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Self-efficacy of College Intermediate French Students: Relation to Achievement and Motivation

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The objective of this investigation was to examine the influence of self-efficacy and other motivational self-beliefs on the achievement of college intermediate French students ($N = 303$). Self-efficacy for self-regulation was a stronger predictor of intermediate French language achievement than were self-efficacy to obtain grades in French, French anxiety in reading and listening, and French learning self-concept. Students who perceived themselves as capable of using effective metacognitive strategies to monitor their academic work time effectively were more apt to experience academic success in intermediate French. Female students reported greater self-efficacy for self-regulation, interest, value, and enjoyment in learning about both the French language and culture than did male students, despite the fact that men and women had similar achievement. Findings are interpreted from the perspective of Bandura's (1986) social cognitive theory as it related to foreign language motivation and learning.

Keywords self-efficacy; motivation; intermediate language learners; achievement; self-efficacy for self-regulation; anxiety; self-concept; perceived value; learning strategies

Three decades of research findings amply support the contention that students' self-efficacy beliefs—the judgments they hold about their capability to organize and execute the courses of action required to master academic tasks—powerfully affect their academic performance in various ways. Students with a strong sense of academic self-efficacy willingly undertake challenging tasks,

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expend greater effort, show increased persistence in the presence of obstacles, demonstrate lower anxiety levels, display flexibility in the use of learning strategies, demonstrate accurate self-evaluation of their academic performance and greater intrinsic interest in scholastic matters, and self-regulate better than other students. As a consequence, they attain higher intellectual achievement (see Bandura, 1997; Pajares & Urdan, 2006). Conversely, students with low self-efficacy prefer to complete only uncomplicated academic tasks to which they apply minimal effort and limited persistence or they might choose to entirely avoid the completion of an academic assignment. For these reasons, self-efficacy beliefs are often said to be better predictors of academic success than are actual abilities (Bandura).

Foreign language (FL) motivation research has also been a productive field of study within second language (L2) research (Dörnyei, 2005). The initial impetus in L2 motivation research was during the social psychological period (1959–1990) in which Gardner and his associates maintained that students' attitudes toward the foreign culture, cultural stereotypes, and geopolitical considerations would likely influence their language success (Gardner, 1985). During the 1990s, FL motivation research moved to the cognitive-situated period, which drew on cognitive theories in educational psychology. During this period, FL researchers began to address the neglect of theories of motivation from educational psychology. Emphasizing this disregard in FL motivation research, Dörnyei (1994) stated that "the last fifteen years have brought along a major shift in mainstream psychological and educational psychological theories of motivation, which could and should be reflected in second language motivation theories as well" (p. 516). Theories of motivation from educational psychology were then introduced into L2 research. FL motivational psychologists argued that one's perceptions of one's abilities, possibilities, and past performances were crucial aspects of motivation and it was at this juncture that the cognitively defined construct of self-efficacy received increasing attention.

The purpose of the present study was to determine whether students' self-efficacy beliefs to achieve a given grade in college intermediate-level French will make an independent contribution to the prediction of the final grade in an intermediate-level French course when other motivational variables are controlled. These controlled motivational variables include French anxiety (listening and reading) and perceived value of language and culture. In addition, French learning self-concept and self-efficacy for self-regulation, variables widely researched in educational psychology, are also included in this study. All motivational variables are described in detail below.

Review of Literature

Social Cognitive Theory and Self-efficacy

Bandura's (1986, 1997) social cognitive theory is a theory of human functioning that subscribes to the notion that humans can regulate their behavior. Individuals possess a system of self-beliefs that enables them to exercise control over their thoughts, feelings, and actions. According to this theory of human behavior and motivation, "what people think, believe, and feel affects how they behave" (Bandura, 1986, p. 25). At the heart of Bandura's (1986) social cognitive theory is the emphasis on "triadic reciprocity" or the interplay among personal, behavioral, and environmental influences. According to this theory, an individual's behavior is determined by the interplay of these three factors. Consequences of a behavior are then used to form expectations of future behavior. Individuals, therefore, make choices and choose their course of action, self-examine the adequacy of their behavior and interpret the outcomes, develop beliefs about their capabilities, and, finally, mentally store this information to be used as a guide for future behavior. Bandura (1997) considered the practice of self-reflection to be the most influential arbiter of human agency. Through this process of reflective self-examination, individuals evaluate the adequacy of their thoughts, behavior, and motivation and alter their thinking and subsequent behavior accordingly.

Social cognitive theory stresses the influential role of self-efficacy beliefs on human behavior. Beliefs of personal efficacy are not dependent on one's abilities but, instead, on what one *believes* might be accomplished with one's personal skill set. Thus, self-efficacy beliefs are often better predictors of success than are prior accomplishments, skills, or knowledge (Bandura, 1997). Such beliefs influence individuals' pursued courses of action, effort expended in given endeavors, persistence in the confrontation of obstacles, and resilience to adversity. Self-efficacious individuals will therefore approach challenges with the intention and anticipation of mastery, intensifying their efforts and persistence accordingly. These individuals rapidly recover their lowered sense of efficacy after enduring failure or difficulty, and attribute failure to insufficient effort or deficient knowledge. According to Bandura, people's beliefs of personal efficacy "affect almost everything they do; how they think, motivate themselves, feel, and behave" (p. 19).

