could improve students' motivation by supporting their basic psychological needs.

Keywords: Self-determined motivation, college students, emotional intelligence, fear, integrative and instrumental motivation, intrinsic and extrinsic motivation correlations, and regressions.

CHAPTER I

INTRODUCTION

Statement of the Problem

Over the course of several years of teaching foreign language classes at the university level, students lacking motivation has been a major source of stress for me as an instructor. Generally, I observed a loss of motivation among students as the year progressed; specifically, a number of students seemed to become less interested in foreign language learning. For example, while doing grammar activity, students displayed distractibility and lack of concentration. This lack of concentration resulted in students frequently failing to complete online assignments, a decline in participation, and decreased academic achievement. When I offered extra credit for completing certain assignments, however, students displayed considerably more enthusiasm and interest for the course. The extrinsic motivator (extra credit) produced behavior changes in the form of significant efforts, although the effort disappeared once the extra credit opportunity was removed. Thus, extrinsic motivation did not produce long-term benefits.

Curious to discover how to help those students learn better, I used the educational psychology literature to determine if self-motivated students would perform better academically (Deci & Ryan 1985; Ryan & Deci, 2000). According to self-determination motivation, human beings have three psychological needs that facilitate intrinsic motivation including autonomy, competence, and relatedness (Deci & Ryan, 2000). *Competence* describes the need to feel

capable and achieve one's goal; *autonomy* is the need to be in control of one's actions; and *relatedness* involves feeling connected to others (Deci & Ryan, 1985, 2012).

Deci and Ryan (2012) found that a healthy learning environment could fulfill those needs, so that the students could succeed. In their study, *intrinsically motivated* students completed academic work because they were interested in the subject; thus, they put forth strong efforts that persisted even after the class, and their internal satisfaction was derived from feelings of competence and autonomy (Deci & Ryan, 2012). However, *relatedness* was also necessary in some cases, in order to bolster the lasting intrinsic motivation. In fact, not all activities or assignments that the teacher wanted their students to perform were exciting; thus, knowing how to transform the extrinsic motivation to self-determined action was important for educators and students (Deci & Ryan, 2012).

In reviewing research on assisting extrinsically motivated students to develop intrinsic motivation, or at least integrated extrinsic motivation and achievement, I examined the work of Gardner and Lambert (1972). In a pioneering study, Gardner and Lambert discussed the notion of instrumental and integrative motivation. *Integrative motivation* referred to the "the interest in learning the second language to come closer to the other language community" (Gardner, 2001, p. 5). This definition implied an openness and respect for other cultural groups, as well as involved partial or complete identification with that speech community (Gardner, 2001). Integrative motivation reflected "a sincere and personal interest in the people and culture represented by the other group" (Gardner, 1985, p. 133). In contrast, *instrumental motivation* is characterized by "the practical value and advantages of learning a new language" (Gardner, 1985, p. 133). In this case, the individual is learning the language for a reward, and he or she has no interest in the target language and culture.

This language motivation theory had been criticized by some researchers, largely against the meaning of integrative and instrumental motivation (Noels, 2001). Noels (2001) indicated that the predictive power of integrative and instrumental motivation was inconsistent; specifically, certain studies found that integrative motivation was a good predictor of academic achievement (Gardner & Lambert, 1972), whereas other studies found that instrumental motivation was a better predictor (Oller & Chihara, 1978; Lukmani, 1972). Also, Noels (2001) claimed that integrative motivation and instrumental motivation lacked consideration of "effort" in their definitions, and without effort, both orientations were not relevant to students.

To resolve these issues, Noels (2001) studied the relationship between integrative and instrumental motivation with self-determination motivation. Noels recognized that, "in an attempt to resolve some of these issues, we are conducting a program of research to examine foreign language motivation in the light of Deci and Ryan's self-determination theory" (Noels, 2001, p. 45). The results of Noels' (2001) study showed that integrative motivation most strongly correlated with intrinsic motivation and identified regulation, yet did not explore the relationships between integrative and instrumental motivation with autonomy, competence, and relatedness. In other words, researchers to date had not examined the full set of relationships among foreign language motivation variables, self-determination motivation constructs, and all sub-constructs in different contexts including fear of speaking in the foreign language. In the present study, I examined not only the applicability of the self-determined motivation in foreign language context, but also the relationship between foreign language motivation such integrative and instrumental motivation with all self-determined constructs. Understanding these critical areas would help me to improve existing theory and applications related to foreign language motivation.

In this study, I also investigated the relationship between fear of speaking in a foreign language with motivation and achievement, since a number of researchers have demonstrated that fear of speaking in a foreign language can affect students' motivation and learning (Hinton, Miyamoto & Della-Chiesa, 2008). Fear might be regarded as a lack of interest, lack of self-determined motivation, or lack of control action, so students could develop a strategy for coping with fear. My study produced useful insights for teachers regarding management of students' fear in the classroom.

The present study also investigated learning strategy to improve motivation and achievement. Emotional intelligence has become important, because integrative motivation involves emotional identification with another cultural group (Gardner, 2001). "Emotional intelligence involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189). From this definition, emotional intelligence is the ability to control one's own feeling in reation to other people. Students and teachers must develop emotional intelligence so that they might have productive relationships with each other and have a positive attitude toward various cultural groups. Emotional intelligence is beneficial for avoiding stereotypes, fear of speaking in a foreign language, and reducing negative attitudes toward other cultural groups. Mendez Lopez and Pena Aguilar (2013) noted that "emotions have not yet been given enough attention in foreign language learning research" (p.110). These authors indicated that anxiety was the emotion most frequently studied in quantitative and qualitative studies (Mendez Lopez & Pena Aguilar, 2013). My study went deeper by examining how emotional intelligent (control) can improve motivation and achievement among college students.

Purpose of the Study

This study investigated foreign language learning motivation among undergraduate college students and its relationships with self-determination motivation, fear of speaking a foreign language, emotional control, and academic achievement.

Research Questions

1. Do autonomy, competence, and/or relatedness predict students' intrinsic motivation and perceived success in learning a foreign language?
2. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' integrative motivation in learning a foreign language?
3. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' instrumental motivation in learning a foreign language?
4. Do emotional control, fear of speaking in a foreign language, autonomy, competence, relatedness, intrinsic, instrumental, and integrative motivation predict students' perceived success by controlling emotional control and fear of speaking a foreign language?
5. Does fear predict students' motivation and perceived success independently in learning a foreign language?

Significance of the Study

This study attempted to fill the gap in the existing literature regarding the relationship analysis between foreign language motivation with self-determination motivation in a domain where it had not been empirically tested. By examining the relationship between these two theories, I studied the applicability of the self-determination theory in foreign language learning

and how it might influence students' learning a foreign language in American cultural context. The results of my study also contributed to the field of foreign language motivation research by improving Gardner's scale of integrative motivation.

Next, my study determined the learning strategy that would most effectively improve foreign language motivation. Gardner (2001) stated that "integrative motivation involves emotional identification with another cultural group" (p.5). In addition, the ability to regulate emotions was a predictor of academic success (Hinton, Miyamoto & Della-Chiesa, 2008). Since integrative motivation involved emotion identification, it was necessary to develop a strategy to control an emotion to improve motivation. Training college students to control their emotions toward other cultures would help students to avoid conflict in the classroom. However, unless teachers had been equipped to teach these skills to students, the problem of intrinsic and integrative motivation might be worsened in schools. In addition, I designed a new scale and examined its validity and reliability for measuring students' emotional intelligence. I hope that this newly-defined and validated form of the emotion questionnaires will be useful to other researchers studying motivation in a foreign language.

Finally, in this study I also highlighted the importance of learning the culture associated with a given language. Gardner (2001) showed that integrative motivation "reflects a genuine interest in learning a second language to come closer to the other language community. At one level, this implies an openness to, and respect for, other cultural groups and ways of life" (p.5). Also, Gardner (1985) noted that "language courses are different from other courses. They required individuals to incorporate elements from another culture" (p. 8). From this perspective, it is important for students to become skilled in the target language and culture; thus, teaching

students about other cultures would help students to be open-minded and sensitive to other groups. This education would help to develop intrinsic and integrative motivation.

Proposed Conceptual Framework

The hypothesized model tested in this study is outlined in Figure 1. The first relationship of this framework was shown by the three arrows from the autonomy competence and relatedness, leading to intrinsic motivation and perceived success. This relationship suggested that the three basic psychological needs would predict intrinsic motivation, then, intrinsic motivation would predict achievement. The foreign language learners progress through intrinsic motivation to achieve self-determined motivation and achievement in foreign language learning context (the arrow could also be vice versa).

The second relationship in this framework was shown by the arrows from the integrative motivation leading to autonomy, competence, and relatedness, intrinsic motivation, extrinsic motivation (see Figure 1), suggesting that there would be relationships between self- determined variables with integrative motivation (the arrow could be vice versa). The foreign language learners progress through integrative motivation to achieve self-determined motivation or vice versa.

The third relationship within this framework was depicted by the arrows from instrumental motivation leading to intrinsic motivation, extrinsic introjected, extrinsic external, and extrinsic identified. The assumption was that the self-determined variables would predict instrumental motivation (the arrow could be vice versa).

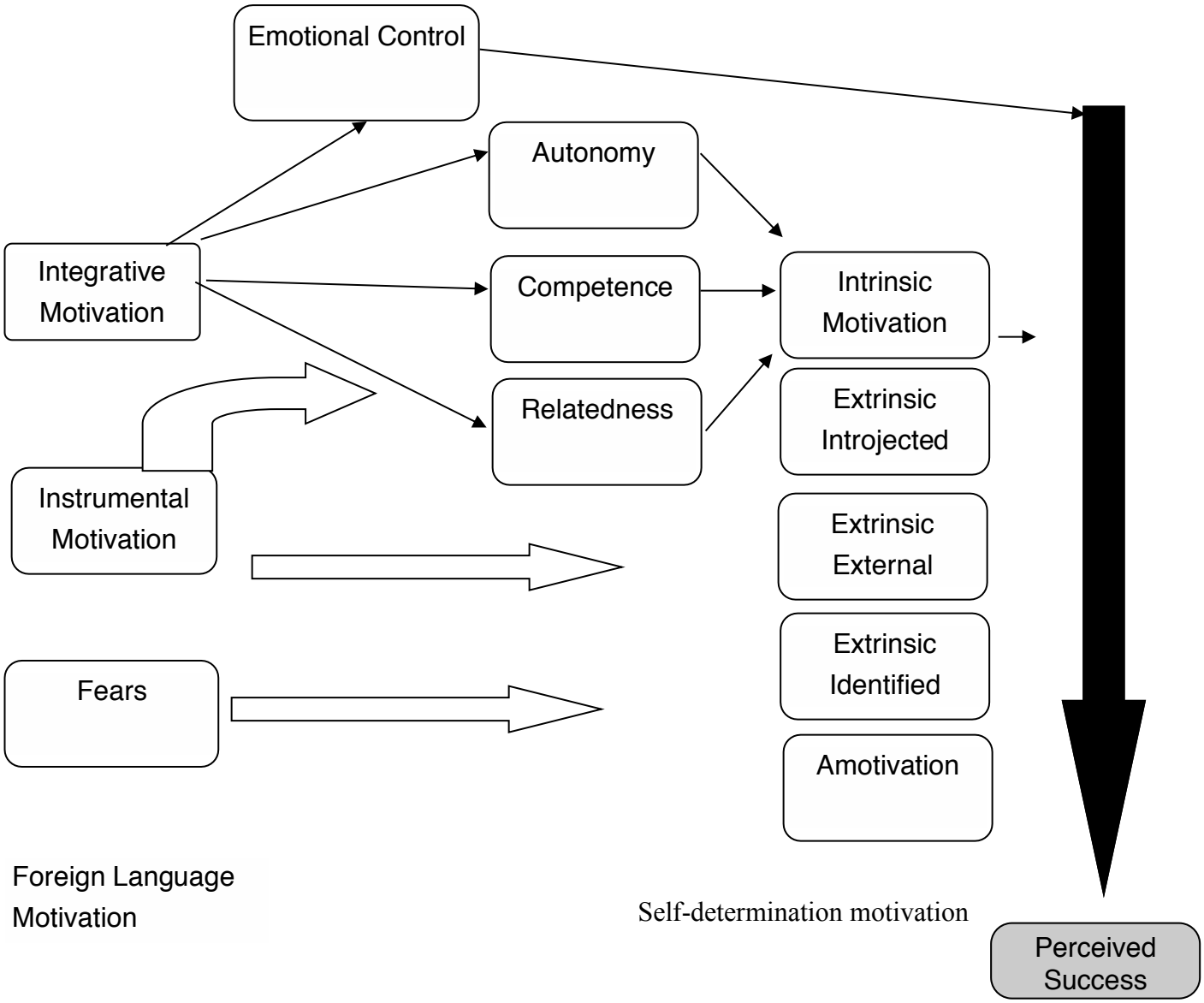

Figure 1. Diagram of the Conceptual Framework with all the possible results. Foreign language motivation & learning strategies within self- determination motivation on students' success.

The fourth relationship in this framework was displayed by the emotional control strategy to perceived success and motivation. The assumption was that the emotional control strategy would predict students' perceived success. The strategy would also improve motivation.

The fifth relationship in this framework sought to determine that the fear of speaking a foreign language would predict motivation and achievement. A number of researchers demonstrated that fear of speaking in a foreign language was reasonable and could lead to foreign language achievement; thus, my study analyzed these relationships (Figure 1).

Limitations and Delimitations

The sample for this study was limited to two universities, specifically students from courses in the departments of foreign language learning. A survey was used to collect students' perceptions of motivation and foreign language learning strategies. There was a risk that students might not answer questions honestly for reasons of social desirability, yet the students knew that their responses would be protected and confidential. It would be more probable that they answered questions honestly, considering the important nature of the research. Also, surveys are widely used in educational research and are considered effective if the survey's instruments/scales have established validity and reliability. In the case of this study, although the validity and the reliability of most scales were established, the scale of integrative motivation, emotional control, and fear of speaking in foreign language had some limitations concerning the Cronbach's Alpha. Nonetheless, the reliability and validity of those items were checked during the study, and the limitations were improved. This study also relied solely on quantitative methods; qualitative factors were not examined.

Definition of Terms

The following terms are used frequently in this study and were defined below.

Self-determination motivation: "motivation that is characterized by high levels of intrinsic motivation and identified regulation, but low levels of external and introjected regulation and amotivation" (Vallerand, 2004, p. 427).

Competence: Competence is a need of succeeding at challenging tasks and exercise one's capacities, feeling capable of attaining the outcomes desired (Baard, Deci & Ryan 2004).

Autonomy: Autonomy is another need when people believe that they have choices, and psychological freedom to initiate and regulate their actions (Baard, Deci & Ryan 2004).

Relatedness: Relatedness is a need that people want to be connected with other people by establishing a sense of mutual respect with other people in their life (Baard, Deci & Ryan 2004). According to Deci and Ryan (2000), with these three needs fulfilled, a person was intrinsically motivated.

Intrinsic motivation: Intrinsic motivation " involves doing an activity because it is interesting and enjoyable. It is often said that when people are intrinsically motivated, doing the activity is its reward" (Deci & Ryan 2012, p. 89).

Extrinsic Motivation: Extrinsic motivation is characterized by "behavior that the individual performs to receive some extrinsic reward such as getting good grades, being praised by the teacher or to avoid punishment" (Dornyei, 1994a, p. 275).

Interest: Ulrich Schiefele (1991) defined interest in two ways: individual interest and situational interest. "Individual interest is concerned of as a relatively enduring preference for certain topics, subject areas, or activities. Situational interest is an emotional state brought about by situational stimuli" (p. 303).

Foreign language achievement: Foreign language achievement is the outcome of the end of the foreign language class: for example, the final grade at the end of the semester. In this study, it was measured by students' perceived success.

Integrative and instrumental motivation: Gardner and his associates defined integrative motivation as, "a desire to learn the language, motivational intensity, and attitudes towards the learning situation" (Gardner, 1985, p. 177-184). Gardner made the distinction between integrative and instrumental orientations in language learning motivation. "An integrative orientation occurs when the learner is studying a language because of a wish to identify with the culture of the speakers of that language. An instrumental orientation includes a group of factors concerned with motivation arising from external goals such as passing examinations, financial rewards, or furthering a career" (William, Burden & Lanvers, 2002 p. 505)

Foreign language learning and second language learning: A distinction is often made between foreign and second: Foreign language learning and teaching referred to "the learning of a non-native language outside of the environment where it is commonly spoken:" (Moller & Catalano, 2015 p. 327-332). A second language implied that the learner resided in an environment where the acquired language was spoken. A language was considered foreign if it was learned primarily in the classroom and was not spoken in the society where the teaching occurs (Moeller & Catalano). In the context of this study, the terms *foreign language*, or *second language* or *world language* would be used interchangeably.

Language acquisition and language learning: Language acquisition occurred subconsciously. We acquired language in natural ways without knowing it. The knowledge is stored in the brain unconsciously. Language learning was a conscious process, such as what we learned in the classroom, like learning grammar (Krashen, 2013, p. 1).

Universal Grammar (UG) "Chomsky's term for the abstract principles that comprise a child's innate knowledge of language and that guide L1 acquisition" (Ellis, 1997, p.144).

L1: Acquisition of the first language.

L2: A systematic study of how people acquire a second language is referred to as an L2. (Ellis, 1997).

Language learning strategies. Learning strategy as defined by Oxford as "operations employed by the learner to aid the acquisition, storage, retrieval, and use of information" (Oxford, 1990, p. 8). The learner will later take "specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, more transferable to new situations" (Oxford, 1990, p. 8). Oxford (1990) divides language learning strategies into two: such as direct and indirect strategies. The direct language learning strategies include memory strategies, cognitive strategies, and compensation strategies. The indirect strategies include meta-cognitive strategies, affective strategies, and social strategies. The present study focused on the affective learning strategy.

Anxiety: Language Anxiety "refers to fear or apprehension that occurs when a learner is expected to perform in the second or foreign language" (Wu & Lin, 2014, p. 785). It was divided into three parts: Communication apprehension, test anxiety, and fear of negative evaluation (Howrwitz, Horwitz, & Cope, 1986).

Emotional intelligence: Peter Salovey and John D. Mayer extended the meaning of intelligence by incorporating the notion of emotional intelligence. " Emotional intelligence involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189). Bar-on (2004) gave different terms to define the emotional intelligence such as

self-awareness, self-regard, emotional self-awareness, and emotional control. These different terms would be used interchangeable throughout the dissertation.

Intercultural Communication Emotional Intelligence (ICCEI). ICCEI assumed that to be intelligent in intercultural communication, Students must understand the level of their emotions and adjust it to others' cultural norms, customs, and social systems. Emotional control was the key element in ICCEI allowing all participants in the communication process to overcome ethnocentrism by trying to understand people from different cultures through verbal and non-verbal communication. Cultural differences in the use of all verbal and non-verbal channels produce uncertainty in messages, so participants need a patience to overcome ethnocentrism.

Summary

Chapter One contained an outline of the statement of the problem, the purpose of the study, research questions, significance of the study, a definition of terms, theoretical framework, as well as delimitations and limitations. In addition, the chapter included a list of definitions for key words used throughout the dissertation. This study will contribute to the growing research on motivation, fear of speaking in foreign language, and achievement. In Chapter Two, a literature review is provided, and Chapter Three contains an explanation of the methodology, population, and data collection. In Chapter Four, the results of the study are presented. Chapter Five presents the discussion of the results.

CHAPTER II

LITERATURE REVIEW

In this study, I investigated the relationships between foreign language motivation and self-determination motivation, as well as the issue of students' perceptions of strategies used to improve foreign language motivation and achievement. This chapter entailed a review of the related research literature, including studies on the different types of self-determined motivation. Then, it broke down the integrative and instrumental motivation. Finally, the last section examined strategies to increase students' motivation and achievement.

Different Types of Self-Determination Motivation

Intrinsic and Extrinsic Motivation

Edward L. Deci and Richard M. Ryan (1985, 2000) developed the self-determined motivation model that focused on different types of motivation. This model "distinguishes between various kinds of motivation based on different reasons or goals that give rise to an action. An essential distinction is between intrinsic motivation and extrinsic motivation" (Ryan & Deci, 2000, p. 55).

Intrinsic motivation could be referred to "activity engagement with tasks that people find interesting and that, in turn, promote growth" (Deci & Ryan, 2000, p.233). The nature of the interest was an essential element of intrinsic motivation. Deci and Ryan (2000) acknowledge this fact by saying that even when the classroom atmosphere supported the basic psychological needs, if students were not interested in the activities, they would not be intrinsically motivated.

The high interest learners achieved deeper understanding than low interest learners, so interest is linked to a high quality of learning (Deci & Ryan, 2000). Hidi and Renninger (2006) also acknowledged the idea by stating that students' interest ought to pass through four stages until it become well-developed (Hidi and Renninger, 2006). When students' interests were well developed, they would become self-determined learners.

There were three types of intrinsic motivation in foreign language learning based on self-determination theory: Intrinsic-Knowledge, Intrinsic-Accomplishment, and Intrinsic-Stimulation (Noels, 2001). Intrinsic-Knowledge refers "to the feelings of pleasure or satisfaction that come from developing knowledge and satisfying one's curiosity about a topic area" (Noels, 2001, p. 45). For example, the study of the language target culture increased learners' curiosity and interest in target countries. When the teacher introduced the cultural aspect in learning, the students' curiosity for language learning increased greatly (Reeser, 2003).

Intrinsic-Accomplishment referred "to the enjoyable sensations that are associated with surpassing oneself and mastering a difficult task" (Noels, 2001, p. 45). For example, attaining fluency with a difficult grammatical structure, or challenging a student to develop communicative competence (Noels, 2001). Intrinsic-Stimulation referred to the simple enjoyment of the activity characterized by a sense excitement to become a bilingual (Noels, 2001).

Some researchers indicated that whenever intrinsic motivation and interest were in place, students showed higher academic achievement and perceived themselves as more competent (Deci & Ryan, 1994; Deci, Vallerand, Pelletier & Ryan, 1991, Grassmann, Schulthesis & Brunstein, 1998; Reeve, 2002; Schiefele, 1996, William & Deci, 1998). Even though intrinsic motivation was the best predictor of students'success, extrinsic motivation could also lead to

self-determined action if the level of action was integrated into self. For this reason, Deci and Ryan (1985) categorized extrinsic motivation into four types of regulation that varied regarding levels of self-determination, from the lowest to the highest level such as external regulation, introjection, identification, and integration.

External regulation was the lowest form of self-determined action, with students influenced by external rewards. Students worked not because they were interested, but because they wanted to avoid punishment or wanted to receive extra credit (Deci & Ryan, 2000). Tangible rewards had been found to undermine intrinsic motivation and decrease creativity (Deci & Ryan, 2000; Amabile, 1982). Some researchers have found that external rewards reduced complex problem-solving (McGraw & McCullers, 1979), and decreased in-depth information processing (Grolnick & Ryan, 1987). At this level of external regulation, it can be assumed that the interest was in the triggered situational level. For example, externally regulated students might dislike a foreign language class or even find it annoying, yet the necessity of the requirement or extra credit would be enough to keep that student motivated to finish the program (extrinsic motivation).