Self-efficacy and the Intermediate Level of College French

The intermediate level of college FL study provides issues in college students' perception of self, as the level has long been considered problematic in terms of overarching goals and continuity with the elementary and advanced levels (Henning, 2002). Enrolling in the intermediate level from varying academic

backgrounds, intermediate French students often become discouraged, develop negative attitudes, and discontinue French study. Harlow and Muyskens (1994) attributed these negative outcomes and attrition to the level's difficulty and/or to French students' experience of boredom as a result of the course's review of elementary material. Intermediate French students' beliefs of personal competence might affect their choice to continue studying French and, ultimately, their choice of a career involving FLs.

Gender and Self-efficacy

In the area of FLs, some L2 acquisition research also suggests that gender is a factor affecting FL performance and motivation (Onwuegbuzie, Bailey, & Daley, 2001; Oxford, 1993; Schmidt, Boraie, & Kassagby, 1996). Onwuegbuzie et al. (2001) suggested that a "female oriented foreign language culture" (p. 12) might exist in which men might perceive FL study as a feminine domain and thus feel less comfortable in the language learning context. Schmidt et al.'s (1996) study of English as a foreign language students suggested that gender differences in motivation might be linked to differences in achievement with their finding that females were generally more intrinsically motivated to study English than men. Men, expressing more extrinsically defined reasons for studying the FL, achieved lower than females. Wright (1999) found significant differences in attitude toward French between female and male FL students, with female students showing more positive attitudes in every case. Gender emerged as the strongest predictor of attitude in the factors "attitudes toward speaking French," "desire to learn about France," and "perceptions of the French character." Oxford and Shearin (1994) suggested that such disparity could be a result of the highly social process of FL learning that motivates females to achieve in FL courses.

Gender has also been a focus of self-efficacy research in other academic domains. Researchers in the academic areas of science and mathematics have reported gender differences in self-efficacy, namely that male students tend to be more confident in their math and science abilities than are female students (see Pajares, 2002). Conversely, female students typically report stronger self-efficacy in language arts (see Pajares & Vaiente, 2006).

Self-efficacy and Academic Achievement

Self-efficacy beliefs have also been found to have a relationship to the academic achievement of both men and women. In a meta-analysis of self-efficacy research published between 1977 and 1988, Multon, Brown, and Lent (1991) found a positive relationship between efficacy beliefs and academic achievement

in over a decade of published research. Graham and Weiner's (1996) review of motivational research revealed similar results with their finding that self-efficacy more consistently predicted academic performance than other motivational constructs. Such research findings indicate the strong influence of students' perceptions of academic potential on academic behaviors and performance.

Self-efficacy and Foreign Languages

In the field of FLs, studies of self-confidence, perceived competence, and self-assessment have been conducted. Research in the area of *self-assessment* in language learning grew out of an interest in the area of autonomous learning or learner independence (Patri, 2002). Self-assessment is often evaluated through journal entries of learners' perception of their linguistic progress and their perceived level of mastery of the content covered in class. Self-assessment differs from self-efficacy in that it often evaluates individuals' assessment of their abilities *after* they have completed a particular activity or task. Evaluation of self-efficacy beliefs most often occurs prior to the activity or task at hand and is used as a predictor of future performance.

Self-confidence studies have also been the object of FL research (Clément, Dörnyei, & Noels, 1994; MacIntyre, Dörnyei, Clément, & Noels, 1998; Noels, Pon, & Clément, 1996). Clément's theory of linguistic self-confidence, grounded within social psychology, defines self-confidence as "self-perceptions of communicative competence and concomitant low levels of anxiety in using the second language" (Noels et al., p. 248). Previous research has found that self-confidence is indicative of a greater identification with the target culture (Noels et al.), linguistic acculturation (Dion, Dion, & Pak, 1990), and lower levels of anxiety (Cheng, Horwitz, & Schallert, 1999; Clément et al.; MacIntyre, Noels, & Clément, 1997).

Although seemingly akin to self-efficacy, self-confidence measures are derived from the "quality and quantity of the contact between the members of the first language (L1) and L2 community" (Dörnyei, 2005, p. 73). Thus, linguistic confidence is a key factor in one's ability to learn a L2, seek intercultural communication, and ultimately identify with the foreign culture. Differing from self-efficacy, which is a cognitively defined construct, self-confidence is a socially defined construct (Dörnyei).

In addition, MacIntyre and his associates evaluated language learners' confidence beliefs using a construct called *perceived competence* (Baker & MacIntyre, 2000; MacIntyre & Charos, 1996; MacIntyre, Clément, & Donovan, 2002; MacIntyre et al., 1997). Perceived competence, a construct embedded within the sociocontextual model, might be defined as the individual's

perception of his/her ability to “properly process information in such a way that communicative behaviors occur in some orderly rule governed way” (Baker & MacIntyre, 2003, p. 70). Perceived competence research has focused largely on individuals’ perception of their communicative competence and the relation to their willingness to communicate orally in the target culture. From this research, perceived competence has been found to be negatively associated with language anxiety and positively associated with language learners’ willingness to communicate (Baker & MacIntyre, 2000; MacIntyre et al., 1998).

Research has also been conducted on self-efficacy in language learning (Cheng, 2002; Huang & Chang, 1998; Huang, Lloyd, & Mikulecy, 1999; Mori, 2002; National Capital Language Resource Center, 2000). However, in certain self-efficacy investigations in the field of FLs, measurement issues exist. In an analysis of FL writing anxiety and its relationship to FL writing self-efficacy, for example, Cheng asked his participants to “rate their English writing ability” with one item on a 5-point Likert-type scale from 1 (not proficient at all) to 5 (very proficient). Although results revealed that individuals’ self-perceptions of confidence in English writing explained the largest amount of variance in L2 writing anxiety (34%), this finding was based on a broad and generalized one-item self-efficacy measure.

In other cases, self-efficacy items were combined with items measuring other constructs (Mori, 2002). For instance, Mori combined measures of students’ perceived value of reading and information about previous reading achievement within her FL reading self-efficacy items. For example, the item “I liked reading classes at junior and senior high schools” questions more the students’ interest, enjoyment, and perceived value in FL reading than perceived reading competence. In addition, Mori’s item “My grades for English reading classes at junior and senior high schools were not very good” asks students to report information about previous grades as opposed to their self-perception of reading competence. Self-efficacy for FL reading might result from perceived high or low achievement on previous FL reading assignments; however, this item does evaluate students’ sense of efficacy for FL reading.

Self-efficacy and Other Motivational Variables

Motivation constructs other than self-efficacy, such as self-concept, anxiety, perceived value, and self-efficacy for self-regulation, have also been found to predict academic performance. Despite the role of these motivational constructs in the prediction of academic performance, however, social cognitive theorists maintain that self-efficacy has been shown to have stronger direct effects on performance than these motivational variables (Bandura, 1997; Pajares & Urdan,

2006). Using multiple regression analyses, this research is designed to evaluate the relationship between self-efficacy and achievement while controlling for these motivational variables. A description of the motivational variables follows.

French learning self-concept describes how individuals generally feel about themselves as French students. French learning self-concept beliefs are descriptive judgments of one's perceived self as a French student. Self-concept has been shown to influence academic outcomes in various domains (Skaalvik, 1997). Some researchers believe there to be a moderate and positive association among self-concept and measures of performance and achievement (Byrne & Worth Gavin, 1996; Hattie, 1992) and others have found self-concept to be strongly associated with the constructs of anxiety, intrinsic motivation, and value (Pajares, Miller, & Johnson, 1999; Pajares & Valiante, 1999). Self-efficacy, however, has been shown to have stronger direct effects on performance than self-concept in various academic domains (Pajares, 1996).

French anxiety in reading and listening is the state of anticipatory apprehension related to listening and reading in French. Bandura (1997) defined anxiety as "a state of anticipatory apprehension over possible deleterious happenings" (p. 137). Individuals experiencing anxiety embody apprehension and avoidant behavior that often interfere with performance in everyday life as well as in academic situations. In social cognitive theory, however, one's perceived sense of efficacy to exercise control over potentially problematic situations plays a key role in the arousal of student anxiety. Those with a stronger sense of efficacy are more apt to take on the "deleterious happenings" that breed stress with positive expectations and are often more successful in transforming them into positive events.

It is important to note that participants in the present study were only asked to evaluate their anxiety related to reading and listening tasks. Although we acknowledge that writing and speaking are important sources of anxiety in FL learning, this study was part of a larger study that focused only on reading and listening skills. In interpreting the findings, readers need to acknowledge this limited focus of the anxiety construct.

Self-efficacy for self-regulation is one's perceived ability to use the appropriate strategies to plan, monitor, and complete a task (Bandura, 1997). The term refers to "the degree that individuals are metacognitively, motivationally, and behaviorally active participants in their own learning process" (Zimmerman, Bandura, & Martinez-Pons, 1992). Research findings suggest that the more efficacious self-regulators are able to self-monitor and appraise their own behavior and employ the appropriate strategies to achieve academic success. The

more efficacious self-regulators often implement more learning strategies and perform better academically. Those with less self-regulatory skills, conversely, often employ fewer learning strategies and set fewer proximal goals, resulting in lower academic achievement (Bandura; Zimmerman & Bandura, 1994).