Deci and Ryan (2000) claimed that *introjected regulation* was inside the person, yet it was still linked to external factors. The activity was beginning to take shape, but individuals behaved out of pride, guilt, obligation, and shame rather than choice or interest (Deci & Ryan, 2000, p. 236). Deci and Ryan used the term "lack of assimilation into the self" to describe introjected regulation (Deci & Ryan, 2000). Behavior was not self-determined because interest was at the maintained situational level. For example, in a foreign language class, introjected regulation students do their assignments to avoid shame or failure, feel frustrated to communicate in the foreign language, and fear speaking in a foreign language classroom.

Identified regulation occurred when students recognized that the action was necessary, began to value it, and freely chose to participate in an activity. For example, "language learners who feel that L2 fluency is an important aspect of their educational development will endure repetitive oral exercises in the interest of obtaining this level of competence" (Noels et al., 2003, p. 39-40). In this case, the students were moving closer to self-determined action and were approaching an autonomous level. In addition, Noels suggested that conducting research in another country (using the native language) was a form of identifying regulation (Noels, 2001).

Integrated regulation was the final level of extrinsic motivation, and the closest level to intrinsic motivation. It was the most autonomous form of intrinsic motivation "when regulations are integrated people will have fully accepted them by bringing them into harmony or coherence with other aspects of their values and identity" (Deci & Ryan, 2000, p. 236). This form of regulation was highly correlated with intrinsic motivation (Wilson, Rodger, Loitz, & Scime, 2006). Students in foreign language courses performed an activity, because they valued the activities and assimilated to self (Ryan & Deci, 2000). Noels noted that learning another language (e.g., bilingual or tri-lingual) was an example of integrated regulation. Also, if the person associated him/herself with another culture, and was aware of various world cultures, he or she assimilated the cultural knowledge to the sense of self (Noels, 2001).

Basic psychological needs. A critical assertion of self-determination theory is that people have three innate psychological needs that must be satisfied before intrinsic motivation or self-determined motivation is realized; those needs are competence, autonomy, and relatedness (Deci & Ryan 1985; Ryan & Deci, 2000). *Autonomy* was necessary when students believed that they possessed choices to initiate and regulate their behavior as integrated within the self (Ryan et al.,

2009). Autonomy was related to the theory of personality from Sheldon, Kasser, Elliot, and Kim (2001).

In foreign language learning, *autonomy* had many definitions such as "learner independence, self-direction, autonomous learning, independent learning" (Ivanovska, 2015, p. 353). Autonomous students must show that they made their own choices and pursued options that were personally relevant to them. "Self-determination is undermined when the teachers act in a controlling manner, forcing students to comply with their demands and priority" (McEown, Noels, & Saumure, 2014, p. 4). Many researchers found that when the environmental conditions support autonomy, learners were more likely to achieve positive outcomes, including self-determined orientations (Noels et al., 1999, 2001, 2003), higher perceived competence (Noels et al. 2001; Reeve, 2002) and a higher self-esteem (Deci et al., 1981).

Noels, Chaffee, Michalyk, and McEown (2014) suggested that "autonomy as a motivational construct seems to be appropriate when discussing it in western societies where individualism is a strongly held cultural value" (p. 134). Nonetheless, "autonomy in language learning may be inappropriate in Asian contexts where social interconnectedness and respect for authority are emphasized" (p. 135). From these perspectives, the generalization of the autonomy to other cultures could pose a problem, in the sense that the collectivism culture emphasized the group value over the individual autonomy. In contrast, the individualistic culture stressed the importance of individual identity, achieving personal goals, self-determination, and autonomy (Noels et al., 2014).

In an attempt to solve this problem of autonomous motivation across cultures, research was conducted by Vansteenkiste, Zhou, Lens, and Soenens (2005) to determine how Chinese students functioned in their cultures that encourage autonomy needs. The results of the study

supported universality of the autonomy by demonstrating that students from the Republic of China demonstrated success when the autonomy are supported. However, when students were controlled by the teacher, their accademic achievement decreased. Deci and Ryan (2000) also indicated that autonomy in cross-cultural studies was universal; consequently, the culture that promoted students' autonomy drove them to succeed in schools. If the students were autonomous, they might be motivated to learn the language. However, if the culture used a controlling form of socialization, the students might miss opportunities for self-determined action, delaying their successful learning. Fostering autonomy in class was predictive of students' well-being and their decisions to continue in foreign language studies.

Competence was defined as the need to be responsible and efficient when interacting with people and the environment. The students' need to succeed by expressing one's capacities and extending skills was an essential component (Ryan, Kim, Reeve, & Jang, 2009). Competence was equivalent to White's concept of mastery, Bandura's concept of self-efficacy, and Atkinson's theory of achievement motivation (Sheldon, Kasser, Elliot, & Kim, 2001).

In foreign language learning, competence is the capacity to develop communicative competence, including cultural competence (Canal & Swain, 1980, 1981). Cultural competency has been described as the ability to work effectively across the cultures, as well as an approach to learning and a respectful style of collaboration (Reeser, 2003). Competence can be developed through positive feedback and encouragement (Reeve 2002, Ryan & Deci, 2000). In foreign language learning, various forms of corrective feedback are useful for enhancing students' competence. The method used to correct students' errors would not stifle students' motivation to speak in the target language. The methods would be flexible, depending on the audience's learning styles and educational level.

Studies have demonstrated that supporting competence increases intrinsic motivation (Deci, Vallerand, Pelletier, & Ryan, 1991; Otosi & Hefferman, 2011, Vallerand, 1983). Researchers also found that intrinsic motivation only increased when informative feedback (competence support) was accompanied by autonomy support (Ryan & Deci, 2000; Ryan, 1982, Deci & Ryan, 1994).

Relatedness describes students' need to be connected with other people; attachment to the important people in their life, a caring, warm, and emotional bond (Ryan et al., 2009). Relatedness is also connected to Maslow's conception of love or belongingness, because of the feeling of interpersonal connection, with few differences between the two concepts. Relatedness in foreign language learning represents the ability to be connected to classmates, to the teacher, and to the target culture group, including a sense of security in the healthy learning environment. Connection to classmates is made through group activities, and Wachob (2004) found that the activities must be completed as teamwork. Team activities, or cooperative learning, were the primary methods of relating to other. The more students felt that their teacher provided informative feedback that facilitated their learnings, the greater was their sense of competence and relatedness. Students who had a good relationship with the teacher exhibited greater engagement, achievement, well-being (Kochanska, 2002; Main, Kaplan & Cassidy, 1985), and a higher sense of autonomy (Ryan, 1991, Ryan & Lynch, 1989).

The role that relatedness played in language learning was significant, helping to facilitate cultural acquisition. For example, intrinsically motivated behavior in college students learning a foreign language was manifested if students fully absorbed the materials, experiencing a sense of interest and joy as they learned to speak the language. According to Deci and Ryan (2000), their basic psychological needs for competence and autonomy were likely met. As they spoke the

language with confidence (without fear of interaction with a classmate) in a healthy environment, their needs of relatedness also had been fulfilled. Since autonomy, competence, and relatedness were in place, students' intrinsic motivation flourished (Deci & Ryan, 2000). The intrinsic motivation shared some similarities with instrumental and integrative motivation in foreign language learning. In both cases, students were driven to perform as a reaction to some external objective (Noels et al., 2003, p. 278).

Foreign Language Learning Motivation: Integrative and Instrumental Motivation

Motivational theories describe the factors that energize people to accomplish tasks. Some theories contend that needs, drives, instincts, goals, or interests move people into action (Printrich, 2003). According to Gardner (1985), motivation drives a person into action; he defined the term motivation as "the combination of effort plus desire to achieve the goal of learning plus favorable attitudes toward learning the language" (p. 10-11). Also, Gardner noted that motivation was " 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" (Gardner, 1985, p. 10-11). From these definitions, Gardner indicated that one element was not sufficient to define motivation; instead, a combination of different motives, such as desire, attitude, effort, and strive, all lead an individual into action (Gardner, 1985).

Gardner and Lambert (1972) laid the foundation for two motivation orientations that led to success in the foreign language classroom: integrative motivation and instrumental motivation. Integrative orientation is the desire to learn a language "to come closer to the other language community" (Gardner 1985, p. 5). At the first level, this definition implies an openness and respect for other cultural groups and ways of life (Gardner, 1985). At the second level, the definition involves complete integration with the target culture, or it might involve integration

within both communities (Gardner, 1985). Integrative motivation is not just a reason for learning the language, it also involves emotional identification (Gardner, 1985). Instrumental orientation is characterized by learning a language to gain an external benefit (Rueda & Chen, 2005). For those motivated by instrumental orientation, there was little interest in learning a language and culture (Collentine & Freed, 2004; Lamb, 2004). As far as language learning was concerned, culture learning was also essential to succeed in a foreign language classroom. A student cannot truly master a language without learning about the target culture (Dema & Moeller, 2012).

Ellis (1997) also made a distinction between the types of integrative motivation and instrumental motivation involved in language learning. Instrumental motivation was characterized, "by learners making efforts to learn a foreign language or second language for an external reason such as to pass an examination, to get a better job, or to get a place at the University" (Ellis, 1997, p. 75). This type of motivation focused only on learning the language for individual interest, such as to obtain a good job or a good grade. Ellis (1997) recognized that, even though this type of motivation could not lead to long-term success, in certain learning conditions, instrumental motivation could result in successful long-term foreign language learning.

Integrative motivation was defined by Ellis as the interest that some learners might have for language learning, as well as the interest they might have in the people and culture represented by the target language community (Ellis, 1997). In this definition of integrative motivation, students' interest caused them to have a positive attitude toward the target language and culture. If the students were interested in activities, they were likely motivated to learn the language by expending more effort and concentration. If students had no interest, the language

learning might become a painful experience. As a result, students might miss opportunities for practice, putting themselves further behind in their education.

Although many studies supported Gardner's socio-educational framework of achievement (Gardner et al., 1997; Gardner, Masgoret, Tennant, & Mihic, 2004; Masgoret & Gardner, 2003; Tremblay & Gardner, 1995), other researchers question the theory (Clement, Dornyei, & Noels, 1994; Clement & Kruidenier, 1983; Dörnyei, 1990; Oxford 1996; Oxford & Shearin, 1994). Consequently, the arguments led to many controversies in the foreign language literature.

Critiques on socio-cultural motivation. Most foreign language researchers agreed that the complexity of integrative motivation was a limitation to the socio-educational model (Lamb, 2004; Coetzee-Van Rooy, 2006; Dornyei, 2005, 2009; Dornyei & Ushioda, 2011; Dornyei et al., 2006; Kachru & Nelson, 2006; Yashima, 2000, 2009; McClelland, 2000; Norton, 2000). The criticism was raised against the definition of integrative motivation; specifically, that it was vague, difficult to measure foreign language motivation, and had limited power to predict learning achievement (Au, 1988; Oller & Chihara, 1978; Oxford, 1996). Some of these authors indicated that the theory could cause a severe problem with individual identity, as it stated that successful language learners were those who wished or wanted to integrate into the target community and therefore would deny their own identities (Zareian & Jodaei, 2015). In addition, Oller, Hudson and Lui (1977) argued that the classification of motivation as integrative and instrumental was contradictory, and other researchers had various definitions. For example, Lukmani (1972) classified the reason for traveling abroad as instrumental, whereas Burstall et al. (1974) classified the cause for travel to France as integrative. For these reasons, researchers were thinking of removing foreign language motivation because of its contradictory definitions.

Dörney (2005) recognized that "contradicting theories do not necessarily exclude one another but may simply be related to different phases of the motivated behavior process" (p. 18). Multiple researchers (Dörnyei 1990; Oxford & Shearin, 1994; & Oxford, 1996) call for expanding foreign language motivation, instead of degrading or abandoning it. For this reason, Noels (2001) studied the relationship between integrative motivation and self-determination motivation. She indicated that, "in an attempt to resolve some of these issues, we are conducting a program of research to examine foreign language motivation in the light of Deci and Ryan's self-determination theory" (Noels, 2001, p. 45).

Integrative motivation and self-determination constructs. Noels (2001) studied the relationship between integrative motivation and self-determination motivation. She recruited 322 undergraduate students in first-year Spanish courses in the California university system. Participants ranged from 17 years to 54 years old and were administered questionnaires during regular class times. Two research questions were tested in this study:

1) The first research question examined how the communicative style of the language might be associated with intrinsic and extrinsic orientation? The results indicated that the more controlling the teacher was perceived to be, the less the students felt they were autonomous, and the lower was students' intrinsic motivation. In conclusion, when environment facilitated autonomy, it increased students' intrinsic motivation and encouraged the students to stay connected to other students and to be involved both academically and socially. However, if the environment consisted of controls, it diminished students' autonomy and competence.
2) The second research question examined how integrative motivation is related to intrinsic and extrinsic motivation. Did these orientations predict language learning

variables? Language learning variables such as motivational intensity, intention to continue learning Spanish, attitude toward learning Spanish, the frequency of contact with the Latino community, and the quality of contact with the Latino community.

To assess the relationship between the different types of intrinsic and extrinsic motivation with integrative motivation, correlation, multiple regression, and hierarchical multiple regression analyses were conducted. The results of the correlation revealed that integrative motivation was correlated with intrinsic and extrinsic motivations, yet was most strongly associated with intrinsic and identified regulation. Integrative motivation was negatively correlated with amotivation. Multiple regression analysis of integrative orientation (DV) paired with intrinsic and extrinsic motivation (IV) was conducted. The results of multiple regressions indicated that the intrinsic and identified regulation predicted integrative motivation. The results of correlations and regressions led Noels to conclude that integrative motivation is similar to self-determined motivation. Hierarchical multiple regression analyses of relations between motivation orientations and variables relevant to the immediate learning situation (DV) were conducted. Variables related to the immediate situation and intergroup context were motivational intensity, intention to continue learning Spanish, attitude toward learning Spanish, the frequency of contact with the Latino community, and quality of contact with the Latino community. The results of the hierarchical regression analyses showed that integrative motivation was a significant predictor. Integrative orientation predicted higher quality of contact with the Latino community, greater identification with the Latino community, and less identification with the Anglo community. Intrinsic motivation did not predict any of the criterion variables. Amotivation predicted less quality of contact with the Latino community (Noels, 2001).

Noels, Clement, and Pelletier (2001) conducted similar research in Canada to see the relationship between foreign language motivation with self-determination motivation. They looked at how intrinsic and extrinsic motivation are related to integrative motivation. The participants were 59 students registered in a Summer immersion program at a French-English bilingual university in Ontario, Canada. All students were francophone and taking English courses. Participants were administered the questionnaires during regular class times concerning their reasons for language learning, perceptions of autonomy and competence, effort expended, and determination to pursue English studies. Correlations and multiple regression analyses were conducted to assess the relationship between intrinsic, extrinsic motivation, and integrative motivation. Correlational findings indicated that integrative motivation correlated most highly and positively with intrinsic motivation and identified regulation. The results of multiple regression showed that only intrinsic motivation significantly predicted the integrative orientation. The results had led Noels et al. (2001) to conclude that integrative orientation is the most similar to intrinsic orientation.

In both studies, Noels (2001) and Noels et al. (2001) did not take into consideration all motivation constructs, such as the relationship between instrumental motivation and all self-determination constructs, including autonomy, competence, and relatedness. This study focussed not only what Noels and other had done about the relationship of integrative motivation with self-determination constructs, but also gave a bigger picture of all relationships between self-determination motivation with foreign language constructs, including instrumental orientation, fear of speaking in foreign language, and emotional control.

Theories of Foreign Language Learning

Lightbown and Spada (2013) developed theories for second language acquisition. They included behaviorist theory, innate theory, cognitive perspective theory, and socio-cultural theory.

Behaviorism. According to Lightbown and Spada (2013), a young child's language development was strongly influenced by the language he or she heard spoken around him or her. The more the child was exposed to the language, the more opportunities he or she had to practice these vital communication skills (Berk, 2010). This view of learning was related to the behaviorist's perspective. Language learning, in this case, was the result of imitation, practice, feedback on success, and correction of errors. In additional, "the quality and quantity of the language the child hears, as well as the consistency of the reinforcement offered by others in the environment, would shape the child's language behavior" (Lightbown & Spada, 2013, p. 15).

Behaviorism was also linked to the contrastive analysis hypothesis that stated the structure of the first language could affect the acquisition of the second language, because of the habits formed in the mother tongue. However, researchers found that errors that the learners made in the first language did not necessarily transfer to the second language (Lightbown & Spada, 2013). This argument led to the rejection of a behavioral view of language learning.

Chomsky. In reaction to behaviorism, Chomsky noted that input was limited and could be misleading, because parental corrections were inconsistent. It would be impossible to learn a lot of words and sentences through imitation and reinforcement. The human mind could limit itself only through the manifestation of this behavior. Chomsky pointed out that human language was based on some innate universal principles. The young child disposed incredible language skill into the structure of the human brain and all children had Language Acquisition Device

(LAD), an innate system that contains a Universal Grammar (UG) (Lightbown & Spada, 2013). It enabled a child to learn any language without having to be taught (Lightbown & Spada, 2013).

Innate perspective was often linked to the Critical Period Hypothesis. This hypothesis stated that "there is a period during which language acquisition is easy and complete (native speaker ability is achieved) and beyond which it is hard and typically incomplete" (Ellis, 1997, p. 67). Some researchers had different perspectives concerning if adults L2 learners have access to the UG, and they presented various arguments.

The first argument was that the adult had full access to UG, and that the critical period did not exist. Adult's second language learners could achieve native fluency (Ellis, 1997). An example was Julie, a woman who did not start learning Arabic until she was 21 years old, but was found to perform like a native speaker on a variety of tests after she had lived in Cairo for 26 years (Ellis, 1997).

The second argument was that adult learners had no access to UG. Adults relied on learning strategies to perform on all aspects of second language acquisition. Full competence would not be possible, because the rules that governed L1 were different from the rules in L2 (Ellis, 1997).

The third argument regarded partial access, stating that “learners have access to parts of UG but not others. For example, they may have access to only those UG parameters operative in their L1. However, they may be able to switch to the L2 parameter setting with the help of direct instruction involving error correction. In other words, the L2 acquisition is partly regulated by UG and partly by general learning strategies” (Ellis, 1997, p. 69).

The fourth argument described dual access. According to this position, “adult L2 learners make use of both UG and general learning strategies. However, the use of general learning

strategies can block the operation of UG, causing students to produce impossible errors and fail to achieve full competence. This position assumes that adult students can only be fully successful provided they rely on UG" (Ellis, 1997 p. 69).

The conclusion was that the innate system must be available to second language learners as well as to first language learners. Some adults could achieve native-speaker ability if motivation was in place. Motivation and efficient learning strategies would help adult students to perform in all aspects of second language acquisition. The critical period hypothesis would diminish people's inspiration to make progress in life to learn more languages (Lightbown & Spada, 2013)

Krashen. One of the most widely known theories of language acquisition was Krashen's Monitor Theory. Krashen's model contained five components: the acquisition-learning hypothesis, the natural order hypothesis, the monitor hypothesis, the comprehension hypothesis, and the affective filter hypothesis (Krashen, 2013).

In the acquisition and learning hypothesis, Krashen made a distinction between language acquisition and language learning. Language acquisition referred to a subconscious system of learning; however, language learning related to the conscious system of learning with grammatical competence (Krashen, 1981; Gardner, 1985). Subconscious learning was very similar to the process children used to learn their first and second languages. It required meaningful interaction in the target language with natural communication in which speakers were not concerned with the form of their communication (Krashen, 1981, 2013). The conscious learning was the language learning in the classroom.

The natural order hypothesis was based on these authors (Dulay & Burt, 1974; Fathman, 1975; Makino, 1980). They recognized that the acquisition of grammar must follow a natural

order. Some parts of grammatical items might be acquired early, while others would be acquired later. The order did not make a difference. In addition, Krashen (2013) stated that it was not clear that simple grammar rules were acquired early, and complicated rules are learned later on. In fact, the natural order could not be changed (Krashen, 2013).

Concerning monitor hypothesis, learners drew on what they learned while engaging in communication with other; the learning system provided rules that could be used as a monitor. Such monitoring took place when speakers had a lot of time. Conscious learning is used to make corrections before someone speaks (Lightbown & Spada, 2013; Krashen, 1981).

In input hypothesis, second language acquisition took place. It was not learning anymore: the acquisition took place with i+1. The "i" represented the level already acquired. The 1 was beyond the current level of performance (Lightbown & Spada, 2013; Krashen, 1981).

Effective hypothesis was the most important hypothesis for this study. This hypothesis argued that a filter that focused on students' emotional states, such as motivation, anxiety, and self-esteem, was responsible for filtering or preventing the input necessary for students' achievement. A learner with high motivation, self-confidence, good self-image, and a low level of anxiety was better equipped for success in second language learning (Lightbown & Spada, 2013).

Vygotsky. Vygotsky had developed the Zone of Proximal Development (ZPD) theory. Through this zone, a learner could better learn a language through scaffolding if he or she interacted with a learner at the same level in the Zone of Proximal Development (ZPD) (Saydee, 2015). Scaffolding was one of the principles of effective instruction that enabled teachers to accommodate student needs. In scaffolding, the teacher helped the students to fulfill their needs so that the students might become independent learners. For example, helping students develop

integrative motivation in this zone was one of the important things teachers could do, to assist students who were instrumentally motivated. The strategy consisted of helping students collaboratively. Once students internalizd the process, they assumed full responsibility for taking a self-determined action.

Vygotsky also identified the rational thinking theory (Gredler, 2009). This theory focused on self-mastery, an important theme throughout Vygotsky's theory of cognitive development. Students transformed their thinking process by mastering their cognitive process. This process would allow students to become independent (autonomous) learners.

Independent learners would take responsibility to regulate their cognitive activity and emotional condition after the scaffolding. They must be able to control their thinking and emotion process by planning, elaborating, and evaluating. They would be aware of necessary resources, be sensitive to feedback, and assess the effectiveness of one's actions. They must be open-minded and be sensitive to the feelings of others (Marzano, Pickening, Arredondo, Blackburn, Brandt, Moffett, Paynter, Pollock, & Whisler, 1997).

The overall theories suggest ideas and avenues for acquiring a Second Language. The researchers had identified various theories of language learning, and the combination of different approaches would help to develop successful learning strategies.

Foreign Language Learning Strategy

Intercultural Communication Emotional Intelligence (ICCEI) is a learning strategy that I developed to explore students' level of emotion (positive or negative) in the foreign language classroom. ICCEI measured students' emotional control and fear of speaking in foreign language classroom. This instrument was new, inspired by the work of Gardner on multiple intelligence, emotional intelligence by Goleman, and cultural intelligence by Early and Ang (2003).

According to Pekrun (2006), "emotion can induce and modulate students' interest and motivation to learn. Activating positive emotions such as enjoyment of learning are assumed to strengthen intrinsic and extrinsic motivation, and deactivating negative emotion, such as boredom and hopelessness, one held to be detrimental" (p. 326). Negative emotions functioned to withdraw attention from an activity one had been doing and increase distractibility. It reduced the motivation to perform achievement activities, but having a positive emotion led to high self-efficacy. Students who lacked positive emotion were expected to drift into unproductive emotions, such as fear, anger, and frustration. The term language learning anxiety was used as an umbrella for those unproductive emotions such as fear, anger, and frustration.

MacIntyre (1998) defined language learning anxiety as the worry and negative emotion displayed by the students while learning a second language. Young (1991) categorized language learning anxiety into 6 categories:

1) Personal and interpersonal anxiety
2) Language learners' belief about learning
3) Language instructors' belief about teaching
4) Instructor and learner interactive anxiety
5) Classroom procedures
6) Language testing anxiety (p. 427)

In this study, they were only concerned about personal and interpersonal anxiety such as fear of speaking in foreign language. Gardner and MacIntyre (1993) indicated that language anxiety referred to fear that occurred when students were about to speak in foreign language. For this reason, fear of speaking in a foreign language and anxiety would be used interchangeably. In fact, fear of speaking in a foreign language came from the students' self-concept when they were

afraid of making a mistake or trying to compare their skills with other students, which lead to embarrassment and shame.

Lopez (2011) studied the different types of emotions involved in foreign language learning. Lopez recruited 20 students learning English as a second language, at the South East Mexican University. Students were asked to write journals each week for 12 consecutive weeks about their emotional experiences. Two research questions were tested in this study. The first research question examined the types of emotions students of a foreign language experience over the term. The second research question analyzed the situations or events that precipitated these emotions during foreign language learning. Students reported vast numbers of positive emotions during the first term such as: happiness, calmness, excitement, confidence, satisfaction, relaxation, interest, and relief, as well as negative emotions, such as fear, worry, nervousness, sadness, anger, frustration, insecurity, anxiety, boredom, stress, disappointment, confusion, intimidation, guilt, depression, and envy, The students also reported the sources of negative emotions, including: fear of peers mocking, fear of speaking English, experiencing difficult family situations, not understanding English, experiencing romantic problem, comparisons with peers, teachers' attitudes, teachers' feedback approach, parental disappointment, taking exams, rigid grading system, unexpected results, oral performance in exams, living alone for the first time. Students reported the source of positive emotions, including: motivating learning activities, feeling confident, experiencing self-efficacy feelings, teachers' attitude, obtaining good marks, positive learning environment, positive experiences with previous teachers, being praised by the teachers, and self-encouragement. From these results, Lopez noted that during foreign language learning, students would display positive and negative emotions, and all of these emotions would

impact students' motivation. Lopez (2011) recognized that teachers must provide a positive learning environment for students to learn.

Reducing learners' fear of speaking could be done by emotional control. Teachers ought to play the role of facilitator to help students with fear. It seemed that, if one did not have control over his or her emotions, then one could engage in self-destructive activities. However, students who had control over their emotions would also have the courage to persist and to be motivated to live up to what they believed about themselves. Students who had negative emotions about their schooling-imposed limitations on their academic achievements.

The development of this strategy (ICCEI) originated with the theory of intelligence. There were many controversies about the meaning of intelligence. Some psychologists mentioned higher-levels of the thinking process, such as metacognition, executive process, general intelligence (g), fluid intelligence, crystallized intelligence, and IQ (intelligence quotient). In the beginning, intelligence seemed to consist of logical, mathematical, and verbal intelligence, supposedly measured by IQ tests (Eris, 2008).

IQ score used to be the primary factor in determining if a person was intelligent. Consequently, the terms IQ tests and intelligence were used interchangeably to classify individuals as inferior or superior. However, these two words, intelligence and intelligence quotient (IQ) tests, are not the same. The definition of IQ tests passed through many revisions and criticisms. The main criticism of IQ tests was that they were culturally biased. Cultural biased usually occurred since the tests measured innate intelligence, without taking into consideration all aspects of intelligence, such as cultural and environmental factors. For these reasons, Eris noted that "defining intelligence solely on the basis of IQ score stumbles the future opportunities of education and development for children who display different kinds of

intelligence" (Eris, 2008, p. 85). It was true that defining intelligence on the basis of IQ score was not promoting fair competition by considering different abilities in an individual. If the educational system was not aware of multiple ways of thinking and learning, the educational system favored students in the dominant culture and disadvantaged minority groups. Social mobility, therefore, was not promoting fair competition. Instead, it promoted the dominant class that had the appearance of superiority, and left the other groups unable to compete.

Howard Gardner's theory of multiple intelligences advanced the definition of intelligence by "breaking the monopoly of IQ, educating other types of intelligence means respecting a multitude of skills in several areas at school, in the family, and in the society" (Eris, 2008, p. 85). Howard Gardner's theory of multiple intelligences suggested that there were eight kinds of human abilities. An individual might have strengths or weaknesses in one or several areas. Among them, Gardner describes visual/spatial intelligence, verbal/linguistic intelligence, logical/mathematical intelligence, bodily/kinesthetic intelligence, intrapersonal intelligence, and naturalist intelligence (Gardner, 2008, 1999). Gardner's theory was an important approach that broadens our understanding of what it meant to be intelligent. Teachers and test makers must be aware of each student's gifts and incorporate them into the learning process.

Salovey and Mayer (1990) and Salovey and Grewal (2005) extended the meaning of intelligence by integrating the notion of emotional intelligence. "Emotional intelligence involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and action" (Salovey & Mayer, 1990, p. 189).

Ang, Van Dyne, and Tan (2011) also diverged from the idea of IQ intelligence by developing the notion of cultural intelligence. They defined cultural intelligence as a person's competence to interact effectively in diverse cultural contexts (Ang, Van Dyne, & Tan 2011). In

fact, cultural intelligence was the ability to work effectively across cultures. It is an approach to learning, communicating, and working respectfully with other people. The acquisition of these aspects of culture helps learners become culturally intelligent.

It was through these three theories mentioned above that I developed this new strategy, Intercultural Communication Emotional Intelligence (ICCEI). ICCEI assumes that to be intelligent, students must understand the level of their emotions and adjust it to others' cultural norms, customs, and social systems. The emotional control allowed all participants in the communication process to overcome ethnocentrism by trying to understand people from different cultures through verbal and non-verbal communication. Cultural differences in the use of all verbal and nonverbal channels produced uncertainty in the message, so participants needed patience to overcome ethnocentrism. If teachers did not accept the role of the emotion as a reality, they could get along with students. If this relationship had been fostered, this could facilitate learning.

Summary

This chapter demonstrated the different types of motivation in foreign language learning, including the applicability of self-determination theory to language learning. Gardner's theory laid a foundation for foreign language motivation such as integrative motivation and instrumental motivation. The theory of integrative and instrumental motivation had not been perceived by some scholars as significant for predicting academic success, so scholars strived throughout the century to replace or improve on Gardner's theory. Noels et al. (2001) further clarified their positions by filling the gap with the correlation methods of foreign language motivation with self-determination motivation. This literature review filled the gap with learning strategies and foreign language theories to improve motivation and achievement. The next chapter will include

the methodology of this study, including research questions, the research design with two pilot studies, procedure, participants, measurement, data collection, and how the data was analyzed.

CHAPTER III

METHODS

In this study, I investigated the relationship between foreign language motivation and self-determination motivation, as well as students' perceptions of strategies used to improve foreign language motivation and achievement among undergraduate students at two universities. This chapter includes the research questions, research design, research procedure, participants, measurements, data analysis, and limitations.

Research Questions

1. Do autonomy, competence, and/or relatedness predict students' intrinsic motivation and perceived success in learning a foreign language?
2. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' integrative motivation in learning a foreign language?
3. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' instrumental motivation in learning a foreign language?
4. Do emotional control, fear of speaking in a foreign language, autonomy, competence, relatedness, intrinsic, instrumental, and integrative motivation predict students' perceived success by controlling emotional control and fear of speaking a foreign language?

5. Does fear predict students' motivation and perceived success independently in learning a foreign language learning?

Research Design

The current study used a cross-sectional research design to examine the relationships between foreign language motivation and self-determination motivation. A survey was given to undergraduate students in their language-learning classrooms.

Research Procedure

This research was approved through the Institutional Review Board (IRB). The documentation of the (IRB) approval is provided in Appendix C. The research was conducted in two Midwestern Universities in the North Dakota Universities system. The choice of these universities was based on sampling technique and most importantly to have a large sample. Students from these universities generally learn a foreign language as a major or minor to fulfill a degree requirement, or to satisfy a personal interest. After receiving approval from each department chair in the Spring 2018 semester concerning the paper-and-pencil survey, the participants were first informed of the purpose of the study via a mass email sent to all college students registered for the Spring semester in two foreign language departments. All professors who accepted to participate, invited me to their classrooms to give the survey. Some professors in the departments did not participate at all.

Participants

The research was conducted among undergraduate foreign language learners in two different universities. The participants in this study came from various levels of their four-year university programs. I explained to the participants that participation was voluntary. Even if they agree to participate, they can change their mind and withdraw their participation at any time.

Also, they may refuse to answer any question in the survey at any time. It took about 15 to 20 minutes to complete the questionnaires that I designed.

It was hope that all students learning a foreign language in the two schools would participate in this research. However, not all of them participated. A total of 391 initiated the survey that included 67 items, but only 380 completed the majority of all sections. There were 211 participants from the first university and 180 participants from the second university. For the first university, five students initiated the surveys but since the surveys were incomplete, they were removed of the study. Six students who took the same survey two times in different classes were also removed from the study. For the second university only one student refused to participate.

Regarding the gender profile, 42% were male, and 58% were female. Students came from various ethnic backgrounds: 97% were not Hispanic or Latino or Spanish origin and 3% were Hispanic. Concerning race, 89% were white/Caucasian; 2% were Hispanic/Latino; 4% were Black/African American; 2% were Native American, and 3% were Asian/Pacific Islander. Concerning the foreign language classes, 20% were taking the French language; 50% were taking Spanish; 27% were taking German; and 3% for other. Concerning the current level, 34% were Freshman, 28% were Sophomores, 23% were Juniors, 12% were Seniors, and 2% other.

Measurements

The codebook for this study can be found in Appendix A. This codebook contains all of the scales used in this study. I designed the codebook based on some established scales for surveying undergraduate students in the foreign language program. The survey contained 67 questions and was designed to measure students' motivation, learning strategies, and students' achievement. It was divided into three sections. The first section of the survey measured

demographic variables, such as ethnicity, race, age, gender, language spoken, language class enrolled, and the current level of school. The second section measured self-determined motivation variables, such as autonomy, competence, relatedness, intrinsic motivation, extrinsic introjected motivation, and extrinsic external regulation motivation. The third section measured instrumental motivation, integrative motivation, fear of speaking a foreign language, emotional intelligence or control, and students' perceived success. The terms emotional intelligence and emotional control were used interchangeably.

S**elf-determined motivation scale (SDT)**. The self-determination motivation scale developed by Van den Broeck, Vansteenkiste, De Witte, Soenens, and Lens (2010) measured the three basic psychological needs: autonomy, competence, and relatedness. The authors established the validity and the reliability of these three factors. The present study used a 5-point Likert scale (5 = *Strongly Agree,* 4 = *Agree,* 3 = *Neutral,* 2 = *Somewhat disagree,* 1 = *Strongly Disagree*). Some questions were slightly modified to suit the purpose of this study. For example, "At work, I feel a sense of choice and freedom in the things I undertake" is changed to "In the classroom, I feel a sense of choice and freedom in the things I undertake." This statement indicated students' feelings in learning a foreign language.

The *autonomy* scale asked participants how they feel about their choice, freedom, and interest in the classroom. When looking at the preliminary analysis results, the scale showed validity and reliability. The Cronbach's Alpha was .82 from the present study, indicating that the model had excellent reliability for measuring students' choice, interest, and freedom in the classroom. It contained four statements, such as "in the classroom, I feel a sense of choice and freedom in the things I undertake."

The *competence* scale contained four items and was valid after the factor analysis. The Cronbach's alpha was .91 from the present study, indicating that the model's items are consistent in measuring students' perceived competence in learning a foreign language. The construct included statements such as, "I feel confident that I can do things well in my classroom."

The *relatedness* scale contained four items. The Cronbach's Alpha was .90 from the present study, indicating that the model's items are consistent in measuring students' relatedness in learning a foreign language. The items included statements such as, "I feel that the people I care about in the classroom also care about me."

Students' intrinsic and extrinsic motivation scale. The intrinsic and extrinsic scales were established by Vallerand et al. (1992). They contained sixteen items and used a Likert-type scale. The present study used a five-point Likert scale (5 = *Strongly Agree,* 4 = *Agree,* 3 = *Neutral,* 2 = *Somewhat disagree,* 1 = *Strongly Disagree*).

The *Intrinsic motivati*on scale contained four items and was reliable. The Cronbach's Alpha for the present study was .89, indicating that the model's items were consistent in measuring students' intrinsic motivation in learning a foreign language. The scale included statements such as, "Because I experience pleasure and satisfaction while learning."

The *introjection regulation* scale contained four items, for example, "To prove to myself that I am capable of completing my college degree." The scale was valid and reliable. The Cronbach's Alpha for the present study was .89, indicating that the model was valid and reliable.

The *external regulation* scale contained four items, including statements like, "Because with only a high-school degree I would not find a high-paying job later on." The Cronbach's Alpha was .89, indicating that the model's items were consistent in measuring students' external motivation in learning a foreign language.

Foreign language motivation. The *foreign language motivation* scale was developed by Robert Gardner in 1985. Gardner and his advisor, Wallace Lambert, started their investigations to examine the type of motivation students need to learn a foreign language successfully. They developed the "socio-psychology model" that was extended later on to socio-educational theory. The Attitude Motivation Test Battery (AMTB) was developed to measure students' integrative and instrumental motivation for learning the language. The scale had gone through many modifications from the original one. It had been developed for the context of Canadians learning French, but the items were extended to English-speaking countries to establish validity and reliability. Some modifications of the questions were made on the original scale. For example, "Studying French can be important to me because it will allow me to be more at ease with fellow Canadians who speak French" was changed to "Foreign language learning will help me to be more at ease with foreign people." The instrument was reported to have good validity and reliability (Gardner, 1985).

Integrative motivation measured students' perception of foreign language and its relationship to other cultural groups. The current study used a measure with a 5-point Likert scale (5 = *Strongly Agree,* 4 = *Agree,* 3 = *Neutral,* 2 = *Somewhat disagree,* 1 = *Strongly Disagree*). The current Cronbach's Alpha of integrative motivation was .79. The scale contained three items, including statements such as, "It should enable me to meet and converse with varied people."

Instrumental motivation contained four items. The Cronbach's Alpha was .71 for the present study, indicating that the model's items were consistent in measuring students' instrumental motivation. The section included statements such as, "Studying a foreign language can be important for me only because I will need it for my future career."

I developed the *fear of speaking in a foreign language* to examine the relationship between fear of speaking in a foreign language with motivation, success, and emotional control. Some foreign language researchers say that anxiety or fear of speaking in a foreign language could affect students' motivation and learning (Hinton, Miyamoto & Della-Chiesa, 2008), so this study investigated how it would correlate with perceived success or with different types of motivation. This scale was used in the pilot study conducted in March 2017 for a multivariate statistics class project. After factorial analysis, the fear scale had only two items: .860 for fear 1; .789 for fear 2. An example statement was, "I am always worried about making a mistake when speaking in a foreign language." The Cronbach's Alpha was .572 for the pilot study, which is below the requirement for satisfactory reliability. The scale was improved during the current study. For the present study, the fear of speaking in foreign Language scale contained five statements measured on a 5-point Likert scale (5 = *Strongly Agree,* 4 = *Agree,* 3 = *Neutral,* 2 = *Somewhat disagree,* 1 = *Strongly Disagree*).The reliability analysis was performed on the scale, with results indicating that the scale had consistent items measuring fear of speaking in a foreign language (α =.71).

Learning strategy. The second part of the survey concerned learning strategies to improve motivation and achievement. The development of this scale was for the pilot study conducted in March 2017 for a multivariate class project. I developed an instrument called ICCEI (Intercultural Communication Emotional Intelligence) to measure students' emotional control and fear of speaking in the foreign language classroom. This instrument was newly created, inspired by the work of Gardner on multiple intelligence, emotional intelligence by Goleman, and cultural intelligence by Ang and Early (2003).

Emotional Control. The Emotional Control scale in this analysis contained six statements measured on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). The reliability analysis was performed on the scale, with results indicating the scale did not have consistent items measuring (α =.68). The scale was improved after deleting item 6 "I take a little deep breath to control my emotion." The reliability became (α =.69) which was rounded to (α =.70).

Perceived success. This perceived success achievement scale was measured by students' perceived success. It was adapted from Buts, Stupnisky, Pekrun, Reinhard, Jesen, Jason, Harsell, Dana (2016). This scale was modified to fit the purposes of my study. For example, "How do you feel you are doing in the MBA/MPA/MS-Avit program overall?" was changed to "How do you feel about the foreign language program overall?" The new scale used a 5-point Likert scale (1 = *very poor,* 2 = *poor,* 3 = *not good not bad, 4 = good, 5 = very good)*. The reliability and validity of the present study indicated that the instrument was effective at measuring students' achievement. When looking at the reliability for perceived success, the Cronbach's Alpha was .80, indicating that the model had excellent reliability for measuring students' achievement. The *perceived success* scale contained six items (e.g., "How do you feel in the foreign language program overall?").

Data Analysis

All data were analyzed using Statistical Package for the Social Sciences (SPSS) version 24.0, through which descriptive statistics were conducted to see normality among the variables. Then, the reliability and validity were conducted, followed by correlation and regression.

Normality

Descriptive statistics were conducted to identify the irregularities in the data. The descriptive statistics included means, standard deviations, percentage of agreement, minimum and maximum, skewness, and kurtosis. The results of the descriptive statistics are presented in the table (Table 1). All variables were normally distributed with skewness and kurtosis near zero. Skewness and kurtosis within the range of (+1.0 to -1.0) are considered normally distributed variables (Warner, 2013). If a variable has a skewness outside the range of +1.0 to -1.0, the distribution is considered skewed. However, Kline (2011) noted that violations of the normality assumption occur at extremes, when kurtosis is higher than +7 or lower than -7 and skewness is higher than +3 or lower than -3.

The distribution of the autonomy, competence, relatedness, extrinsic, integrative, instrumental, fear of speaking in foreign language, emotional control, and perceived success variables were normally distributed, with skewness and kurtosis within the range (+1.0 to -1.0). The intrinsic scale had a skewness of -1.36 and kurtosis of + 2.6. Even though the kurtosis was + 2.6, the distribution satisfied the moderate normality assumption and was retained for the study, based on the violation of the normality assumption recognized by Kline (2011).

The amotivation distribution was not normally distributed, with skewness and kurtosis deviating from normality (skewness - 2.59 and kurtosis +7.4); therefore, the scale was not used in the analysis. All of the other scales were normally distributed, with skewness and kurtosis within the acceptable range.

Reliability

Reliability is a measurement of internal consistency of the scale. Cronbach's Alpha provides an estimate of the reliability of the scales (Warner, 2013). Some researchers have indicated that the preferred range of Cronbach's Alpha is between .70 to .95 (DeVellis, 2003; Bland & Altman, 1997). Most authors assume that the reliability Cronbach's Alphas are between .7 to .8 (Nunnally, 1978). The authors should correct the low reliability. All the variables in this present study are reliable. The Cronbach's Alpha values for all variables were between .70 to .91 (see Table 1).

Table 1. Summary of the variables

Measures	N	Mean	SD	Minimum	Maximum	Skewness	Kurtosis	α
Autonomy	377	3.96	.75	1	5	-.87	1.14	.82
Competence	379	4.00	.85	1	5	-1.00	1.02	.91
Relatedness	380	3.87	.82	1	5	-.44	-.40	.90
Intrinsic	380	4.24	.76	1	5	-1.36	2.64	.89
Introjected	379	3.93	.95	1	5	-1.00	.58	.89
External	377	3.96	1.02	1	5	-.97	.22	.89
Instrumental	380	3.29	.95	1	5	-.30	-.39	.71
Amotivation	380	1.36	.69	1	5	2.59	7.4	.89
Fear	377	3.11	.89	1	5	.01	-.70	.79
Success	377	4.21	.56	2	5	-.77	.73	.80
Integrative	380	4.19	.76	1	5	-1.17	1.84	.79
EmotiC	378	4.21	.54	2	5	-.419	-.43	.70

**Correlation is significant at the .01 level(2-tailed)
*Correlation is significant at the .05 level (2-tailed)

Validity

Validity is the extent to which an instrument measures what it is supposed to measure. It is important to ensure that an instrument is valid before conducting a regression analysis. The validity and reliability allow a proper interpretation of the results (Brown, 1976). In fact, "factorial analysis is intimately involved with questions of validity… and is at heart of the measurement of psychological constructs" (Nunnally, 1978, p. 113).

To determine the validity of the variables, I performed two-factor analyses: one on the self-determined motivation scales, and the other on the foreign language motivation scales. The factor analyses explored if the scale items related to their expected constructs validity and reliability.

The first analysis on the self-determined motivation scale included autonomy, competence, relatedness, intrinsic motivation, extrinsic motivation introjected, and extrinsic motivation for external regulation (see Table 2). After performing Principal Axis factoring, I performed a factor analysis on all six constructs to test the quality of the scale and discovered six Eigenvalues that were greater than 1.0. Direct Oblimin Rotation with suppression of small coefficient was put at .30. The results showed six factors. The interpretation was consistent with the Scree plot and accounted for 75.31 percent of the overall variance in the dataset. The factors represented autonomy, competence, relatedness, intrinsic motivation, extrinsic motivation introjected, and extrinsic motivation for external regulation. Looking at the pattern matrix, none of the factors was cross-loading.

The second analysis included integrative motivation, instrumental motivation, motivation, fear of speaking in a foreign language, emotional control, and perceived success (see Table 2). Concerning the second analysis on foreign language motivation scales, the results

showed six factors such integrative motivation, instrumental motivation, motivation, fear of speaking in a foreign language, emotional control, and perceived success. Looking at the pattern matrix, the result showed six factors, and none of the factors were cross-loading. However, two items from instrumental motivation were removed because they were loading with integrative motivation: "I study a foreign language because it is a University requirement" and "I study a foreign language to become more knowledgeable." The results indicated that the three items were consistent in measuring instrumental motivation. The reliability analysis was performed on the three items, with results indicating that the scale had consistent items measuring instrumental motivation (α =.71). Also, the integrative motivation scale in this analysis contained five statements, measured on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). After factorial analysis, two items were loading poorly and were dropped: " It should allow me to participate more freely in the activities of other cultural groups and the integrative" " if Americans had no contact with other countries, it would be a great loss."

Table 2. Exploratory factor analysis for Self-determined Motivation Scales

Items	Competence	Extrinsic External	Relatedness	Intrinsic	Extrinsic Introjected	Autonomy
Competence1	.835					
Competence2	.963					
Competence3	.783					
Competence4	.761					
Extrinsic Ext1		.705				
Extrinsic Ext2		.773				
Extrinsic Ext3		.865				
Extrinsic Ext4		.922				
Relatedness1			.846			
Relatedness2			.896			
Relatedness3			.857			
Relatedness4			.726			
Intrinsic1				-.889		
Intrinsic2				-.792		
Intrinsic3				-.805		
Intrinsic 4				-.757		

(Table 2. cont.) Items	Competence	Extrinsic External	Relatedness	Intrinsic	Extrinsic Introjected	Autonomy
Extrinsic Introj1					-.665	
Extrinsic Introj2					-.790	
Extrinsic Introj3					-.879	
Extrinsic Introj4					-.822	
Autonomy1						-.646
Autonomy2						-.787
Autonomy3						-.757
Autonomy4						-.584
Eigen	6.891	4.38	2.55	1.942	1.214	1.101
% var	28.71	46.95	57.58	65.670	70.72	75.31
α	.91	.89	.90	.89	.87	.82

Table 3. Exploratory factor analysis for foreign language motivation and perceived success

Items	Fear	Emotional control	Instrumental	Perceived Success	Integrative
Fear1	.709				
Fear2	.582				
Fear 3	.775				
Fear 4	.498				
Fear 5	.692				
EmotionalC1		.514			
EmotionalC2		.554			
EmotionalC3		.438			
EmotionalC4		.589			
EmotionalC5		.592			
Instrumental1			.705		
Instrumental2			.743		
Instrumental3			.547		
Perceived Succ1				.366	
Perceived Succ2				.458	
Perceived Succ3				.631	
Perceived Succ4				.616	
Perceived Succ5				.758	
Perceived succ6				.560	
Integrative 1					.596
Integrative 2					.733
Integrative 3					.646
Eigen	3.07	2.19	1.9	1.63	1.56
% var	33.8	40.87	47.14	52.43	57.47
α	.79	.70	.71	.80	.80

Correlation

I conducted the correlation analysis to evaluate if there is a relationship between the three basic psychological needs with intrinsic motivation and achievement. The correlations also examined possible relationships among foreign language motivation, self-determination motivation, emotional control, fear of speaking in a foreign language, and students' perceived success.