In the field of FL education, scholars have also begun to focus their attention on self-regulation and its importance in language learning (Ehrman & Dörnyei, 1998). A large body of FL research, however, has been conducted in the effectiveness and importance of language learning strategies in language acquisition (Barnhardt, 1998; Chamot, 1998; Cohen, 1998; Erhman, Leaver, & Oxford, 2003; Wenden, 1999). Learning strategies are generally described as “any thoughts, behaviors, beliefs, or emotions that facilitate the acquisition, or later transfer of new knowledge and skills” (Weinstein, Husman, & Dierking, 2000, p. 727). Types of language learning strategies have been categorized and described in a variety of different ways. Such categorizations include language use strategies, language learning strategies, cognitive strategies, metacognitive strategies, affective strategies, and social strategies (Cohen, 1995; O’Malley & Chamot, 1990; Oxford, 1990). Although the conceptualization and definition of language learning strategies varies and there are theoretical inconsistencies and conflict within results and methodologies surrounding the language learning strategy literature (Dörnyei, 2005), it seems to be agreed upon by researchers that learning strategies play a key role in L2 acquisition and that proactive students tend to be successful language learners across learning contexts (Macaro, 2001). Because of an interest in shifting the focus from the product (learning strategies) to the process (self-regulation), the field of FL education has shifted its focus from language learning strategies to self-regulation and the degree to which individuals are active participants in their own learning (Dörnyei, 2005). Dörnyei (1994) suggested that self-regulated learning allows FL researchers to evaluate a broader, more multidimensional construct, including cognitive, metacognitive, motivational, behavioral, and environmental processes that learners might use to enhance achievement. Researchers agree, however, that learning strategies still remain useful tools in language learning and are claimed to lead to increased proficiency, learner autonomy, and self-regulation (Hsiao & Oxford, 2002).

Perceived value of language and culture refers to an individual’s perception of the importance, interest, and enjoyment involved in learning about the French language and culture. In other academic domains, conceptualizations of value have been found to be associated with academic performance (Britner & Pajares, 2001; Pajares & Graham, 1999; Pajares & Valiante, 2001). Social cognitive theory suggests, however, that because efficacy judgments often partially

determine the perceived value of activities, perceptions of value are unlikely to independently predict behavior when controlling for self-efficacy beliefs (Bandura, 1986).

In the field of FLs, motivation research from the social psychology period has concentrated on integrative aspects of motivation or learners' desire to learn a FL to integrate into the FL community (Gardner, 1985). A decade ago, however, FL researchers questioned the concept of integrative motivation for its ambiguous terminology, highly disparate results, and domination within FL motivation research (Crookes & Schmidt, 1991; Dörnyei, 1994; Oxford & Shearin, 1994). In place of an integrative motivation measure, this study employs the adapted educational psychology measure of perceived value and evaluates its influence on the academic achievement of French students at the intermediate level.

Methods

Hypothesis

Informed by the theoretical tenets of social cognitive theory and building on the results of previous self-efficacy investigations, we tested the following hypothesis:

French grade self-efficacy or students' confidence beliefs in their ability to attain an intermediate French grade will make an independent contribution to the prediction of the French grade of college intermediate-level French students when French learning anxiety, French learning self-concept, self-efficacy for self-regulation, and value of French language and culture are controlled.

Participants and Setting

Participants consisted of 303 college students enrolled in intermediate French I or intermediate French II courses at three institutions of higher education. The class, level, and gender of the participants at the three universities are presented in Table 1. Further characteristics of the participants in Table 1 include a description of the sample by major, L1, reason for intermediate French course selection, and previous study of other FLs. The study included participants from one university each in the northeastern, southeastern, and midwestern United States.

The southeastern university is an urban private university that offers both undergraduate and graduate programs. The undergraduate student body consists of approximately 6,500 students, 45% male and 55% female. The university's

Table 1 Characteristics of study participants

Characteristics	Midwestern university	Southeastern university	Northeastern university	Total
Gender				
Male	35	29	25	89
Female	69	66	79	214
University class				
Year 1	35	48	44	127
Year 2	40	24	22	86
Year 3	23	14	16	53
Year 4	6	0	13	19
Other	1	9	9	19
Level				
Intermediate I	55	46	39	140
Intermediate II	50	49	65	165
Major				
Humanities	36	21	24	81
Social Sciences	21	14	15	50
Business	11	13	32	56
Math/ Science	25	25	9	59
Foreign Language	1	2	11	14
Undecided	10	20	13	43
Native language				
English	95	81	96	187
Other	10	13	7	30
Course selection				
Elective	46	27	17	90
Requirement	58	67	87	212
Study of other foreign languages				
Yes	61	45	48	154
No	44	49	56	147

Note. Response rates varied for each of the participant characteristic variables.

student admissions process is defined as “most selective” by *US News & World Report* (Zuckerman, 2003) and average SAT scores range from 1300 to 1460. In Fall 2003, intermediate French students enrolled in three *Intermediate French* courses (French 201) and four Grammar and Composition courses (French 203) participated in the study.

The northeastern university is an urban public institution of higher education that also offers both undergraduate and graduate programs. The undergraduate

student body consists of approximately 18,000 students, 47% male and 53% female. Its admissions process is defined as “more selective” by *US News & World Report* (Zuckerman, 2003) with average SAT scores ranging from 1070 to 1270. In Fall 2003, intermediate French students enrolled in three Intermediate French I courses (French 0003) and three Intermediate French II courses (French 0004) participated in the study.

The Midwestern university is an urban private university offering both undergraduate and graduate programs. The undergraduate student body consists of approximately 8,200 students, 54% male and 46% female. Its admissions process is defined as “most selective” by *US News & World Report* (Zuckerman, 2003) and average SAT scores range from 1260 to 1450. In Fall 2003, intermediate French students enrolled in three Intermediate French I (French 201) courses and three Intermediate French II (French 202) courses participated in the study.