What are the correlations among all of the independent variables (IV)? The correlation coefficient must be between – 1.00 to +1.00 (Warner, 2013). For examples, range equal to -1 (perfect negative correlation); range of + 1.00 (perfect positive correlation). The correlation coefficient (r) r = 0.00 means no correlation. The correlation is small when r = .10, medium when r = .30; and large when r = .50 plus. The advantages of this type of correlation include that it allows interpreting the relationships between variables. These relationships between variables were not the causal inference (Gall, Gall, & Borg, 2005).

The first analysis was performed to examine if there was a correlation between autonomy competence with intrinsic motivation; and if there was a correlation between intrinsic motivation and perceived success. The analysis suggested that the three basic psychological needs would correlate with intrinsic motivation, and then, from intrinsic motivation to achievement (Ryan & Deci 2000). As observed (Table 9), there were strong correlation between autonomy, competence, and relatedness with intrinsic motivation. For example, some of the strongest correlation were noticed among some variables such as autonomy (.56), followed by competence (.44) and elatedness (.30). The significant were at the .01 level. When autonomy, competence, and relatedness increased, intrinsic motivation did as well. Another strong positive correlation

was found between intrinsic motivation and perceived success (.49) at the .01 level, indicating that, as students' intrinsic motivation increased, so did their perceived success.

The second analysis tested the correlation between instrumental and integrative motivation with self-determination sub-constructs. The result of the analysis revealed that integrative motivation was highly correlated with intrinsic motivation (.60) at the .01 level. The integrative motivation was also correlated with autonomy (.42), competence (.32), relatedness (.30), and perceived success (.40) at the .01 level. For instrumental motivation, a medium correlation was found with external regulation (.39) with Introjected (.37) at the .01 level. A small correlation was found with autonomy, competence, intrinsic, and perceived success.

The third analysis examined if fear of speaking a foreign language would correlate with self-determination sub-construct and motivation. Since some foreign language researchers indicate that anxiety or fear of speaking in a foreign language could affect students' motivation and learning (Hinton, Miyamoto & Della-Chiesa, 2008), this study investigated how it would correlate with perceived success or with different types of motivation. Results from my study revealed that fear of speaking in a foreign language negatively correlated with autonomy, competence, perceived success, and relatedness and it positively correlated with the two external regulations. A medium negative correlation was found with competence (-.48) followed by success (-.32), autonomy (-.24) and intrinsic (-.15) at the .01 significant level.

The fourth analysis tested the correlations of emotional control with motivation, fear, integrative motivation, and instrumental motivation. Results indicated that emotional control positively correlated with autonomy (.20), competence (.20), relatedness (.19), perceived success (.28), and negatively correlated with fear of speaking in a foreign language (-.14). The emotional

control positively correlated with integrative motivation (.31), and intrinsic motivation (.30). Surprisingly, no strong correlation was found with instrumental motivation (.07).

Table 4. Correlation among variables

	1	2	3	4	5	6	7	8	9	10	11
1.Auto	-										
2.Comp	.54**	-									
3.Related	.39**	.23**	-								
4.Intrinsi	.56**	.44**	.30**	-							
5.Introject	.15**	.07	.09	.27**	-						
6.External	.04	.03	.03	.03	.53**	-					
7.Instru	.21**	.14**	.06	.18**	.37**	.39**	-				
8.Fear	-.24**	-.48**	-.15**	-.15**	.18**	.18**	.04	-			
9.Succes	.56**	.65**	.25**	.49**	.11*	-.03	.17**	-.32**	-		
10.Emotio	.20**	.20**	.19**	.30**	.04	-.02*	.07	-.14**	.28**	-	
11.Integra	.42**	.32**	.30**	.60**	.32**	.11*	.34**	-.05	.41**	.31**	-

**Correlation is significant at the .01 level(2-tailed)
*Correlation is significant at the .05 level (2-tailed)

Summary

This chapter described the methodology that was used in this dissertation. The study design was cross-sectional, in order to examine the relationships between foreign language motivation, self-determination motivation, and the strategies used to improve motivation and achievement. The research was conducted among undergraduate foreign language learners in two different universities. The participants in this study came from various levels of their four-year university programs. A total of 380 students completed all sections of the survey.

A survey was given to undergraduate students learning a foreign language in two universities during their regular language-learning classes. I previously conducted two pilot studies, using quantitative research designs, to address the same research questions. All data were analyzed using SPSS version 24.0, through which descriptive statistics were conducted to see normality among the variables. Then, the reliability and validity were conducted, followed by correlation and regression. The following chapter will present the results of the study.

CHAPTER IV

RESULTS

This chapter presents the results obtained from the research question concerning the relationship between foreign language motivation and self-determined motivation, as well as students' perceptions of strategies used to improve foreign language motivation and achievement. All data were analyzed by using SPSS (Statistics Package for Social Science). This chapter includes the assumptions of the multiple linear regression and the results of the regression analysis.

Assumptions of the Multiple Linear Regression

Testing the assumptions was an essential task before conducting the multiple regression. There are assumptions of linearity, normal distribution of the error, homoscedasticity, independence, multicollinearity, and outliers (Osbone & Waters, 2002; Hoekstra, Kier, & Johnson, 2012). In fact, the normality, linearity, multicollinearity, and independence assumptions assumption were checked at the same time by visual inspection of the histogram, skew and kurtosis, and the P-P plots (probability-probability plot).

Linearity and Normality

The distribution of autonomy, competence, relatedness, intrinsic, extrinsic, integrative, instrumental, fear of speaking in a foreign language, emotional control, and perceived success were all normally distributed, with skewness and kurtosis within the range (+1.0 to -1.0). Kline (2011) noted that the violation of the normality assumption at extremes when kurtosis is higher

than +7 or lower than -7, and skewness higher than +3 or smaller than -3. Concerning the intrinsic scale, skewness was -1.36 and kurtosis was + 2.6. Even though the kurtosis was 2.6, the distribution satisfied the normality assumption, according to Kline (2011). For the rest of the scales, the distributions were normally distributed, with skewness and kurtosis within the acceptable range.

Some studies suggest that normality violation may not pose a severe problem to the accuracy of multiple regression (Schafer, 1997; Demirtas, Freels, & Yucel, 2008). However, this assumption was required for significance tests in a small sample (Cohen et al., 2003). The larger the sample size, the lesser the importance of this assumption. The normality assumption is of primary importance for a small sample. Williams, Grajales, and Kurkiewcz, (2013) indicated that that "the sampling distribution of the coefficients will approach a normal distribution as the sample size grows larger. This is why it is plausible to say that the regression is relatively robust to the assumption of normally distributed errors. If the sample is small, errors are not normally distributed" (p. 3).

I checked the linearity and independence by looking at the P-P plot (probability-probability plot, or p value plot). The relationship between the independent variables (IVs) and the dependent variables (DV) must be linear. It means that these relationships must be characterized by a straight line (see Figure 3). All points should lie in the straight diagonal line, from the bottom to the top. We can see how this line fits the data by looking at the different data points fall closely to the line (see Figure 4). This assumption was satisfied.

Homoscedasticity

I checked the homoscedasticity by looking at the scatterplot (see Figure 4). Most of the scores should be concentrated in the center, and rectangularly distributed. The scatterplot showed

that the equal variance assumptions are met, without a curve. The residual should be rectangularly distributed.

The homoscedasticity is also called the homogeneity of variance. This means that "the variance of errors is the same across all levels of the independent variables (IV) when the variance of the errors differs at different values of the dependent variables (IV), heteroscedasticity is present" (Osborne & Waters, p. 4). Heteroscedasticity is " indicated when the residuals are not evenly scattered around the line. When the plot of residuals appears to deviate substantially from normal" (Osborne & Waters, p. 4). In fact, the errors are assumed to be normally distributed with mean zero and homogeneous variance. Heteroscedasticity occurs when the errors variance is not homogenous. By looking at the scatterplot (Figure 4), this assumption was satisfied.

Multicollinearity

To detect the multicollinearity, a more precise test was to used to detect the variance inflation factor (VIF). Paul (2014) stated that a VIF exceeding 5 or 10 is an indication of multicollinearity. None of the variables' VIF in this study was greater than 5.

Regression

Research Question One

Do autonomy, competence, and relatedness, predict students' intrinsic motivation, and perceived success in learning a foreign language?

In response to research question one, the regression analysis was conducted in which autonomy, competence, and relatedness were predictors, and intrinsic motivation was the dependent variable. The results (see Table 5) indicated that autonomy and competence predicted intrinsic motivation (β=.42, p <.001; β=.19, p <.001). However, relatedness was not significant

in the model (β=.08, p >.05). In conclusion, autonomy and competence were the strongest predictors of students' intrinsic motivation in learning a foreign language.

Table 5. Regression: *How autonomy, competence, and relatedness predict students' intrinsic motivation*

Predictors	Intrinsic Motivation		
	B	SE	β
Autonomy	.43	.05	.42***
Competence	.17	.04	.19***
Relatedness	.07	.04	.08
R^2	.34***		

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

Simultaneous multiple linear regression analysis was conducted in which autonomy, competence, and relatedness were predictors, and perceived success was the dependent variable. The results (see Table 6) revealed that autonomy and competence were the best predictors of students' perceived success (β=.27, p <.001; β=.49, p <.001); however, relatedness was not significant (β=.02, p > 0.5). It became clear that the autonomy and competence were the strongest predictors of students' success in learning a foreign language.

Table 6. Regression: *How autonomy, competence, and relatedness predict students' perceived success*

Predictors	Perceived Success		
	B	SE	β
Autonomy	.20	.03	.27**
Competence	.32	.03	.49***
Relatedness	.01	.02	.02
R^2	.41***		

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

Research Question Two

Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic motivation external regulation predict students' integrative motivation in learning a foreign language?

To answer the research question two, regression analysis was conducted on self-determination constructs such as autonomy, competence, relatedness, intrinsic motivation, extrinsic motivation introjected, extrinsic motivation external regulation as independent variables, and integrative motivation as a dependent variable. The results (see Table 7) indicated that intrinsic and extrinsic introjected motivation were the strongest predictors of students' integrative motivation (β=.37, p <.001; β =.25, p <.05). The results meant that there was relationships between integrative motivation with intrinsic motivation and extrinsic introjected motivation. There was no relationship between integrative motivation and extrinsic external regulation.

Table 7. Regression*: How self-determination constructs predict students' integrative motivation*

Predictors	Integrative Motivation		
	B	SE	β
Autonomy	.06	.04	.08
Competence	.02	.03	.03
Relatedness	.05	.03	.07
Intrinsic	.27	.04	.37***
Introjected	.14	.03	.25***
External	.03	.03	.25
R^2	.36***		

*p <.05; **p <.01; ***p < 0.001

Research Question Three

Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' instrumental motivation in learning a foreign language?

Regression analysis was conducted on self-determination constructs such as autonomy, competence, relatedness, intrinsic motivation, extrinsic introjected motivation, extrinsic external motivation as the independent variables, in which instrumental motivation was a dependent variable. The results (see Table 8) indicated that autonomy, extrinsic introjected and extrinsic external motivation were significant predictors of students' instrumental motivation (β=.13, p <.05) (β=.18, p <.05; β=.27, p <.001). The results meant that there were relationships between instrumental motivation with autonomy and extrinsic motivation. The intrinsic motivation did not predict instrumental motivation.

Table 8. Regression: *How self-determination constructs predict students' instrumental motivation*

Predictors	Instrumental Motivation		
	B	SE	β
Autonomy	.16	.08	.13**
Competence	.03	.06	.02
Relatedness	-.03	.05	-.03
Intrinsic	.07	.07	.05
Introjected	.18	.05	.18**
External	.26	.05	.27***
R^2	.21***		

*p <.05; **p <.01; ***p < 0.001

Research Question Four

Do emotional control, fear of speaking in a foreign language, autonomy, competence, relatedness, intrinsic, instrumental, and integrative motivation predict students' perceived success by controlling emotional control and fear of speaking a foreign language?

Hierarchical multiple regression analysis was performed to examine if emotional control, fear, autonomy, competence, relatedness, intrinsic, instrumental, and integration motivation were predictors of students' perceived success together as a model and/or individually, as shown on (Table 9). The emotional control and fear of speaking in a foreign language predicted student perceived success in step 1 of the regression model. The overall model explained 16% of students perceived success of learning a foreign language. R-square: F (2, 365) = 34.94, $p < .001$ The addition variables such as autonomy, competence, and relatedness were added in step 2. The overall model explained 50% of the model of the students' perceived success. The result increase on R square. F (3, 362) = 72.04 $p < .001$. Autonomy and competence were significant. However, the fear of speaking in a foreign language became insignificant. The addition of motivational variables such as intrinsic, instrumental, and integrative motivation were added in step 3. The overall model was significant and explained 53% of student perceived success. The result increase on R square. F (3, 359) = 49.69 $p < .001$ The integrative motivation along with autonomy, competence, and emotional control were significant. However, fear, instrumental, and intrinsic were not significant.

Table 9. Hierarchical multiple linear regression in predicting students' perceived success.

	Step 1			Step 2			Step 3		
	B	SE	β	B	SE	β	B	SE	β
Emotional Control	.26	.05	.25***	.14	.04	.13**	.09	.04	.09*
Fear	-.18	.03	-.28***	-.00	.03	-.01	-.02	.03	-.40
Autonomy				.19	.04	.26***	.14	.04	.18***
Competence				.32	.03	.48***	.29	.03	.44***
Relatedness				.00	.03	.01	-.01	.03	-.01
Intrinsic							.05	.04	.06
Instrumental							-.00	.02	-.00
Integrative							.13	.04	.16**
R-square	.16***			.50***			.53***		

*p <.05, ** p <.01, *** p <.001

Research Question Five

Does fear predict students' motivation and perceived success in learning a foreign language?

To understand how fear contributed to foreign language learning in predicting motivation perceived success, a simple learner regression was employed. The results (see Table 10) showed that fear was a negative significant predictor of students' intrinsic motivation (β=.-.15, p <.05). It means that, as fear of speaking in a foreign language increased, intrinsic motivation decreased.

Table 10. Regression: *How fear predicts students' intrinsic motivation*

Predictors	Intrinsic motivation		
	B	SE	β
Fear	-.13	.04	-.15**
R^2	.02**		

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

For the same research question 5, a second simple linear regression was performed to see how fear contributed to foreign language learning perceived success. The result (see Table11) demonstrated that the fear was negatively significant predictor of students' academic success (β= -.32, p <.001).

Table 11. Regression*: How fear predicts students' perceived success*

Predictors	Perceived Success		
	B	SE	β
Fear	-.20	.03	-.32***
R^2	.10***		

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

Summary

This chapter reported the findings regarding the relationship between foreign language motivation and self-determination motivation, as well as students' perceptions of strategies used to improve foreign language motivation and achievement. Results indicated that competence and autonomy were the best predictors of students' intrinsic motivation and perceived success. It also found that there was a relationship between foreign language motivation and self-determined motivation. Moreover, emotional control had impacts on students' motivation and achievement. The next chapter includes the discussion of this study.

CHAPTER V

DISCUSSION

This study investigated the relationship between foreign language motivation and self-determination motivation, as well as students' perceptions of strategies used to improve foreign language motivation and achievement among undergraduate students in two university systems. To test this model, five research questions were used:

Research Questions

1. Do autonomy, competence, and/or relatedness predict students' intrinsic motivation and perceived success in learning a foreign language?
2. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' integrative motivation in learning a foreign language?
3. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' instrumental motivation in learning a foreign language?
4. Do emotional control, fear of speaking in a foreign language, autonomy, competence, relatedness, intrinsic, instrumental, and integrative motivation predict students' perceived success by controlling emotional control and fear of speaking a foreign language?
5. Does fear predict students' motivation and perceived success independently in learning a foreign language learning?

Dissertation Summary

In Chapter One, I introduced the statement of the problem, the purpose of the study, research questions, significance of the study, a definition of terms, and theoretical framework.

In Chapter Two, a comprehensive literature review was provided. It described the different types of motivation in learning a foreign language including the applicability of self-determination theory to language learning. Theories related to motivation and foreign language learning, fear, as well as the strategies used to improve motivation were provided.

In Chapter Three, I described the methodology of this study. It included the research questions, the research design with two pilot studies, procedures, participants, measurement, data collection, and how the data had been analyzed. The participants came from various levels of their four-year university programs. A total of 380 students completed all sections of the survey. All data were analyzed using SPSS version 24.0 through which descriptive statistics were conducted to see the normality among variables, the reliability, and validity followed by correlation and regression.

In Chapter Four, I presented the results of the present study. Results summary are below:

Question 1. Do autonomy, competence, and relatedness, predict students' intrinsic motivation and perceived success?

The findings indicated that competence and autonomy are the two needs students have experienced in the foreign language classroom that related to their perceived success. It has become clear that promoting self-determined motivation was based on two basic psychological needs such as autonomy and competence.

Question 2. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' integrative motivation?

The results of the second research question pointed out that there was a relationship between integrative motivation with intrinsic and extrinsic introjected motivation. The integrative motivation in foreign language learning is the same as intrinsic, and extrinsic introjected motivation in self-determination motivation. There was no relationship between integrative motivation with extrinsic external regulation.

Question 3. Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' instrumental motivation?

The results of the third research question indicated that the instrumental motivation was the same as autonomy, extrinsic introjected, and extrinsic external regulation in self-determination motivation constructs. The strongest relationship was extrinsic external regulation, followed by extrinsic introjected, and autonomy. The instrumental motivation was the same as extrinsic external regulation in self-determination sub-constructs.

Question 4. Do emotional control, fear of speaking in a foreign language, autonomy, competence, relatedness, intrinsic, instrumental, and integrative motivation predict students' perceived success by controlling emotional control and fear of speaking a foreign language?

The results of the fourth research question pointed out the emotional control improved students' motivation and perceived success in learning a foreign language. The autonomy competence, and integrative motivation contributed a significant amount of variance in students' perceived success.

Question 5. Does the fear of speaking in a foreign language predict students' motivation and perceived success?

The results of the fifth research question indicated that the fear of speaking in a foreign language predicted students' motivation and academic success. The fear of speaking in a foreign

language predicted negatively and strongly intrinsic motivation and academic success. The negative regression demonstrated that as fear increased, motivation and success decreased; and as fear decreased, motivation and success increased

In Chapter Five, the discussion was presented. This section takes place in four parts; namely, the five research questions, the limitations of the research, implications, and directions for future research.

Discussion Questions

Research Question 1) Do autonomy, competence, and relatedness, predict students' intrinsic motivation and perceived success in foreign language learning?

The results of the multiple regressions indicated that autonomy and competence predicted students' intrinsic motivation and perceived success in foreign language learning; however, relatedness did not predict intrinsic motivation and perceived success in the model. This result could be explained as self-determination motivation was used to strengthen intrinsic motivation through the combination of autonomy and competence. Relatedness was less important in this context ,where people were learning a foreign language in the American education system. Even though relatedness played a distant role in this learning situation, it might play a very important function in a different context.

A few studies have been done in foreign language learning contexts that support the current findings. The results of the present study supports the cognitive Evaluation Theory developed by Deci and Ryan. According to Cognitive Evaluation Theory, Deci and Ryan (1985) recognized that "feelings of competence will not enhance intrinsic motivation unless they are accompanied by a sense of autonomy" (p. 58). Ryan and Deci (2000) made it clear that " a high level of intrinsic motivation people must experience the satisfaction of the needs both

competence and autonomy" (p. 58). From this point of view, autonomy and competence were a more powerful influence on intrinsic motivation than relatedness.

Another key finding from the current study was that autonomy made the greatest contribution to intrinsic motivation, followed by competence. Taken together, the results suggested that autonomy was a very important factor for enhancing intrinsic motivation in learning a foreign language. The finding was supported by Ryan and Deci (2006), who noted that autonomy was the most important need to be fulfilled to improve intrinsic motivation. Sheldon and Miemiec (2006) corroborated that idea by stating that autonomy appeared to be the important need, so increasing teachers' support of autonomy in the classroom would certainly increase students' competence.

Little et al. (2002) cautioned about the hierarchy of basic psychological needs by saying that "autonomy seems to function as supporting either the need for competence or the need for relatedness rather than an important need" (p. 312). In fact, all three needs, autonomy, competence, and relatedness, were important for intrinsic motivation; however, it is possible that one need might be more important than the others. Even though there might be a balance between the three needs, autonomy functioned as a support in varying the needs of competence and relatedness.

Autonomy was the most important need that students reported as improving their intrinsic motivation. The majority of the students' experiences included statements such as: 1) "In the classroom, I feel a sense of choice and freedom in the things I undertake," 2) "I feel that my decisions in the classroom reflect what I really want," 3) "I feel my choices in the classroom express who I really am," and 4) "I feel I have been doing what really interests me in my classroom."

During my study, the development of autonomy in learning a foreign language was demonstrated by four keys elements: “interest,” “freedom,” “decision making,” and “choice.” That said, the best way of developing autonomy was to give students the choice and freedom to pursue goals that they find meaningful and interesting. “Interest” was a very important need for autonomy. Deci and Ryan (2000) recognized this idea by saying that if students were not interested in the activities, they would not be intrinsically motivated. If students were autonomous, they would feel interested, and the interest would nourish intrinsic motivation. If students were not interested, they could still be self-determined if they could integrate the activity into their own experiences. “Choice” was another element that students reported to strengthen their autonomy. For this reason, students could be invited to develop different skills by choosing their activities, and engaging in challenging and collaborative learning experiences. This process was based on Vygotsky’s Zone (Saydee, 2015) of Collaborative Development (ZCD), where students learn from each other and take responsibility for their learning. The strategy (ZCD) would help to strengthen their intrinsic motivation. Dincer and Yesilyurt (2017) conducted similar research by investigating the relationship between English as a foreign language learners’ motivation to speak and the autonomy support from the teachers with both qualitative and quantitative methods. Questions were asked about teachers’ autonomy support and students’ support for their improvement of the speaking skills. The results indicated that teachers’ autonomy support helped students to develop speaking skills. For instance, some students’ reported that “ I can express my thoughts freely in the classroom,” “My instructor makes me feel that I am developing,” and “My teacher cares about all of us and treats me as a person…”

Another critical finding in the present study was the capacity for students to make their own decisions was critical for autonomy. Students reported that "I feel that my decisions in the classroom reflect what I want." From this viewpoint, autonomous supportive teaching styles would allow students to make good decisions. Bad decisions made by the students might have consequences on their intrinsic motivation. Teachers could help students to make good decisions by letting them practice. Zimmerman and Lebeau (2003) stated that allowing students to make a decision enables students to regulate aspects of their learning as well as emotions. Good decision making was a skill that promotes a students' autonomy in foreign language learning environment.

Competence was the second need that students learning a foreign language demonstrated in the present study. For instance, the majority of the students learning a foreign language stated that, "When I am in class, I feel competent to achieve my goals," and "In my class, I feel I can complete difficult tasks."

Achieving goals and completing difficult tasks were some of the elements that characterized students' competence in learning. The findings support the idea of mastery goals developed by Ames. Ames (1992) argued that mastery goals led to inward satisfaction, enjoyment of the school work, and intrinsic interest in learning. This means that students would keep their goals in the face of difficulties. However, students with performance goals would perform the tasks to outperform one other; they were not willing to do a difficult task or take risks, because they wanted to do better than everyone else (Ames, 1992). Some researchers linked the mastery orientation to intrinsic motivation and competence (Midgley, Kaplan, & Middleton, 2001; Kaplan, & Middleton, 2002), and the performance goals to extrinsic motivation (Ames, 1992; Barron & Harackiewicz, 2000).

Relatedness was the third need, and was not supported by the regression model. Several possible explanations exist for this situation. First, relatedness might play a significant role in tasks that involved a social context, such as the environment. The learning environment could influence the three basic psychological needs. Deci and Ryan (2000) stated that when a social context supports the three basic psychological needs, students may feel motivated to fulfill those needs, so the classroom environment was a very important element that would support or undermine students' basic needs. For example, a majority of students expressed their concerns about relatedness statements by saying that, "I feel that the people I care about in the classroom also care about me," and "I experience a warm feeling with the people I spend in the classroom." These concerns were tied to the classroom environment.

The second explanation as to why relatedness was not supported in the model could be explained by cultural differences. Support for relatedness could be different in different cultures, such as individualistic and collectivistic cultures. Individualistic cultures (e.g., American culture) valued individual identity over group identities, and individual rights over group obligations (Hofstede, 2001); thus, relatedness in the individualistic culture could be difficult to attain. Conversely, in collectivistic cultures (e.g., Asian and some African cultures), where people emphasized group identity over individual identity (Hofstede, 2001), relatedness could be easier to attain. This view was supported by Noels (2013) who recognized that "it seems plausible that where collectivistic values are relatively strongly endorsed, individuals feel a greater need for relatedness, and that fulfilling this need could be more central to intrinsic motivation than fulfilling the need of autonomy" (p. 21). That said, students learning a foreign language in the American education system functioned well in a social environment that encourages the growth of autonomy and competence.

The present study was consistent with findings reported by Durken, Ahmad, Radil, and Daniels, (2016) who conducted similar research in Canadian universities. The authors wanted to examine the relationship between the basic needs of self-determination motivation such as autonomy, competence, and relatedness in the context of online learning. The results of the regression analysis stated that autonomy and competence were linked together. Although relatedness was included in the overall model, it was distinct from competence and autonomy. These authors argued that the lack of connection between relatedness with autonomy and competence provided evidence that the needs of relatedness were not being met in the same way as competence and autonomy. They also indicated that meeting the need of relatedness through online courses could be more difficult than reaching the combined needs of autonomy and competence, so future research should look into these relationships (Durken, Ahmad, Radil, & Daniels, 2016).

Although my study shares similar results, the explanations of the findings were different. For instance, meeting the need of relatedness through online learning was not the problem, because my study dealt with on-campus students. Nonetheless, my study still found that the need for relatedness was distinct from autonomy and competence. That said, there was no reason to argue that the online learning caused the distinction of relatedness in the analysis. One of the best possible explanations for this phenomenon would be based on the classroom environment. A favorable learning environment would help students to be connected, and all together would foster autonomy, competence, and relatedness. Future research will focus on the three basic psychological needs in relationship to the classroom environment. At present, there were not enough arguments to support both perspectives. The discussions concerning the interaction

between the needs such as main effects and synergistic and additive hypotheses will be addressed in the future research.

One of the key findings of this current study was different from some authors. Chen and Adesope (2016) focused on the effects of the need for satisfaction, autonomy, competence, and relatedness among English as a foreign language (EFL) learners. They wanted to find out whether the basic psychological needs of autonomy, competence, relatedness would predict English as a foreign language online learning satisfaction. The results of multiple regression analyses indicated that autonomy, competence, and relatedness had a positive effect on student satisfaction and success. The three independent variables of competence, relatedness, and autonomy predicted EFL online learner satisfaction in that order. Akbari, Pilot, and Robert-Jan Simons (2015) conducted similar research in a different context. The primary research question was "How can we explain differences between face- to- face group and Facebook group learning a foreign language regarding autonomy, competence, and relatedness?". The results indicated that the students in the Facebook group felt more autonomy, competence, and relatedness than the face- to- face group' students. The strongest predictor of learning outcomes was relatedness, followed by competence.

These two studies found that the three basic psychological needs had been fulfilled to foster students' success, which was different from my study that found only autonomy and competence were predictors. The results were not surprising. The need for relatedness may not be necessary for self-determination motivation (Deci, & Ryan 2000). In fact, early work in self-determination motivation made little references to the role that relatedness plays in Cognitive Evaluation Theory (CET). The reason why the three basic psychological needs could be fulfilled

together might be explained by the influence of the social environment and the interaction of the three needs. The manner in which the three needs interacted is still a topic of discussion.

Research Questions Two and Three

Research questions two and three were answered together, because they examined the relationship between integrative and instrumental motivation in a foreign language with self-determined motivation constructs of autonomy, competence, relatedness, extrinsic and intrinsic motivation, external regulation, and introjected motivation. To find out the relationship between these two theories, a correlation analysis was conducted. The correlation analysis revealed that integrative motivation was related to intrinsic motivation, and instrumental motivation was related to extrinsic motivation. Then, I conducted a regression analysis to test those relationships.

2) Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' integrative motivation in learning a foreign language learning?

3) Do autonomy, competence, relatedness, intrinsic, extrinsic introjected, and extrinsic external regulation predict students' instrumental motivation in learning a foreign language?

The regression analysis was conducted on the self-determination constructs of autonomy, competence, relatedness, intrinsic motivation, extrinsic motivation introjected, external regulation, in which integrative motivation was a dependent variable. The results indicated that integrative motivation was related to intrinsic motivation. There was no relationship between integrative motivation and extrinsic external regulation. The results meant that integrative motivation in foreign language learning was similar to intrinsic motivation in self-determined motivation.

Additionally, a simultaneous multiple linear regression analysis was conducted with autonomy, competence, relatedness, intrinsic motivation, extrinsic motivation introjected, extrinsic motivation external regulation as predictors, and instrumental motivation as a dependent variable. The results indicated that instrumental motivation was related to extrinsic external regulation, extrinsic introjected, and autonomy.

In conclusion, integrative motivation in foreign language learning was the same as intrinsic motivation in self-determination motivation. Instrumental motivation in foreign language motivation was the same as extrinsic external motivation, extrinsic introjected regulation, and autonomy in self-determined motivation.

This result was similar to the study conducted by Noels, Clement, and Pelletier. Noels, Clement, and Pelletier (2001) conducted research in Canadian universities to investigate the relationship between foreign language motivation and self-determined motivation. The results of correlations indicated that integrative motivation correlated most significantly and positively with intrinsic motivation and identified regulation. The results of multiple regression showed that only intrinsic motivation significantly predicted integrative orientation. The results led Noels et al. (2001) to conclude that the integrative orientation was the most similar to intrinsic orientation. The same results had been found by Noels. Noels (2001) found that intrinsic and identified regulation predicted integrative motivation. McEown, Noels, and Saumure (2014) conducted similar research in foreign language learning in Canada. The student was asked to complete a questionnaire survey containing three research questions. The first question was the most important, regarding the relationship among integrative orientation and self-determination constructs by using multiple regression analysis. The results showed that intrinsic motivation predicted integrative orientation, followed by external regulation.

My study was similar to the three previously mentioned studies. The difference was that the autonomy was related to instrumental motivation in foreign language learning. How autonomy was related to instrumental motivation piqued my interest, and I hope to deepen my knowledge in future research by further examining that relationship.

Kan (2001) conducted a study using 234 Korean middle school students by performing correlation analyses to test the difference between foreign language motivation and self-determined motivation in a relationship with achievement across two periods. Results of the study indicated that intrinsic and extrinsic motivation were more related to foreign language achievement than the traditional instrumental and integrative orientation. The author continued by stating a preference to use self-determined motivation to conduct foreign language research for academic achievement, rather than Gardner's Theory of Motivation (Don-Ho Kan, 2001)

I supported this view in the sense that Self-Determination Theory might be a better predictor of academic achievement than Gardner's Theory of Motivation, because the self-determination theory offered different constructs with clear explanations. However, since integrative motivation "reflects a genuine interest in learning the second language to come close to the other language community. At one level, this implies an openness to, and respect for other cultural groups and ways of life" (Gardner 1985, p. 5), the cultural aspect of integrative complemented the self-determined motivation. Both theories were important for foreign language learning.

Research Question 4) Do emotional control, fear of speaking in foreign language, autonomy, competence, relatedness, intrinsic, instrumental, and integrative motivation predict students' perceived success by controlling emotional control and fear of speaking foreign language?

The purpose of this research question was two-fold: First, the study reported the development and validation of a short form of measurement of intercultural communication emotional intelligence scale (ICCEI), which measures students' emotional control and fear of speaking in a foreign language learning. The scale was a new 10-item instrument (based on past research) to assess students' emotional control in Foreign language learning classrooms.

Second, based on the results of the factorial analysis, I conducted a hierarchical multiple linear regression to see if by controlling emotion control scale and fear of speaking in a foreign language, do our predictor variables can still be able to predict a significant amount of variance in perceive success. The terms emotional intelligence, emotional control, and self-control were used interchangeability. Results indicated that the emotional control and fear of speaking predicted students' perceived success. However, fear of speaking was not significant at the second step when added autonomy, competence, and relatedness. The key finding for this research question showed that as students' control their emotions, students' autonomy, competence, and integrative motivation increase. This led to students' success in a foreign language learning classroom

The first finding in my study was that emotional control improved students' autonomy competence, and perceived success. That said, students who control their emotions are motivated to use problem-solving strategies, such as confidence, and persistently to complete difficult tasks to fulfill intrinsic motivation. It was also assumed that students with negative emotions tend to regard emotional control as unimportant; they are less motivated and less persistent in overcoming the adversity they might encounter. This view had been confirmed by Pekrun (2006) who noted,

> "emotion can induce and modulate students' interest and motivation to learn. Activating positive emotions, such as enjoyment of learning are assumed to strengthen intrinsic and extrinsic motivation, and deactivating negative emotion, such as boredom and hopelessness, one held to be detrimental. (p. 326).

Emotional control is a method for improving autonomy and competence. Since the scale was new, little research had been carried out about its effect on students' motivation and achievement. Nonetheless, the results of my study were similar to previous research that demonstrated that emotional control improved students' motivation and achievement. For instance, Arguedas, Daradoumis, and Xhafa (2016) conducted research to see the effects of emotional awareness on students' motivation. The terms emotional awareness and emotional control (or intelligence) were used interchangeably. The results indicated that students who control their emotions showed a high level of motivation. Students who displayed positive emotions such as joy, maintained strong concentration to a given task. Conversely, students who did not control their emotion would lose motivation to continue their activities.

The second finding in this study was that emotional control improved students' integrative motivation and perceived success. Since "integrative motivation involves emotional identification with another cultural group" (Gardner, 2001 p.5), emotional control became an important strategy to improve integrative motivation and achievement. Emotional control was tied to the work of Krashen's Affective Theory, as well as Vygotsky's Theory of Connection. Language acquisition is a social act that involves connection with yourself, people around you, and people around the world. According to these theories, the factors affecting our interpretation of a situation should be filtering before entering our memory (Krashen, 1982). The filtering in

this situation was emotional control. Through emotional control, a person would be able to develop integrative motivation.

Furthermore, emotional control was also tied to behaviorism theory. According to behaviorism theory, learning is a permanent change in behavior, emphasizing the effects of external events on the students. The external condition in this context was the person's behavior toward other cultural groups. The behavior could be changed or modified through emotional control. Change in behavior would help the student to be more at ease with people from different cultures. It would also enable the student to understand foreign arts and literature and help to converse with varied people which characterized the integrative motivation.

A similar study was carried out to investigate if emotional intelligence would affect students' motivation and achievement in learning English as a foreign language. The correlational results indicated that there were significant correlations between emotional intelligence and skills such as motivation and academic success (Zarezadeh, 2013). Similar findings came from Kumar, Mehta, and Maheshwari's (2013) study to measure the effects of students' emotional intelligence on students' achievement. The researchers found a significant effect on students' achievement motivation. Additionally, Oz, Demirezen, and Pourfeiz (2015) conducted similar research by investigating the relationships among emotional intelligence, attitudes toward English as a foreign language learning, and success. The results of the study indicated that there was a relationship between students'emotional intelligence and a satisfactory level of the attitude toward foreign language learning. These authors stated that "students were able to control and regulate their emotions and are less influenced by negative factors such as frustration, anxiety, anger, worry, sadness, insecurity, nervousness, and boredom in their attitudes toward learning" (Oz et al., p. 421).

The findings of the the previously mentioned studies corroborated with my study by emphasizing the importance of emotional intelligence (control) on student motivation and achievement. One difference was that the other studies did not take into consideration the various types of motivation that were improved by the emotional control. In my study, integrative, autonomy, and competence were specified. Also, emotional control had been defined in different ways, such as emotional awareness, self-control, and emotional intelligence. All of these terms were used interchangeably. It led to the conclusion that emotional control was an important factor for improving students' motivation and success in learning a foreign language. The teacher could address the students' intrinsic and integrative motivation, as well as perceived success by teaching students how to control their emotions.

In my study, students reported the following strategies that they have used to improve their motivation and perceived success in foreign language learning: 1) when interacting with people from different cultures, I try to understand them through verbal and non-verbal communication, 2) I have the patience to deal with second language learners, and 3) I can settle things quickly after an argument. These strategies support the idea from intercultural communication emotional intelligence (ICCEI) that, students would control their emotions and adjust to others' cultural norms, customs, and social systems. The emotional control would allow all participants in the communication process to overcome obstacles by trying to understand people from different cultures through verbal and non-verbal communication. Cultural differences in the use verbal and non-verbal channels produced uncertainty; thus, participants needed a patience to overcome ethnocentrism. If teachers did not accept the role of the emotion as a reality, teachers could effectively work with students. If this relation had been fostered, thus, this could facilitate success.

My finding was also aligned with the results of several previous studies concerning a strategy used to cope with fear (MacIntyre, 2002; Goleman, 2001; Xiao, 2012). For example, Xiao (2012) examined the strategies used by students when they have a fear of foreign language speaking. Interviews took place over a period of three months. Students were asked if there were times when they felt anxious and what strategies they used to cope with anxiety when it arose. The results of the analysis indicated that all of the students reported that they felt anxiety most of the time while learning a language. For example, one of the students reported that:

"I used to get nervous and stammer when asked to make a presentation in the tutorial. Consequently, I tried some strategies to ease my anxiety such as: I talked to myself in English when alone. I went to the English corner, and I forced myself to think in English. These strategies have worked, and I can express myself orally with confidence. Some of the unsuccessful students reported that: they took no measure to address their problems. Some of them stated that I will go to sleep when I am weighed down by learning difficulties" (Xiao, 2012, p. 130). Many students reported varying coping strategies, yet some of them responded they did not take any action. Learning about emotional control could help students to cope with their fears.

A similar study was conducted by Manzouri and Movahed (2017) to explore the relationships among emotional intelligence, English learning anxiety, and students' achievement in Iran. Results indicated a negative correlation between emotional control and language anxiety; as emotional control increased, anxiety decreased.

Bora (2012) conducted a study to investigate the relationship between emotional intelligence and students' perceptions toward speaking in the language classroom. Results indicated that students with a high level of emotional intelligence were comfortable to speak

without fear, while students with a low level of emotional intelligence did not have the confidence to speak.

Training college students to control their emotions was essential to develop motivation and perceived success. By using emotional control, they would feel relaxed and secure to express themselves orally.

Research Question 5: Does fear predicted students' intrinsic motivation and students' perceived success in foreign language learning?

A simple linear regression analysis was conducted, in which fear was a predictor and intrinsic motivation and perceived success were the dependent variables. The results indicated that fear had a significant negative effect on students' intrinsic motivation and perceived success. The regression analysis indicated that as fear increased, students' intrinsic and perceive success decreased.

Fear of speaking in a foreign language could decrease students' intrinsic motivation and create a negative effect on students' success; thus, high motivation and low fear were needed for students learning a foreign language be successful. Gardner and MacIntyre (1993) also stated that high levels of fear or anxiety tend to reduce proficiency. Consequently, teachers should foster confidence in the students to reduce fear and anxiety. Krashen (1982) noticed that fear was an affective filter that prevented students from receiving input, yet low levels of fear with emotional control could produce positive effects on learners' success.

My findings were consistent with previous studies that demonstrated that language anxiety was negatively correlated with language achievement (MacIntyre, Noels, Clements, 1997; Horwitz, 2001; MacIntyre, 1999, Wu & Lin, 2014). Wu and Lin (2014) examined whether anxiety about speaking in a foreign language mediated the relationship between motivation and

willingness to communicate toward students' learning and success. The results of the analysis showed that fear was negatively correlated with students' motivation and willingness to communicate in a foreign language learning classroom. Similarly, Amiri (2015) examined the relationship between English learning anxiety and the students' achievement in English as a foreign language in a different context. Findings showed that all components of fear, including communication anxiety, fear of negative evaluation, test anxiety, the anxiety of English class, and English classroom anxiety, significantly and negatively correlated with students' achievement.

Since the researches above were consistent with the present study, teachers should prevent student fear by maximizing positive expectations. Teachers must also explore possible strategies to teach every student, because each student displays fear differently. To have the correct method for the student, the teacher needs to have the patience to monitor the students' progress and help with difficulties.

Another key finding of this study was that the majority of students reported that "they are always worrying about making a mistake when speaking in foreign language." In this case, how a teacher responds to students' mistakes was an important factor in creating a sense of confidence for students. The teacher should be very careful about the methods he or she would use to correct the students, so that the teacher would not make the learners feel frustrated, upset, and uneasy. The method used to correct students' errors should not affect or cut off students' motivation to take the risk of speaking the target language. The methods should be flexible, depending on the student's learning styles, the subject, and the student's level. The teacher would also respond positively to students' incorrect responses or lack of response. If the students feel that in spite of their errors or lack of information, the teacher keeps supporting them by

helping them to answer another easy question, they would feel accepted and would have a sense of safety.

Some of the students also reported that, " I feel my heart beating very fast when I am about to speak in a foreign language." The heart beating could release hormones that were not good for students. Students might also display sweating and increased rate of breathing. The fear could go away if the students feel comfortable. Thus, teachers could create a welcoming learning environment, where students were prepared in advance to give a speech in the classroom. Calling out students learning a foreign language to speak without preparation could result in anxiety and increased heart rate. Similar findings came from Cohen and Norst's (1989) study of the effects of language learning anxiety on student achievement. The result of their study indicated that students expressed their fear when they were about to speak in front of the class. Students expressed words such as embarrassment, trauma, frightening, frustration, and heart beating heavily. In this case, the teacher could teach students how to control those fears by using different learning strategies.

Several studies demonstrated that a small amount of fear could be a facilitator for better success. However, a higher level of fear could cause poor performance as well (Stipeck, 1988, Scovel, 1991). Zhan (2000) compared lower level fear and higher level fear by making the distinction between facilitating and debilitating anxiety. Facilitating anxiety was the form of low level anxiety, while debilitating anxiety was the higher form of anxiety. A high level of anxiety could cause students to lose concentration on a task, the student might become so fearful of speaking poorly in front of the class. Conversely, students with facilitating anxiety approached the task with more confidence and little fear for completing difficult tasks (Zhan, 2000).

Brown (2000) also made a distinction between debilitative and facilitative anxiety. He indicated that debilitative anxiety was harmful, while facilitative anxiety was helpful. The regression analysis in my study also demonstrated that fear had negative effects on students' motivation and perceived success. These findings could be interpreted as small amounts of fear improving motivation and achievement, and higher amounts of fear decreasing motivation and achievement. We could link low fear and higher fear from my study to debilitative and facilitative anxiety. Youn (1991) demonstrated that student's with low self-perceived ability are likely to experience fear; therefore, teachers should help students to develop higher self-esteem by controlling their emotions.

Limitations

First, the study used a survey to collect students' perceptions of motivations and foreign language learning strategies. The study could be strengthened by also surveying teachers to gain a more comprehensive understanding of motivation support and strategies teachers used to improve students' motivation and achievement.

Second, the study used a cross-sectional collection of data, administering the survey at only one-time point. Adding a longitudinal component to this study would collect data at multiple points would help to examine the evolution of students' perceptions of motivation and achievement

Third, the type of sampling used in this study was convenient not a random sampling. It was limited to two universities and students from courses in the departments of foreign language learning. In addition, all ethnic groups were not represented equally. The majority of the students were White, with other races represented being Asian, Black, and Native Americans. Therefore, the findings could not be generalized to other populations. Since the research was conducted in

two Midwestern Universities in the North Dakota Universities system and the choice of these universities was based on sampling technique, the results could not be applicable to other geographical locations or other schools accross the entire country.

Fourth, the present study used only quantitative research methods. To further understand the phenomena and perceptions of participants, qualitative methods, such as participant observations and interviews, would be implemented. Future research could employ a mixed methods approach, leveraging the strengths of both quantitative and qualitative methodologies. For example, Dincer and Yesilyurt (2017) conducted mixed methods to investigate the relationship between English as a foreign language learners'motivation to speak, autonomy support from the teachers. Their mixed methods approach garndered consistent results.

The fifth limitation involved students' perceived success. This study used students' perceived success instead of students' examination scores or final grade point average (GPA). Even though students' perceived success positively related to academic success, students' perception of success does not always correlate with final GPA. Grade point average appeared to be a significant predictor of students' success based on the comprehensive examination. Onwuegbuzie, Baily, and Daley (2000) conducted a study with grade point average (GPA) at the end of the class. They found that expectation of foreign language achieving, perceived intellectual ability, and perceived competence were correlated with foreign language achievement (GPA); however, GPA was the best predictor of foreign language achievement, as compared to perceived success.

Finally, the study design was cross-sectional, in order to examine the relationships between foreign language motivation, self-determination motivation, and the strategies used to

improve motivation and achievement. However, there were many conflicting terms used to express those relationships such as impact, related, correlation, and predict.

Implications

First, while autonomy was an important need for self-determination, it alone was not a powerful influence to predict student achievement. Competence and autonomy were both important variables for the development of intrinsic motivation, and these two needs lead to students' academic success. Consequently, it became clear that promoting self-determination was the avenue to attaining success in foreign language learning. Promoting self-determined motivation in foreign language learning would be given high priority in the foreign language education department. Teachers could help to improve students' autonomy in this context by allowing them to make important decisions. For example, when learners feel a sense of choice in foreign language learning, it increased student autonomy to achieve their goals, leading to intrinsic motivation and success.

Second, regarding the relationship between the foreign language motivation and self-determined motivation, the finding of my study supported the Self-Determination Theory and Gardner's Integrative and Instrumental Motivation Theory. The two theories complemented each other. My findings demonstrated that the student could improve motivation through the two perspectives and researchers could use both theories to conduct foreign language motivation research.