Instrumentation

In this study, measures from the field of educational psychology were used, as opposed to standard social psychology measures, so as to link FL education motivation research to the current theoretical foundations and constructs found in contemporary educational psychology research. One survey with multiple components was used to evaluate students' French grade self-efficacy, French learning anxiety, French learning self-concept, self-efficacy for self-regulation, and perceived value of language and culture. Achievement was evaluated by the students' final course grade in intermediate-level French.

French grade self-efficacy items ask participants to evaluate how confident they are in their ability to attain an intermediate French grade (sample item: “How confident are you that you will get a grade better than a B?”). The scale includes five items and uses a Likert-type scale ranging from 0 (not confident at all) to 7 (completely confident). Britner and Pajares (2001) obtained a Cronbach's α coefficient of .90 for a similar scale evaluating science grade self-efficacy. Cronbach's α coefficient for the present study was .88.

French learning anxiety in reading and listening was measured using an adapted version of Betz's (1978) Mathematics Anxiety Scale (MAS). Although adapted MAS scales from previous research have consisted of 9 items (Britner & Pajares, 2001; Pajares & Graham, 1999; Pajares & Valiante, 1997), the French learning anxiety scale consists of 18 items to account for anxiety in the language skills of reading and listening. Each of the 9 MAS anxiety items was adapted to the reading and listening domains, therefore totaling 18 items (sample listening anxiety item: “Listening to native French speakers makes me feel uneasy and

confused.”; sample reading anxiety item: “Reading in French makes me feel uneasy and confused.”). Students responded on an 8-point Likert-type scale continuum from 0 (definitely false) to 7 (definitely true) to questions about feelings of stress and uneasiness associated with French language learning. Cronbach’s α coefficients for adapted MAS scales in various academic subjects have varied from .87 to .91 (Pajares & Graham; Pajares & Kranzler, 1995; Pajares & Urdan, 1996) and Dew, Galassi, and Galassi (1983) have reported a test-retest reliability of .87 over a 2-week interval. Cronbach’s α coefficient for the French learning anxiety scale was .90.

French learning self-concept was measured using an adapted version of Marsh’s (1990) Academic Self Description Questionnaire (ASDQ-1). The French learning self-concept scale, consisting of six items, measures generalized self-perceptions of French competence (sample item: “Compared to others in my class I am good at French.”) The items were measured on a Likert-type scale ranging from 0 (definitely false) to 7 (definitely true). Cronbach’s α coefficients for ASDQ self-concept scales in various academic subjects have varied from .89 to .95 (Marsh, 1992). Cronbach’s α coefficient for the French concept scale for this research was .86.

Self-efficacy for self-regulated learning was assessed using an adapted subscale from Bandura’s (1995) Children’s Multidimensional Self-Efficacy Scales. Eight of the 11 original items were used in the present study to evaluate students’ perceptions of competence in using various self-regulated learning strategies (sample item: “How well can you finish your French assignments on time?”). Students responded on an 8-point Likert-type scale continuum from 0 (not well at all) to 7 (very well) to questions that self-evaluate their capability to complete and concentrate on French assignments. Cronbach’s α coefficients for the scale have ranged from .80 to .87 for various researchers (Pajares, 1996; Pajares et al., 1999; Zimmerman et al., 1992). Cronbach’s α coefficient for the scale used in the present research was .87.

Perceived value of French language and culture was assessed by an adapted measure from Eccles’s (1983) Student Attitude Questionnaire and evaluated students’ interest, enjoyment, and perceived importance of learning the French language and its culture. Nine items evaluated students’ perceptions of the value of French language and nine items evaluated students’ perceived value of learning about French-speaking cultures (sample item assessing perceived value of French language: “Studying the French language is an enjoyable experience.”; sample item assessing perceived value of French culture: “French-speaking cultures are interesting for me.”). The items were measured on an 8-point Likert-type scale ranging from 0 (definitely false) to 7 (definitely true).

Previous Cronbach's α coefficients for the scale in various academic subjects have ranged from .69 to .92 (Britner & Pajares, 2001; Pajares & Graham, 1999; Pajares & Valiante, 1997, 1999). Cronbach's α coefficients of the perceived value of the French language and the perceived value of the French culture scales used in the present study were .87 and .96, respectively.

Achievement was assessed with the participants' Intermediate French semester grades. Achievement measures are designed to assess what students have learned from a specific curricular program. This achievement measure was used to evaluate the predictive power of the French grade self-efficacy scale. The mean final course grade was $M = 89.6$ and grades ranged from 61 to 100. As the predictive power of self-efficacy assessments increases in high stakes conditions in which participants have investment in their performance (Bandura, 1986, 1997), the use of semester course grades ensures maximized achievement and increased explanatory power in the assessment of self-efficacy.

Procedure

In Fall 2003, the survey evaluating the students' self-beliefs was administered to students in their intermediate French classes at the three universities. Administering the survey on student self-efficacy took place during one class period in the first 2 weeks of the Fall 2003 semester. Following instruction on the survey protocol, the language program coordinator administered the survey at the Midwestern university and the principal investigator administered the survey at the southeastern and northeastern universities. The intermediate-level French instructors were not present during the survey administration to encourage participants' honesty and candor in responding to attitudinal items. First, the participants were asked to complete the demographic questionnaire. Next, the survey administrators read aloud the written directions for each subscale and encouraged the participants to ask questions if they did not understand the directions. The survey administrators collected the completed instruments and delivered them to the principal investigator. At the end of the semester, the French instructors provided the researcher with the students' final course grades.