Third, emotional control predicted students' success. For this reason, language teachers would teach students how to control their emotions. In addition, by increasing students' emotional control, their autonomy, competence, and integrative motivation, as well as perceived

success would increase. Consequently, teachers ought to design multiple emotional control interventions to improve students' motivation and achievement

Training college students to control their emotions would help students to avoid conflict in the classroom. Unless teachers were equipped to teach these skills to students, the problem of intrinsic and integrative motivation might be worsened in schools with an adverse effect on society. I recommended that the curriculum be designed with time allotted for teachers to discuss these issues with students. It was also important also to create a program that promotes emotional intelligence or control.

According to my study, the fear of speaking in a foreign language had a positive and negative effect on students' motivation and success; thus, it is important for teachers to create an environment that keeps fear low.

The teacher would also stop paying attention to near-native speaker pronunciation as a strategy to alleviate the fear of speaking in the foreign language. Teachers could address the students' feelings of discomfort and assist them to achieve success in foreign language learning environment. Teachers need some specific training in psychology to deal with anxiety. Familiarity with the students' background could also assist the teacher to understand the anxiety behavior of some students.

Direction for Future Research

Future research would take into consideration teachers' perceptions about motivation and achievement, as well as how they support students' learning. The present study focused on students' perceptions, and adding teachers' perceptions would strengthen future studies.

If I had a chance to conduct similar research, I would use the present study in a different setting to include different universities (more than two universities), to broaden our knowledge

about student motivation and achievement, and compare the results with the present study. The different ethnic groups would also be taken into consideration, as well as how students motivation varied across gender and age. Also, future research would include students' examination scores (Final GPA) instead of students' perceived success.

Future research would also incorporate more quantitative and qualitative research methods. The quantitative research methods would include the confirmatory factor analysis to test the present variables, in addition to a path analysis. Using Structural Equation Modeling would provide a clear statistical fit of the model. It would be important to investigate the relationship between autonomy and instrumental motivation in more depth in future research.

The degree to which the relatedness could be fulfilled was roughly tied to the quality of the classroom environment. A positive learning environment helps students to stay connected and to be involved both academically and socially. A negative environment would undermine students' need for relatedness. Therefore, future research would focus on the classroom environment that supports relatedness and autonomy.

The Intercultural Communication Emotional Intelligence (ICCEI) scale of fear and emotional control was newly created. Future research would test the ICCEI in different contexts to see its validity and reliability. It is also essential to determine whether or not the ICCEI is effective across different samples and groups (e.g., age, gender).

Summary

One of my study's main contributions to the literature was that autonomy and competence predicted students' intrinsic motivation and perceived success. It became clear that promoting self-determination was the best way to attain success in foreign language learning. The study also demonstrated that there were correlations among foreign language motivation,

self-determination variables, and achievement. Gardner's Motivation Theory and Deci and Ryan's Self-Determination Theory influenced language learning motivation and achievement. Findings from my study also indicated that the emotional control improved students' motivation and perceived success in learning a foreign language. The autonomy competence, and integrative motivation contributed a significant amount of variance in students' perceived success.

The results indicated that fear of speaking in a foreign language would hinder students' development of communicative competence in the foreign language classroom; therefore, emotional control was needed to decrease fear so that students could succeed. Teachers ought to create welcoming environments that provide clear guidelines and multiple opportunities for students to succeed, including students from culturally diverse backgrounds.

Based on the analysis of how my students had been motivated by grades, which were external motivators, my results showed that more internal flexibility would be given to students for their self-determined motivation rather than focusing on external behavior. Learner's autonomy was one of the internal flexibilities. It would be given some consideration in the development of self-determined motivation. It was not a matter of providing unlimited students' freedom, but a way to create their learning environments so that they might take responsibility for their learning.

APPENDICES

Appendix A: Scale
Survey Design Codebook

The data described in this codebook examined the relationship between motivational orientation, self-regulation learning and classroom academic performance for undergraduate college students at the western University.

Instructions to participants: Please take a minute to complete the survey below. The purpose of this survey is to understand student types of motivation to learn Foreign Language and the learning strategy they have used so far. This may help a researcher and teacher understand how to better facilitate learning. We appreciate your time and willingness to make the school system better.

DEMOGRAPHIC VARIABLES

This study will investigate the nature of motivation among students learning foreign language and what kinds of strategies students use to improve their foreign language motivation and achievement.

1. **Ethnicity**

_____Hispanic or Latino or Spanish origin
_____Not Hispanic or Latino or Spanish origin

2. **Race**

_____White
_____Hispanic/ Latino
_____Black/African American
_____Native American/American
_____Asian
_____Other

3. **Age**_____

4. **Gender**

____Male

____Female

____Transgender

5. Is English your first Language?
_____Yes
_____No

6.How many languages do you speak?_____

In what language class are you currently enrolled?

_____French
_____Spanish
_____German
_____Chinese
_____Norwegian
_____Other

Current level

_____Freshman

_____ Sophomore

_____Junior

_____Senior

AUTONOMY SATISFACTION

The following questions concern your feelings about your foreign language learning during the past 3 months. Please, indicate how much you agree with each of the following statements given your experiences in your foreign language classes.

Please read each item carefully and respond to it as honestly as you can.

AUTONOMY SATISFACTION

Strongly agree	**Agree**	**Neutral**	**Somewhat disagree**	**Strongly disagree**
5	**4**	**3**	**2**	**1**

Time 1	**Items**
1	In the classroom, I feel a sense of choice and freedom in the things I undertake
2	I feel that my decisions in the classroom reflect what I really want.
3	I feel my choices in the classroom express who I really am.
4	I feel I have been doing what really interests me in my classroom.

COMPETENCE SATISFACTION

Strongly agree	**Agree**	**Neutral**	**Somewhat disagree**	**Strongly disagree**
5	**4**	**3**	**2**	**1**

Time 1	**Items**
1	I feel confident that I can do things well in my class.
2	In the classroom, I feel capable of what I do.
3	When I am in class, I feel competent to achieve my goals.
4	In my class, I feel I can successfully complete difficult tasks.

RELATEDNESS SATISFACTION

Strongly agree 5	Agree 4	Neutral 3	Somewhat disagree 2	Strongly disagree 1

Time 1	Items
1	I feel that the people I care about in the classroom also care about me.
2	I feel connected with people who care for me in the classroom, and for whom I care in the classroom.
3	In the classroom, I feel close and connected with other people who are important to me.
4	I experience a warm feeling for the people I spend time with in the classroom.

Intrinsic Motivation- To know

Strongly agree 5	Agree 4	Neutral 3	Somewhat disagree 2	Strongly disagree 1

Time 1	Items
1	Because I experience pleasure and satisfaction while learning.
2	For the pleasure I experience when I discover new things never seen before.
3	For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.
4	Because my studies allow me to continue to learn about many things that interest me.

Extrinsic Motivation – Introjected

Strongly agree 5	Agree 4	Neutral 3	Somewhat disagree 2	Strongly disagree 1

Time 1	Items
1	To prove to myself that I am capable of completing my college degree.
2	Because of the fact that when I succeed in college I feel important.
3	To show myself that I am an intelligent person.
4	Because I want to show myself that I can succeed in my studies.

Extrinsic Motivation –external regulation

Strongly agree	Agree	Neutral	Somewhat disagree	Strongly disagree
5	4	3	2	1

Time 1	Items
1	Because with only a high-school degree I would not find a high-paying job later on.
2	In order to obtain a more prestigious job later on.
3	Because I want to have “the good life” later on.
4	In order to have a better salary later on.

AMOTIVATION

Strongly agree	Agree	Neutral	Somewhat disagree	Strongly disagree
5	4	3	2	1

Time 1	Items
1	Honestly, I don’t know; I really feel that I am wasting my time in school.
2	I once had good reasons for going college; however, now I wonder whether I should continue.
3	I can’t see why I go to college and frankly, I couldn’t care less.
4	I don’t know; I can’t understand what I am doing in school.

Foreign Language Motivation

Using the scale below, indicate to what extent each of the following items presently corresponds to one of the reasons why you are learning foreign language.

INTEGRATIVE MOTIVATION

Strongly agree	Agree	Neutral	Somewhat disagree	Strongly disagree
5	4	3	2	1

Time 1	Items
1	It will help me to be more at ease with foreign people.
2	It should enable me to meet and converse with varied people.
3	It should help me understand foreign peoples' arts and literature.

INSTRUMENTAL MOTIVATION

Strongly agree	Agree	Neutral	Somewhat disagree	Strongly disagree
5	4	3	2	1

Time 1	Items
1	I study a foreign language as I need it for my future career.
2	I study a foreign language as it helps me to get a good job.
3	I study a foreign language as others respect me more.

Fear of speaking a foreign language.

Please rate each of the statements below by circling the appropriate option based on how you express your fear while speaking in the foreign language. Please read each item carefully and respond to it as honestly as you can.

Strongly agree 5	Agree 4	Neutral 3	Somewhat disagree 2	Strongly disagree 1

Time 1	Items
1	I am always worrying about making a mistake when speaking in foreign language.
2	I want to overcome fear of speaking in foreign language.
3	I feel my heart beating very fast when I am about to speak in foreign language.
4	I have an upset feeling when the teacher always speaks in foreign language.
5	I am afraid the other students will laugh at me when I speak in foreign language.

LEARNING STRATEGY

The following questions concern your strategy use in foreign language classes to improve your motivation and achievement. Please indicate how much you agree with each of the following statements given your experiences. Please read each item carefully and respond to it as honestly as you can.

1. Emotional Intelligence/ Control

Strongly agree 5	Agree 4	Neutral 3	Somewhat disagree 2	Strongly disagree 1

Time 1	Items
1	I control my emotions even during a difficult learning situation.
2	When interacting with people from different cultures, I try to understand them through verbal and non-verbal communication.
3	I have patience to deal with second language learners.
4	I can settle things quickly after an argument
5	If someone insults me about how i speak a foreign language, I manage to remain calm