Data Analyses

To analyze the contribution of French grade self-efficacy to the prediction of intermediate-level French achievement, we conducted a hierarchical multiple regression. Our choice of hierarchical regression was guided by two reasons. First, we wanted to test the contribution of the key motivation constructs previously described to the prediction of our participants' final grades in French

class. These are motivation constructs that have proved predictive of achievement across a number of academic areas, and it was our aim to compare our findings with those previously obtained (see Schunk & Pajares, 2005). Second, in previous FL studies, researchers have concentrated on integrative aspects of motivation or learners' desire to learn a FL to integrate into the FL community (Gardner, 1985) and its influence on FL achievement. Recall that a decade ago, FL researchers began to question its influence (Crookes & Schmidt, 1991; Dörnyei, 1994; Oxford & Shearin, 1994). Thus, we wanted to investigate whether the perceived value of French language and of French culture, which mirror these constructs, would add incremental variance to the prediction of achievement in French.

Consequently, in the first step of the regression analysis, or Model 1, students' French course grades were the dependent variable; independent variables were French grade self-efficacy, French learning self-concept, French learning anxiety, self-efficacy for self-regulation, and value of French language and culture. Model 1 tested whether French grade self-efficacy would predict the final course grade when French anxiety in reading and listening, self-efficacy for self-regulation, and self-concept were controlled.

In the second step of the analysis, or Model 2, we added two predictors: students' perceptions of the value of French language and of French culture. The perceived value of French language and of French culture were included in this step to evaluate their influence on achievement when controlling for the motivation constructs widely acknowledged to predict achievement across academic areas.

Results

Descriptive Statistics

Means, standard deviations, and zero-order correlations for all variables in the study are presented in Table 2. Results reveal that six of the seven correlations with grade self-efficacy were statistically significant and ranged from $r = .22$ to $r = .59$. These results reveal that a stronger sense of grade self-efficacy is associated with a stronger perceived value of language, self-efficacy for self-regulation, self-concept, and final course grade.

Means, standard deviations, and zero-order correlations for all men ($n = 89$) and women ($n = 214$) are provided in Table 3. Independent-samples t tests were conducted to check for gender differences in the motivational variables. There were no gender differences in the grade self-efficacy of intermediate-level French learners. Gender differences were found, however, in students'

Table 2 Means, standard deviations, and zero-order correlations of variables in the study for all participants ($n = 303$)

	<i>Mean</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Grade self-efficacy	5.7	1.0	—						
2. French anxiety (reading and listening)	3.0	1.2	-.40**	—					
3. Value of language	5.2	1.1	.22**	-.30**	—				
4. Value of culture	5.3	1.4	.02	-.08	.70**	—			
5. Self-efficacy for self-regulation	5.1	1.0	.42**	-.33**	.36**	.24**	—		
6. Self-concept	4.7	1.2	.59**	-.59**	.47**	.18*	.47**	—	
7. Final grade	89.6	6.1	.24**	-.16*	.09	-.02	.23**	.25**	—

Note. Means for all self-efficacy and motivation variables are on an 8-point Likert-type scale (ranging from 0 to 7). Means for final course grades ranged from 0 to 100. Data for the final grades were only available for 270 of the participants.

* $p < .01$.

** $p < .001$.

self-reports of self-efficacy for self-regulation, perceived value of French language, and perceived value of French culture. Women reported a stronger sense of self-efficacy for self-regulation ($M = 5.2$, $SD = 1.0$) than did the men ($M = 4.8$, $SD = 1.1$), $t(301) = 2.68$, $p < .01$. Women also reported stronger perceptions of the value of French language ($M = 5.3$, $SD = 1.0$) than did the men ($M = 4.8$, $SD = 1.4$), $t(301) = 3.75$, $p < .001$. Gender differences were also present in students' perceived value of the French culture, with women reporting stronger perceptions of the value of French culture ($M = 5.6$, $SD = 1.3$) than the men ($M = 4.7$, $SD = 1.7$), $t(301) = 4.3$, $p < .001$. Four of the seven correlations with the final course grade were statistically significant for the women and ranged from $r = .14$ to $r = .31$. For women, self-concept, self-efficacy for self-regulation, and grade self-efficacy were positively associated with the final course grade. Statistically significant inverse correlations between the final course grade and French anxiety in reading and listening were also present for the women. For men, only grade self-efficacy was positively associated with the final course grade ($r = .22$). Regression analyses were not conducted for men and women separately because of the small sample size (men, $n = 89$; women, $n = 214$).

Multiple Regression Analyses

Results of the hierarchical multiple regression analyses are found in Table 4. Recall that the first step in this analysis was to test whether French grade

Table 3 Means, Standard deviations, and zero-order correlations of variables in the study for all men (*n* = 89) and women (*n* = 214)

	Men									Women	
	Mean	SD	1	2	3	4	5	6	7	Mean	SD
1. Grade self-efficacy	5.8	1.0	—	-.37**	.20*	-.05	.44**	.58**	.25**	5.6	1.0
2. French learning anxiety	2.8	1.3	-.45**	—	-.36**	-.10	-.32**	-.62**	-.20*	3.0	1.2
3. Value of language	4.8	1.4	.32*	-.29*	—	.63**	.29**	.42**	.07	5.3	1.0
4. Value of culture	4.7	1.7	.20	-.15	.74**	—	.13	.05	-.09	5.6	1.3
5. Self-regulation	4.8	1.1	.45**	-.44**	.41**	.34*	—	.45**	.23*	5.2	1.0
6. Self-concept	4.6	1.3	.64**	-.57**	.56**	.37**	.51**	—	.31**	4.8	1.1
7. Final grade	89.0	6.3	.22*	-.10	.09	.06	.20	.13	—	89.9	6.0

Note. Means for all self-efficacy and motivation variables are on an 8-point Likert-type scale (ranging from 0 to 7). Means for final course grades ranged from 0 to 100. Data for the final grades were only available for 78 men and 192 women. Means, standard deviations, and zero-order correlations of variables are below the diagonal for the men and above the diagonal for the women.

* *p* < .05.

** *p* < .001.

Table 4 Standardized regression coefficients predicting final grade from hierarchical multiple regression models for variables in the study ($n = 270$)

	Model 1	Model 2
Grade self-efficacy	.098	.083
French learning anxiety	.018	.022
Self-efficacy for self-regulation	.141*	.156
Self-concept	.152	.155
Value of language		.022
Value of culture		-.074
R^2	.09**	.10**
Change in R^2		.01

* $p < .05$.** $p < .001$.

self-efficacy would predict final course grade of intermediate-level French students when French anxiety in reading and listening, self-efficacy for self-regulation, and self-concept were controlled. The combination of these independent variables was significantly related to French achievement, $R^2 = .09$, $F(4, 265) = 6.90$, $p < .01$, and accounted for 9% of the variance. Note that only self-efficacy for self-regulation predicted students' final grade in French ($\beta = .14$). These results suggest that intermediate French students' perceived ability to use the appropriate strategies to plan, monitor, and complete tasks are more predictive of their success in intermediate French courses than is their confidence in the final grade they will obtain.

In the second step of our hierarchical regression, we examined the potential contribution of students' perceived value of French language and French culture to the prediction of their final grade. The combination of perceived value of French language and culture, French learning anxiety, French learning self-concept, self-efficacy for self-regulation, and grade self-efficacy was significantly related to French achievement, $R^2 = .004$, $F(2, 263) = 4.76$, $p < .001$, but the nonsignificant 1% increase in R^2 [R^2 change = .01, $F(2, 263) = 4.76$, $p = .596$] showed that these variables added no incremental variance to our first model. Additionally, neither students' perceived value of the language ($\beta = .022$) nor of the culture ($\beta = -.074$) proved significant predictors; therefore Model 2 was rejected. These results show that the perceived value of French language and culture do not predict French achievement when the other motivational variables are controlled. In addition, this study counters some

FL motivation research that focuses on the influence of integrative aspects of motivation and the learners' desire to achieve in FLs to integrate into the foreign culture and community (Gardner, 1985).

Discussion

The primary objective of this study was to determine whether intermediate-level French students' efficacy beliefs would predict their intermediate-level French achievement. We found that students' self-efficacy for self-regulation was the most significant predictor of intermediate French language achievement. In fact, this variable proved to be a stronger predictor of the final grades of intermediate-level French students than did students' self-efficacy beliefs about the grades they would obtain, the anxiety they experienced in French reading and listening, and their French learning self-concept. Students who perceived themselves as capable of using effective metacognitive strategies to monitor their academic work time effectively were more apt to experience academic success in intermediate French.

Research in educational psychology reveals that self-regulatory processes are teachable, although few teachers effectively prepare their students to learn independently (Schunk & Zimmerman, 1998). Because these findings reveal that effective self-regulatory practices can lead to stronger self-efficacy and increased French achievement, French language students might be well served by teachers' instruction of effective language learning strategies. A variety of effective approaches to the instruction of language learning strategies currently exist in previous literature and research on language learning strategy education (Barnhardt, 1998; Chamot, 1998; Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Chamot & O'Malley, 1994; Cohen, 1998, 2003; Cohen & Weaver, 2004; Hismanoglu, 2001; Macaro, 2001; Wenden, 1998).

Cohen (2003), similarly, provided a variety of options for language strategy training, including awareness training via lectures and discussion, intensive language strategy workshops, peer tutoring, focus on embedded strategies within language textbooks, videotaped mini-courses (see Rubin, 1996), or strategies-based instruction within the curriculum. Strategies-based instruction often includes a description and modeling of useful strategies, elicitation of student strategies, group strategy discussions, strategy experimentation, and integration of strategies in classroom materials. Macaro (2001), similarly, developed a learner strategy training cycle including nine stages: (a) raising student awareness, (b) exploration of possible strategies, (c) teacher or student modeling, (d) combination of strategies for assigned task, (e) application of strategies

with scaffolding, (f) initial student evaluation, (g) removal of scaffolding, (h) student and teacher evaluation, and (i) strategy use monitoring. Regardless of the method chosen, however, the incorporation of strategy instruction within the language curriculum might allow teachers to better guide students toward improved FL performance.