Appendix B
Additional Figures

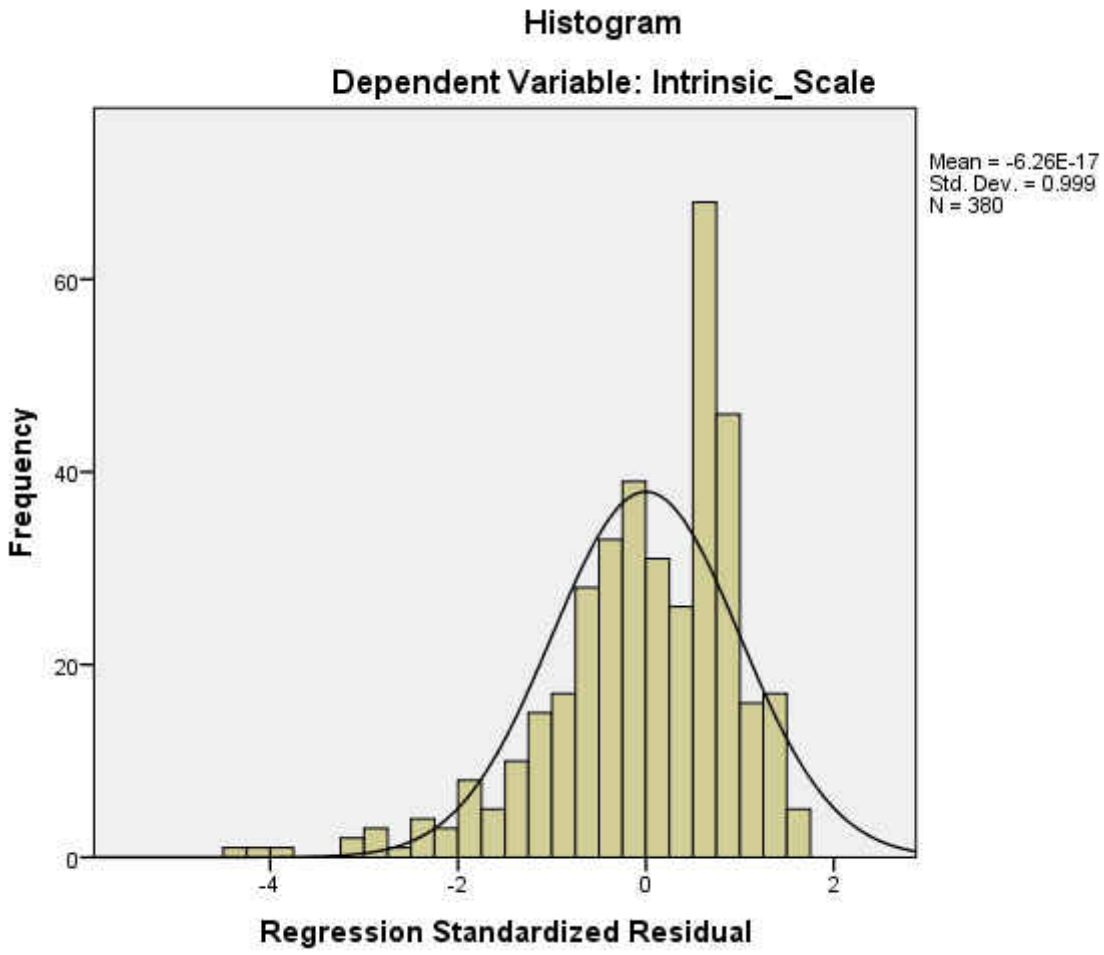

Figure 2. Histogram on intrinsic motivation as the dependent variable

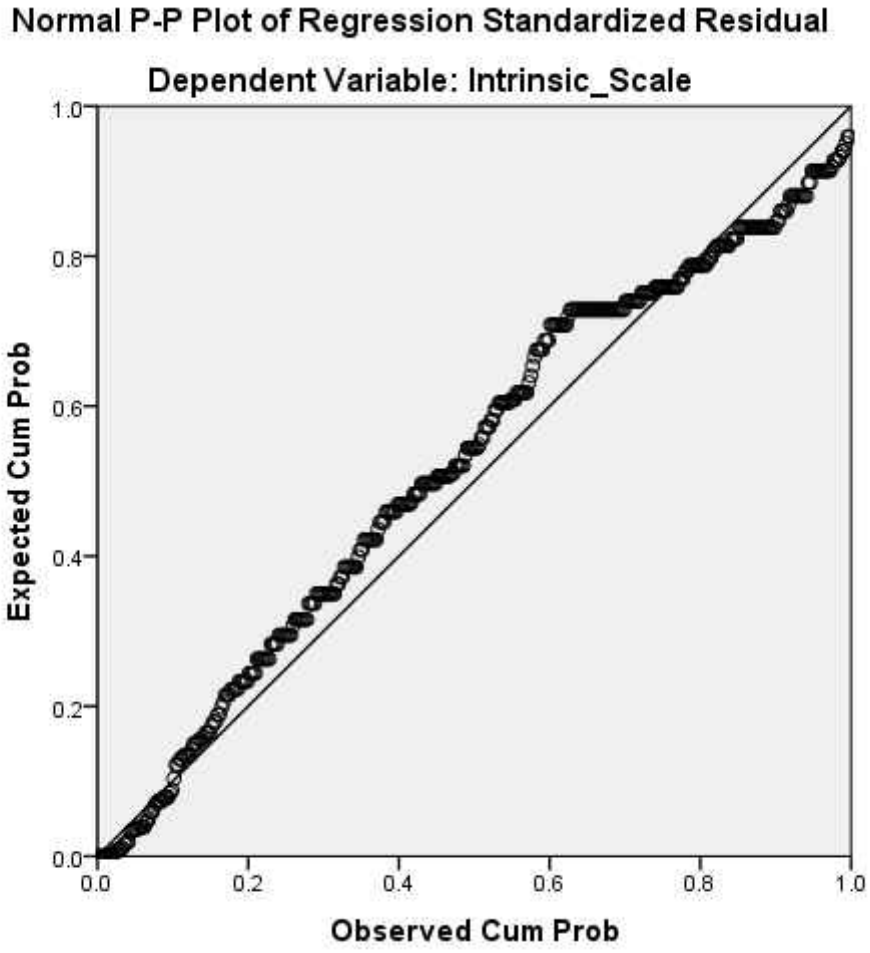

Figure 3. Normal P.P Plot (probability plot) regression on intrinsic motivation

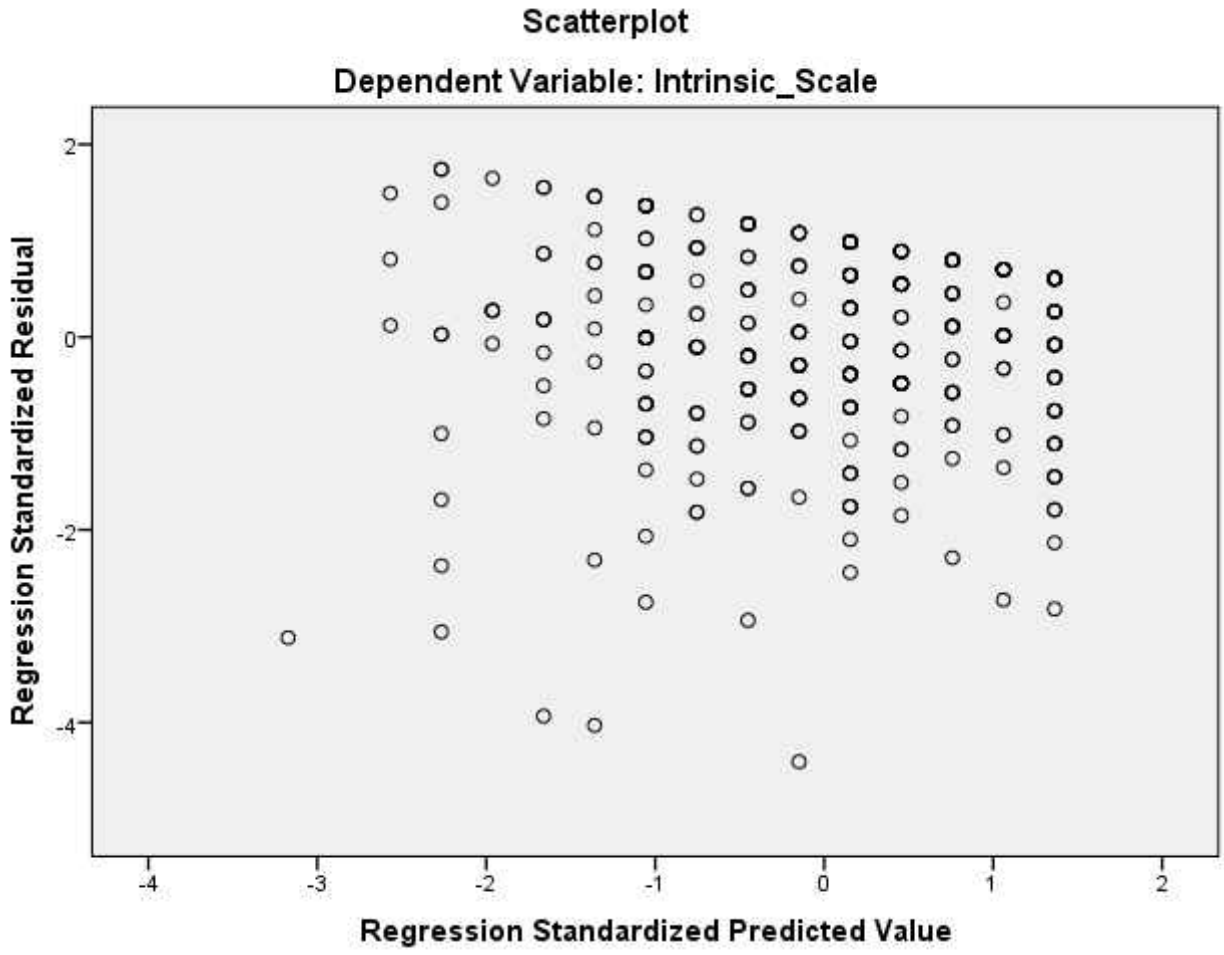

Figure 4. Scatterplot dependent variable intrinsic scale

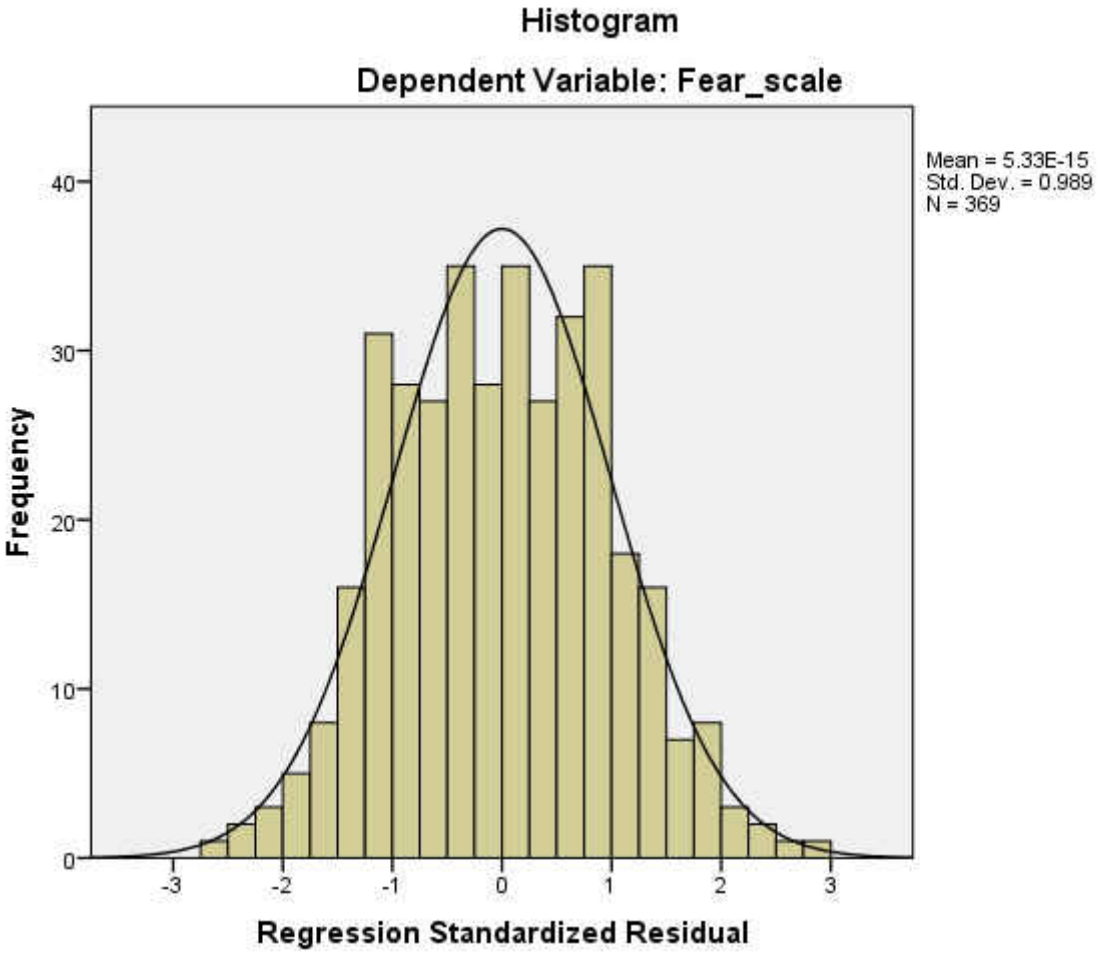

Figure 5. Histogram on fear scale

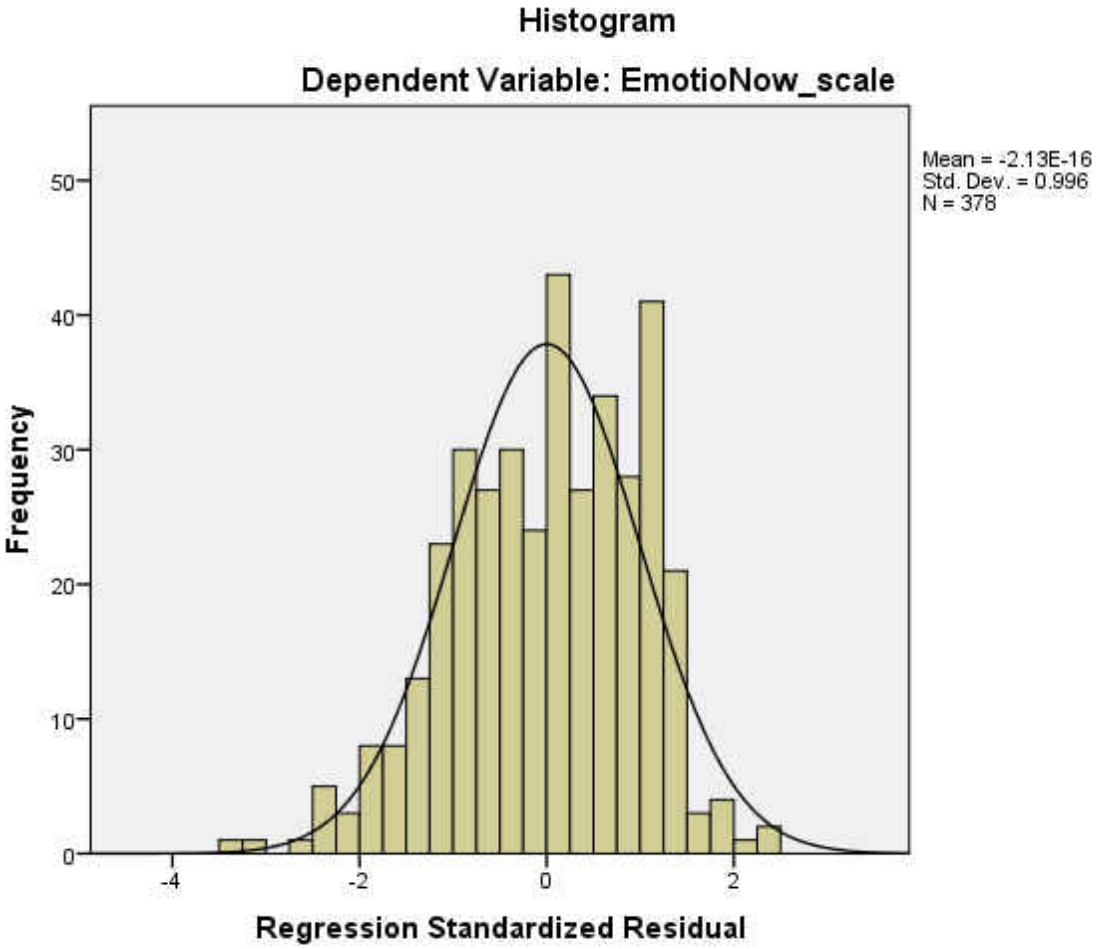

Figure 6. Histogram on emotional control

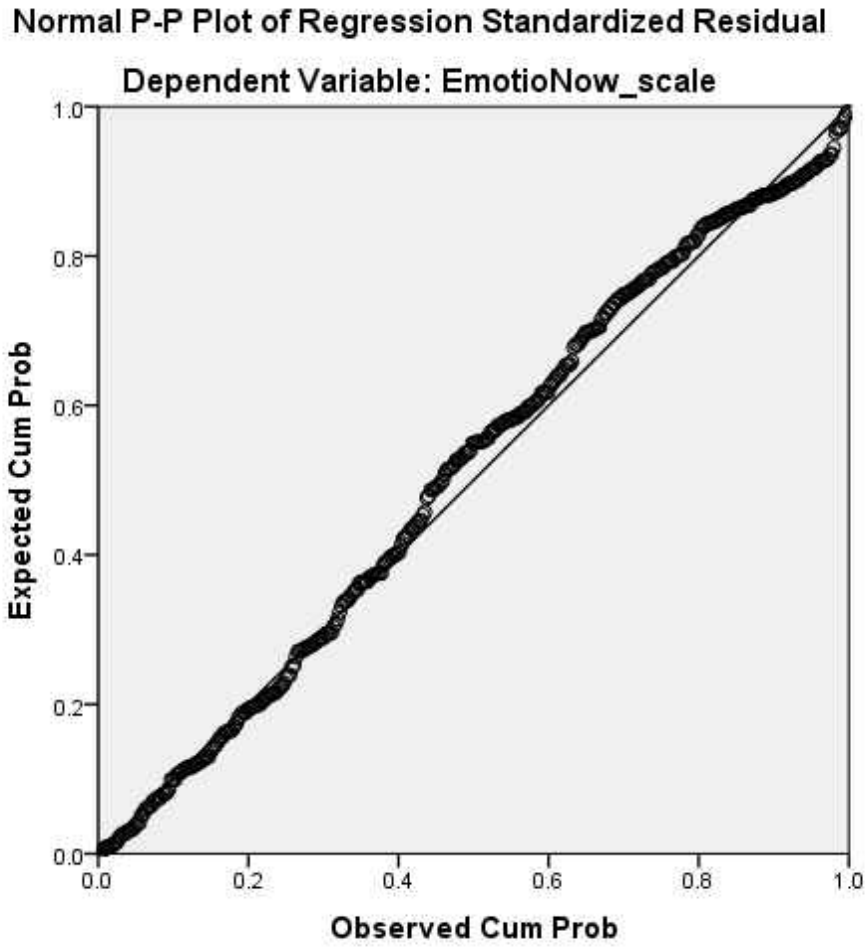

Figure 7. Normal P. P. Plot (probability plot) regression on emotional control

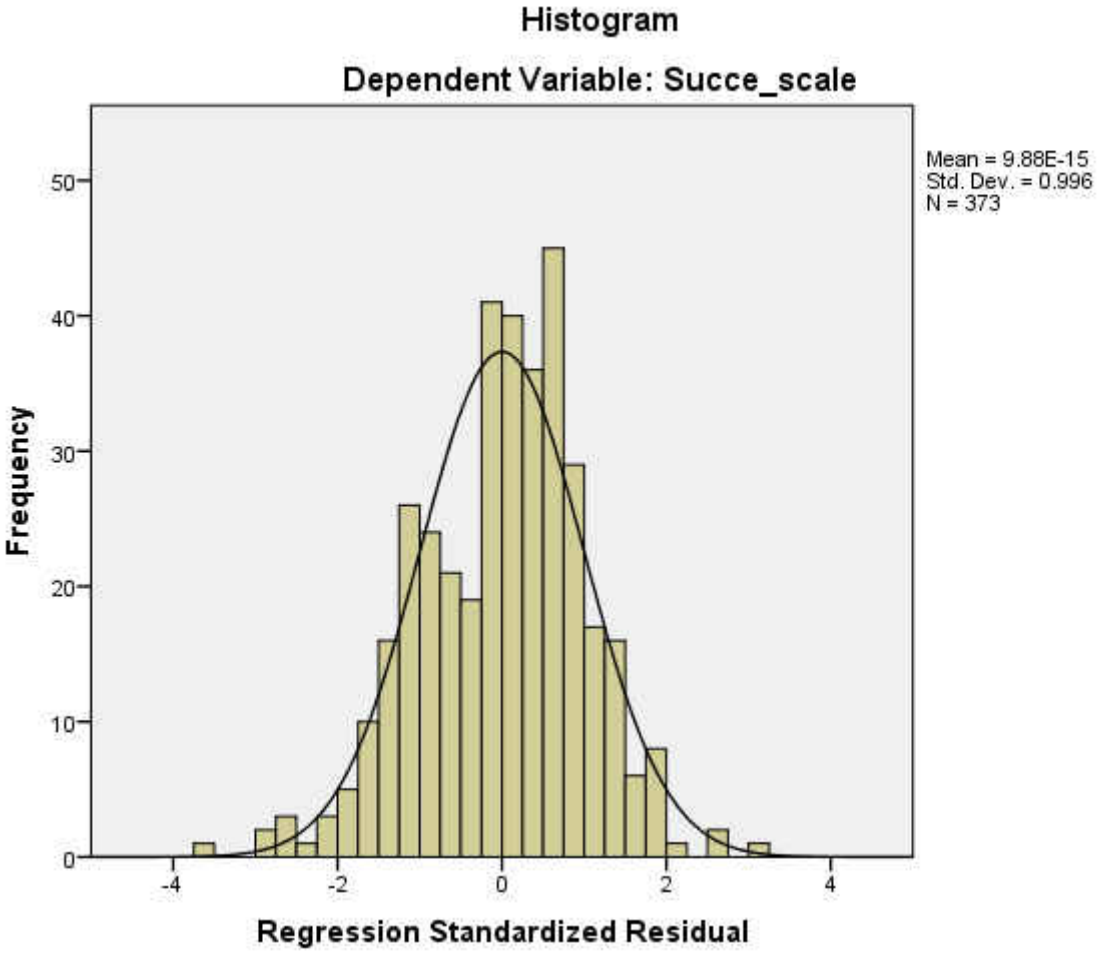

Figure 8. Histogram on success

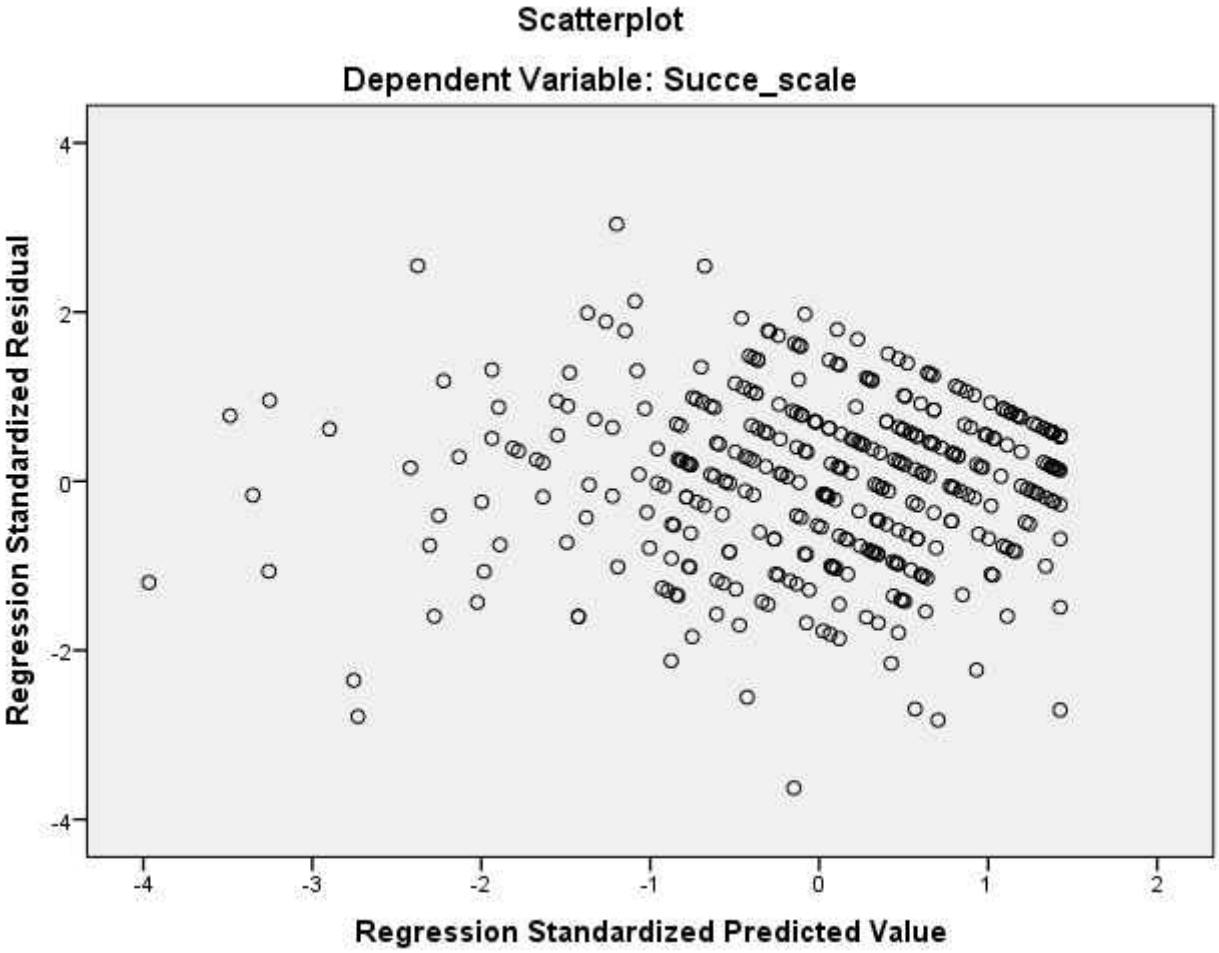

Figure 9. Scatter plot on success

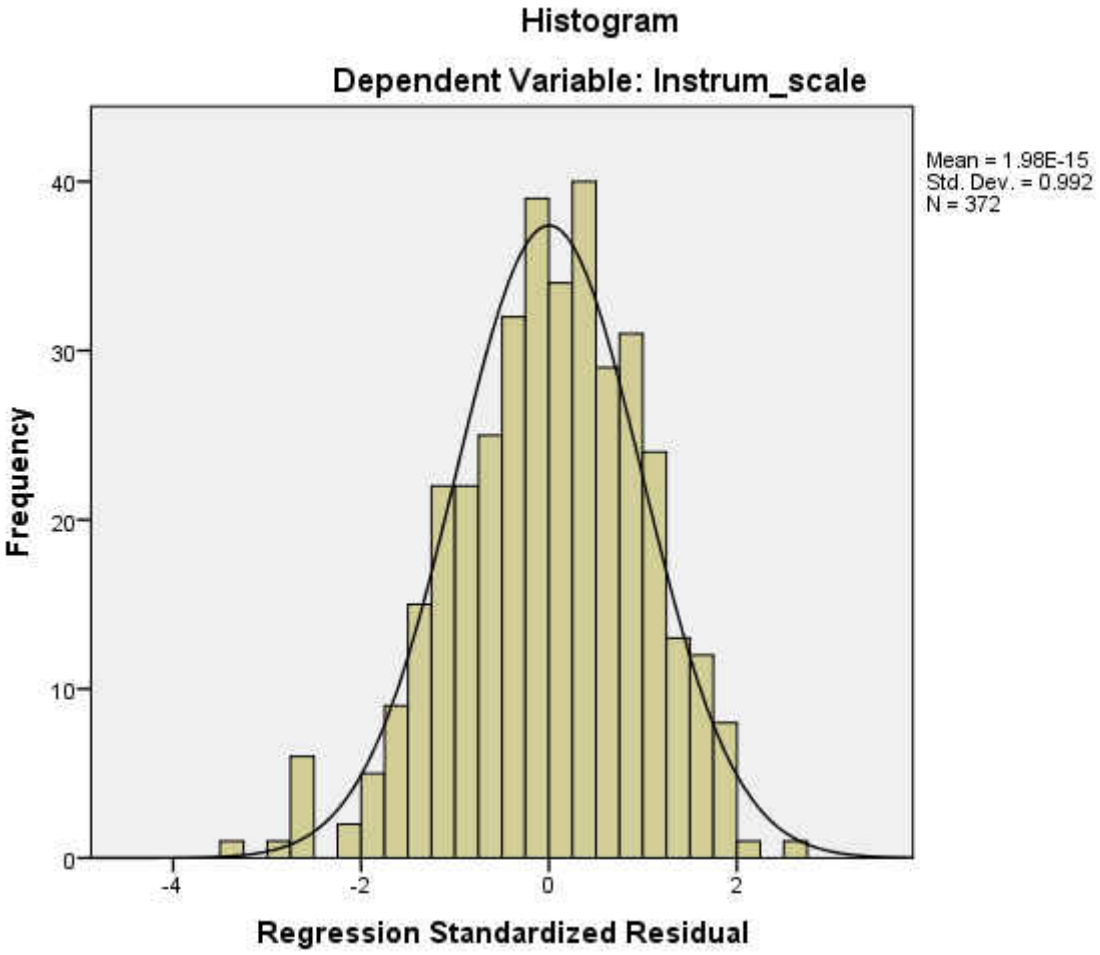

Figure 10. Histogram on instrumental motivation

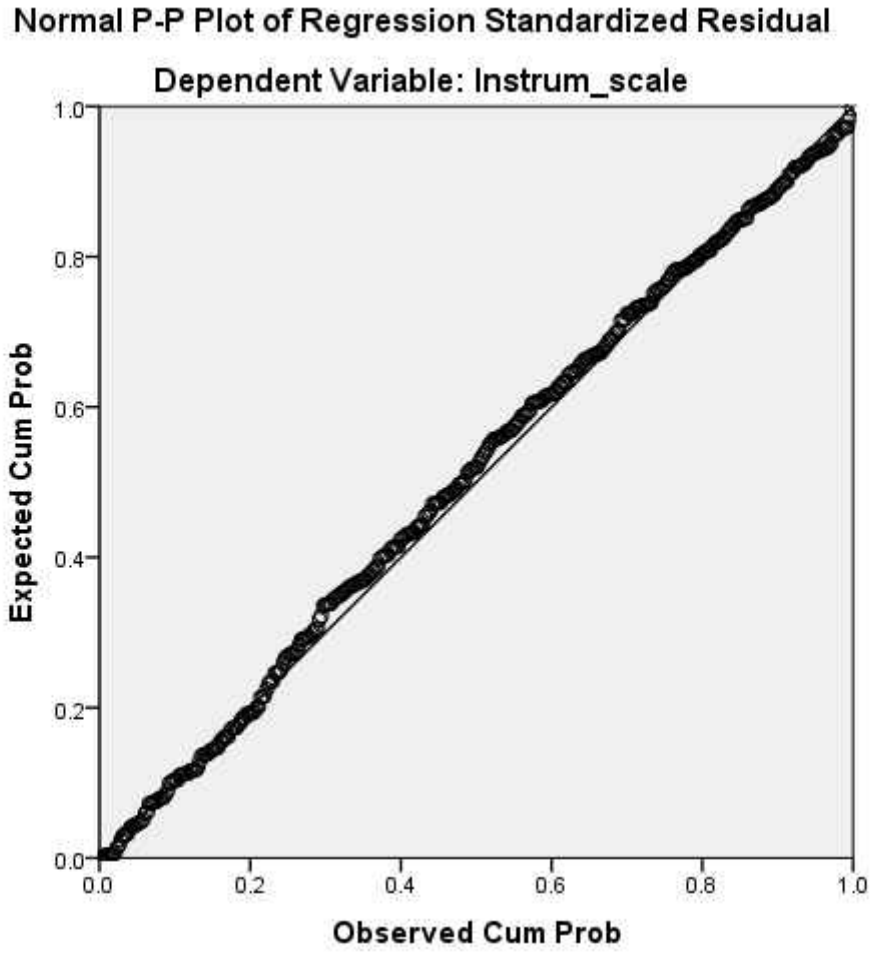

Figure 11. Normal P. P. Plot regression on instrumental motivation

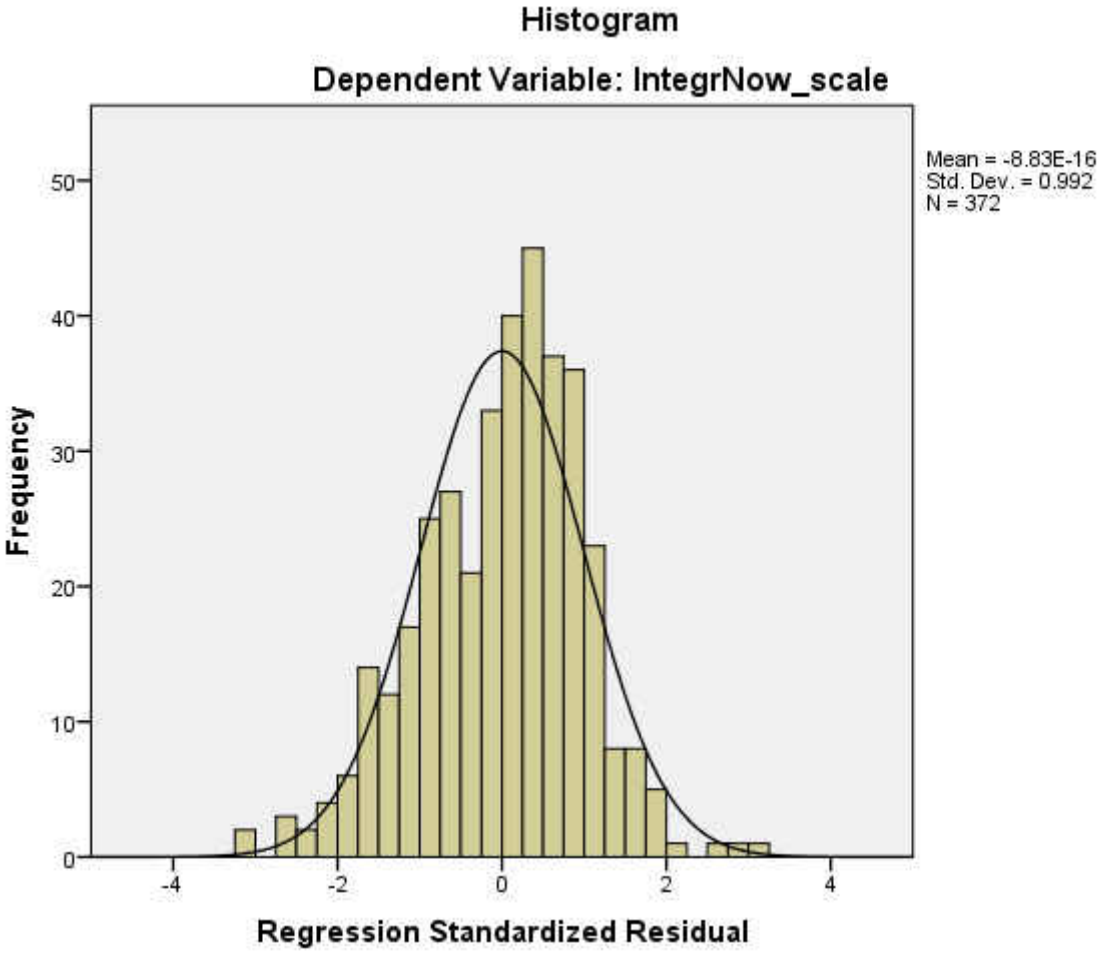

Figure 12. Histogram on integrative motivation

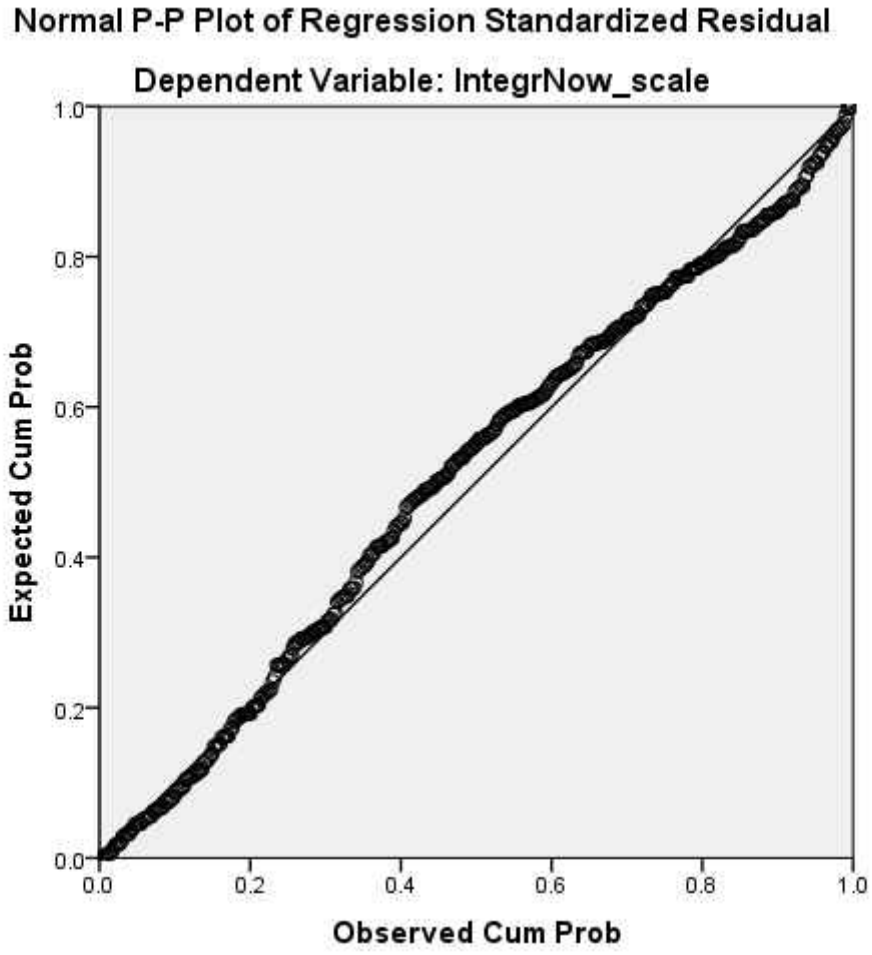

Figure 13. Normal P. P. Plot regression on integrative Motivation

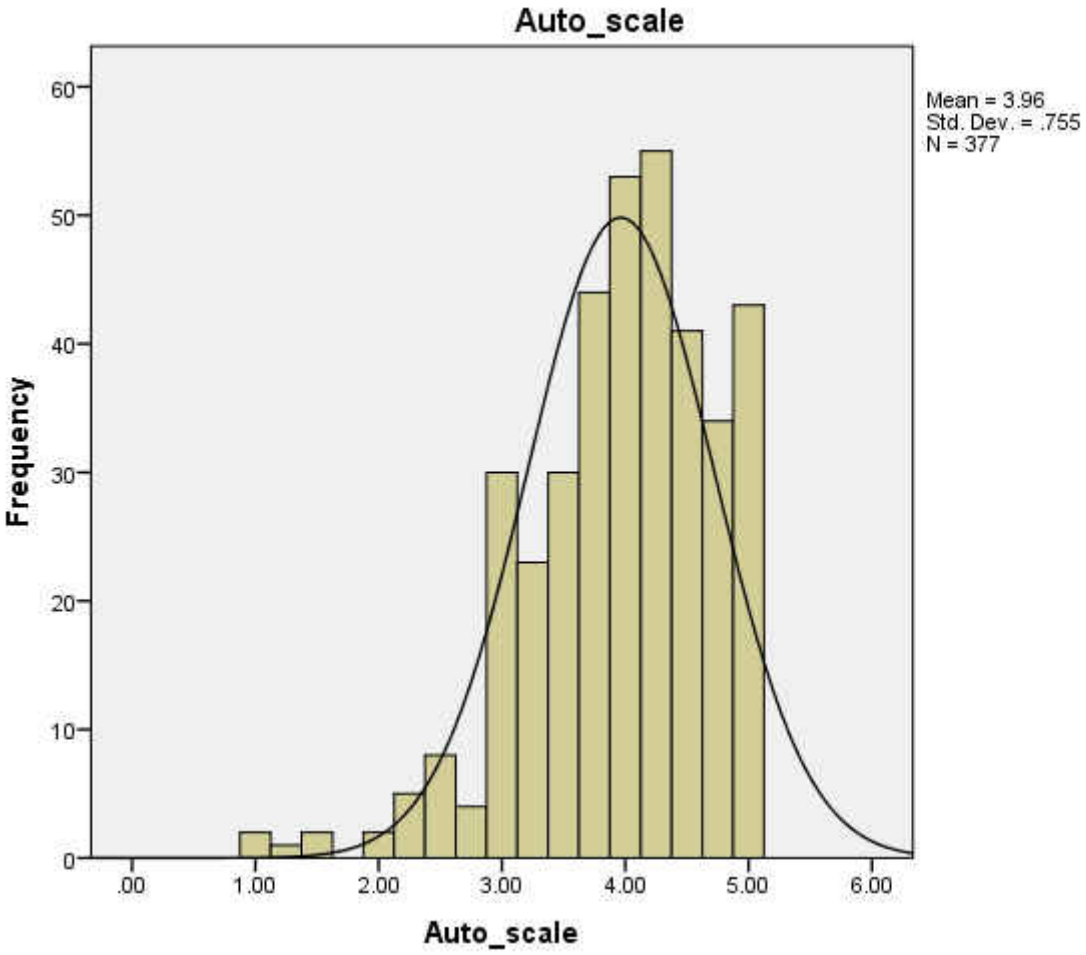

Figure 14. Histogram on autonomy scale

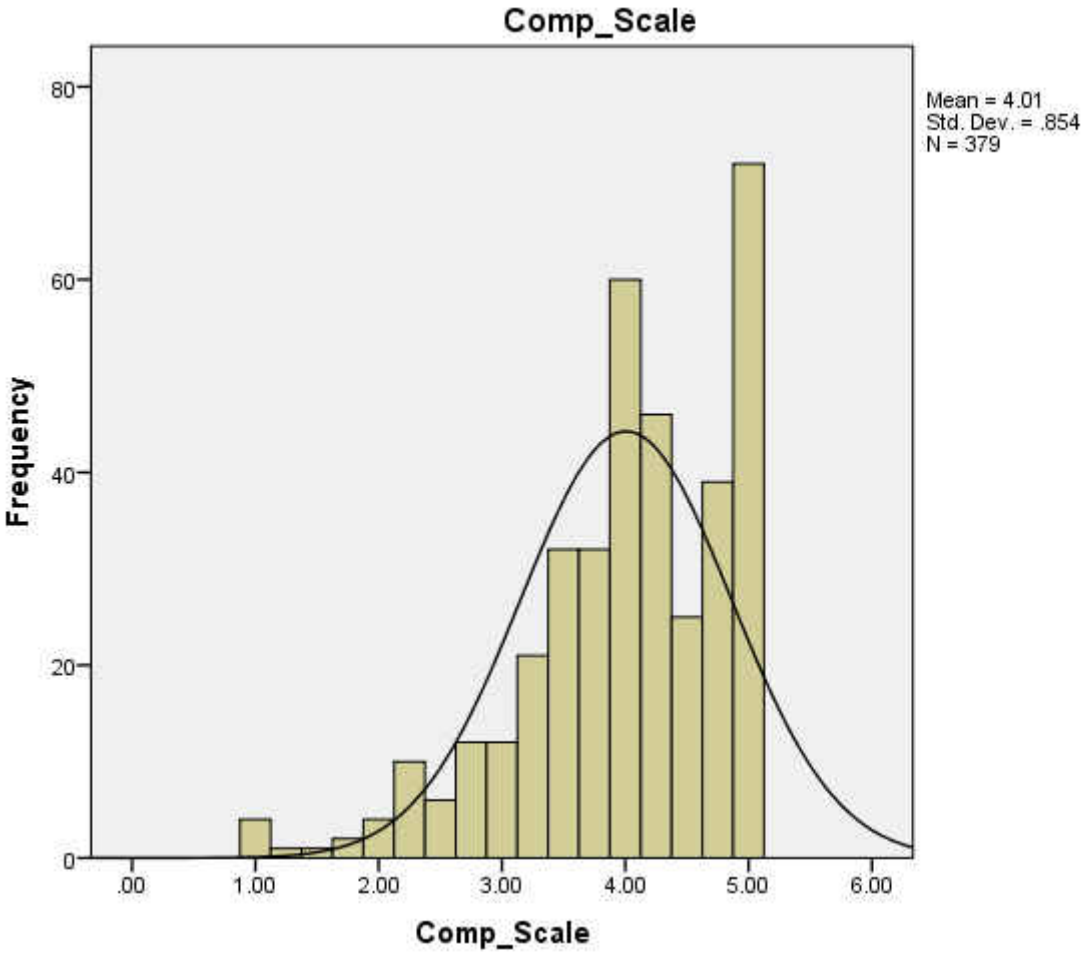

Figure 15. Histogram on competence scale

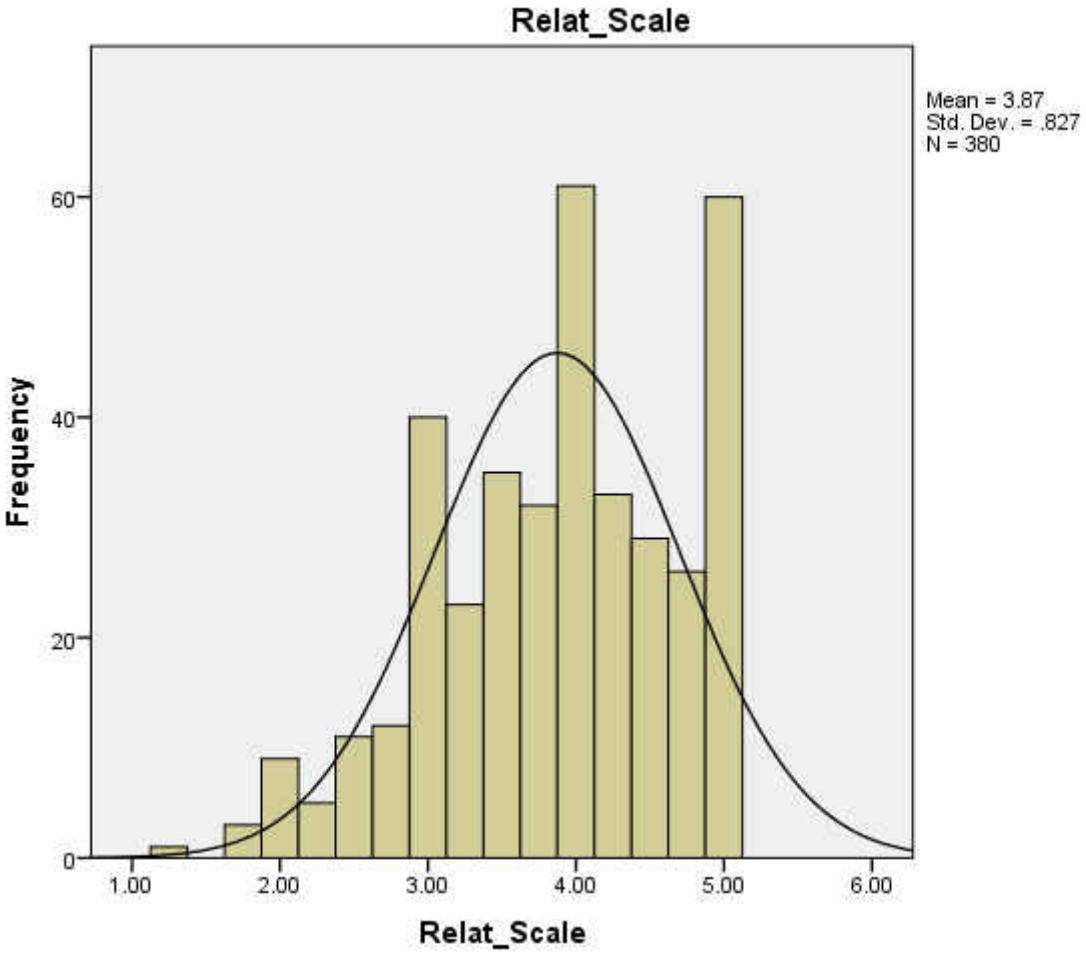

Figure 16. Histogram on relatedness scale

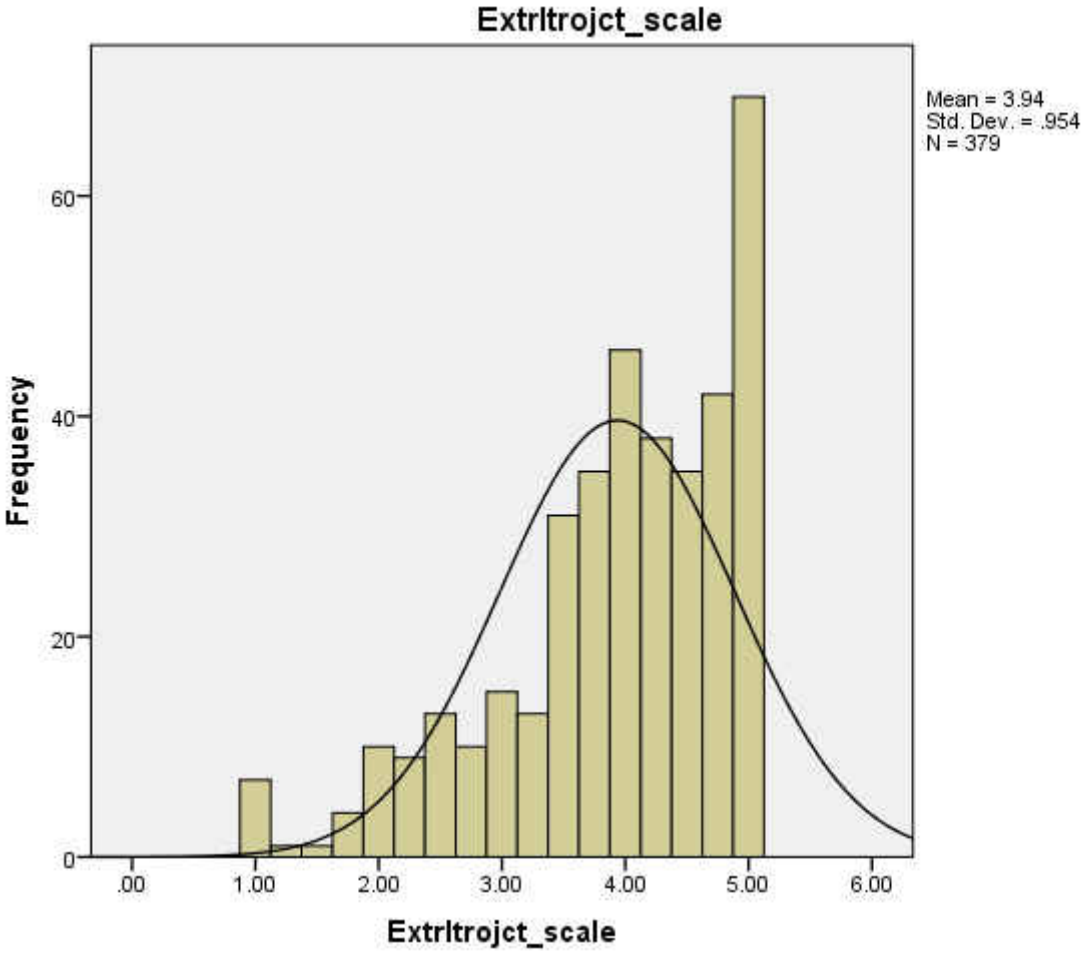

Figure 17. Histogram on introjected scale

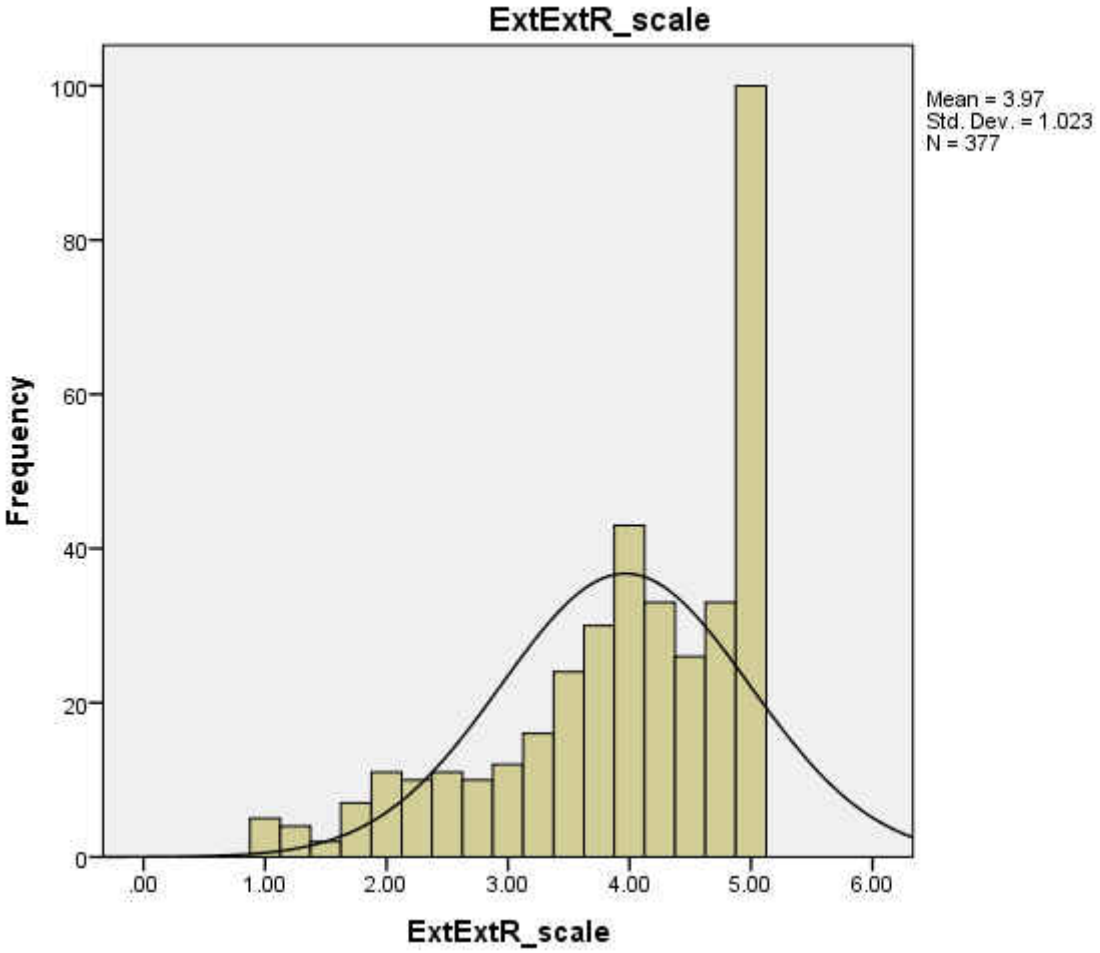

Figure 18. Histogram on external scale

Appendix C
IRB Approval Form

UNIVERSITY OF NORTH DAKOTA
DIVISION OF RESEARCH & ECONOMIC DEVELOPMENT

UND.edu

Institutional Review Board
Twamley Hall, Room 106
264 Centennial Dr Stop 7134
Grand Forks, ND 58202-7134
Phone: 701.777.4279
Fax: 701.777.6708
Email: UND.irb@research.UND.edu

January 16, 2018

Principal Investigators:	Yawo Badagbo
Project Title:	Self-determined Motivation in Foreign Language Learning: Examining the Effects on Students' Achievement
IRB Project Number:	IRB-201801-173
Project Review Level:	Exempt 2
Date of IRB Approval:	01/16/2018
Expiration Date of This Approval:	01/15/2021

The application form and all included documentation for the above-referenced project have been reviewed and approved via the procedures of the University of North Dakota Institutional Review Board.

Attached is your original informed consent statement that has been stamped with the UND IRB approval and expiration dates. Please maintain this original on file. You must use this original, stamped consent form to make copies for participants. No other consent form should be used, and no signatures should be obtained from participants. Each participant must be given a copy of the informed consent statement to keep for their records.

If you need to make changes to your research, you must submit a Protocol Change Request Form to the IRB for approval. No changes to approved research may take place without prior IRB approval.

This project has been approved for 3 years, as permitted by UND IRB policies for exempt research. You have approval for this project through the above-listed expiration date. When this research is completed, please submit a Termination Form to the IRB.

The forms to assist you in filing your project termination, adverse event/unanticipated problem, protocol change, etc. may be accessed on the IRB website: http://und.edu/research/resources/human-subjects/

Sincerely,

Michelle L. Bowles, M.P.A., CIP
IRB Manager

MLB/sb

Enclosure

Cc: Robert Stupnisky, Ph.D. (w/o attachment)

UNIVERSITY OF NORTH DAKOTA
Institutional Review Board: Informed Consent Statement

Project: Self-determined Motivation in Foreign Language Learning: Examining the Effects on Students' Achievement
Principal Investigator: Yawo Badagbo, yawo.badagbo@ndus.edu
Advisor: Dr. Robert Stupnisky, Robert.Stupnisky@und.edu

Purpose of the Study:
The purpose of this research study is to examine the relationship between foreign language motivation and self-determination motivation, as well as the issue of students' perceptions of strategies used to improve foreign language motivation and achievement among undergraduate students in the department of foreign language.

Procedures:
Participants are asked to complete a survey measuring students degree of motivation and strategies used to succeed in foreign language classroom. The questionnaire will take approximately 15 minutes.

Risks:
There are no risks in participating in this research beyond those experienced in everyday life. Some of the questions are personal and might cause discomfort. If you would like to talk to someone about your feelings regarding this study, you are encouraged to contact The University of North Dakota's Counseling Center at 701-777-2127 which provides counseling services to UND students at no charge. If the participants are not UND students, you may contact NDSU Counseling Center at 701-231-7671.

Benefits:
Participants may benefit by learning more about their motivation and realizing that others have had similar experiences. This research might also provide a better understanding of how strategy of learning affect college students' motivation and achievement. This information could help plan programs, or make student services better. This information might assist students in getting used to college life.

Statement of Confidentiality:
The survey does not ask for any information that would identify who the responses belong to; therefore, your responses are anonymous. If this research is published, no information that would identify you will be included since your name is in no way linked to your responses. All survey responses that we receive will be treated confidentially and stored on a secure server

Right to Ask Questions:
The researchers conducting this study are Yawo Badagbo (yawo.badagbo@ndus.edu) and his advisor Dr. Robert Stupnisky (Robert.Stupnisky@und.edu). You may ask any questions you have prior to, during, or after survey completion. If you later have questions, concerns, or complaints about the research please contact the name above during the day.

If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at (701) 777-4279. You may also call this number with problems, complaints, or concerns about the research. Please call this number if you cannot reach research staff, or you wish to talk with someone who is an informed individual who is independent of the research team. General information about being a research subject can be found on the Institutional Review Board website "Information for Research Participants"
http://und.edu/research/resources/human-subjects/research-participants.cfm

Compensation:
You will not receive compensation for your participation. You may withdraw from the study at any time without losing any course points that may be assigned by your instructor.

Voluntary Participation:
You do not have to participate in this research. You can stop your participation at any time. You may refuse to participate or choose to discontinue participation at any time without losing any benefits to which you are otherwise entitled. You do not have to answer any questions you do not want to answer. You must be 18 years of age older to participate in this research study. Completion of the survey implies that you have read the information in this form and consent to participate in the research.

Thank you very much for participating in this survey.
Sincerely, Yawo Badagbo

1

Approval Date: JAN 16 2018
Expiration Date: JAN 15 2021
University of North Dakota IRB

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