Cohen (2002) similarly suggested that as learners become more self-aware of their learning strategy choices in various contexts, they will also become more responsible for their own language learning and become more autonomous, self-directed learners. As no instructional program can provide learners with all of the necessary linguistic and cultural background needed to fully function in a foreign culture (Ehrman & Dörnyei, 1998), instructors need to provide students with the necessary lifelong tools to continually develop their linguistic and cultural knowledge.

Pajares (2002) suggested that teachers should also assess and identify students' self-beliefs about their own self-regulatory strategies and then develop appropriate interventions to challenge and alter their perceptions accordingly. Instructors might wish to assess the self-regulatory strategies of their students through the use of self-efficacy for self-regulation surveys completed at various points during the semester. Research from educational psychology has cited Bandura's (1995) Children's Multidimensional Scale as an effective self-efficacy for self-regulation survey for children. Attention might also be directed to existing surveys on the assessment of language learning strategies. Such surveys include Horwitz's (1988) Beliefs about Language Learning Inventory, Oxford's (1990) Strategy Inventory for Language Learning, and Cohen and Chi's (2002) Language Strategy Use Inventory and Index. These inventories could possibly be further adapted to include the multidimensional nature of the self-regulation construct, including cognitive, metacognitive, motivational, behavioral, and environmental processes. Through the use of such surveys, instructors might become aware of the strategies their students use to complete language assignments and include appropriate lessons to teach students the necessary strategies to become more successful language learners. In addition, through the completion of these surveys, students become aware of their own techniques and strategies in language learning and improve on them. Kojic and Lightbown (1999) discovered that reflection increases students' awareness of their language learning strategies and allows students to evaluate the effectiveness of their choices. If students are aware of their self-regulatory strategies and can evaluate their effectiveness, they might choose better strategies for themselves in the future. By empowering students to be aware of their own cognitive, metacognitive, motivational, behavioral, and environmental strategies, students

might attain the self-directed learning strategies necessary for future language success.

Results also reveal that some motivational variables, including self-efficacy for self-regulation, varied as a function of gender. The women reported a significantly stronger interest, value, and enjoyment in learning about both the French language and culture than did the men. Similarly, the findings also support previous research in other academic domains showing gender differences in self-efficacy for self-regulation favoring women (Pajares & Valiante, 2001; Zimmerman & Martinez-Pons, 1990). The results reveal that female students of French reported a significantly stronger sense of self-efficacy for self-regulation than men. Research suggests that there is a disparity in the language learning approaches of men and women, which might have a significant impact on long-term FL performance (Harris, Nixon, & Ruddick, 1993). In discussing this disparity, Clark and Trafford (1995) affirmed that boys tend to devote less time regularly to course work, which might not serve them well in their study of a FL, a subject that requires progressive assimilation of linguistic and cultural skills. The findings in this study did not reveal a disparity in the academic success of the male and female intermediate French students; however, teachers and researchers should be encouraged to address this gender gap in self-regulatory strategies. One could speculate that the long-term FL performance of men might be jeopardized by gender differences in self-efficacy for self-regulation.

Our results support the importance of self-efficacy for self-regulation to the achievement of intermediate French students. Note also that grade self-efficacy correlated positively with self-efficacy for self-regulation, supporting Bandura's (1986, 1997) contention that self-efficacy beliefs are associated with students' self-regulated learning strategies and that confident students use more appropriate strategies to plan, monitor, and complete their academic tasks. Teachers should nurture students' self-efficacy beliefs, as these self-perceptions are related to academic success. Research suggests that students' self-beliefs might be nurtured through teachers' fostering of the sources of self-efficacy (see Pajares & Urdan, 2006). In the FL classroom, these sources could include fostering successful learning experiences, providing opportunities for students to experience vicariously the successes of their peers, and receiving positive feedback when merited (Bandura, 1986, 1997). In addition, students' sense of efficacy for self-regulation also correlated positively with their perceived value of the French language and culture. Clearly, the development of self-regulatory skills in the classroom is associated with students' value, interest, and respect for the target language and culture.

Implications should always be interpreted in light of potential limitations. First, it bears emphasizing that our analyses were correlational in nature; hence, no causal inferences among the variables are warranted. In addition, self-report instruments do not always appropriately capture the participants' perceptions and feelings. Ensuring participant anonymity and using measures with strong empirical qualities, however, help minimize this threat. Also, participants in this study were college intermediate-level French students. As such, caution is urged in generalizing to other populations and settings. Further research should evaluate the relationship among self-beliefs and achievement for students studying other FLs at different levels of language study. In addition, we assessed anxiety only in reading and listening. Finally, it bears noting that we used intermediate French grades that were given by various instructors at different institutions of higher education that might well have slightly different assessment formats for the determination of final grades. We believe, of course, that our use of universities in the northeast, southeast, and Midwest of the United States, as well as the use of both public and private institutions, enhance the generalizability of our findings.

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