

The Interplay of Self-Regulation, Grit, and Motivational Beliefs among Learners of French as a Foreign Language

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ABSTRACT

As foreign language learning, particularly French, becomes increasingly important in Malaysia, there is a growing need to understand how learners' confidence, motivation, and determination influence their success in acquiring the language. Self-regulation, grit, and motivational beliefs are among the factors that are associated with academic success. However, research combining all these variables together and focusing on French as a foreign language context remains limited and underexplored. Hence, this current study aimed to examine the interrelationships among French language learners. The objectives of the study focused on three main areas: differences across gender and academic streams, learners' perceptions of self-regulation, grit, and motivational beliefs, and the connections among these constructs. To address the research goals, a quantitative survey was administered to 277 learners undertaking French language courses. Data were gathered using a questionnaire comprising four sections: demographic background, grit (12 items), motivational beliefs (17 items), and self-regulated learning strategies (7 items). The instrument demonstrated good reliability ($\alpha = .852$). Analysis of the data revealed that learners displayed positive levels of self-regulation, perseverance, self-efficacy, and perceived value of learning French. Gender and academic disciplines did not significantly affect the findings. Additionally, self-regulation was found to be positively related to both grit and motivational beliefs. The findings further indicated that self-regulated learners are more likely to be grittier and to possess stronger beliefs about their learning abilities. This study contributes to a better understanding of foreign language learning by highlighting the interplay between self-regulation, grit, and motivational beliefs. The findings imply that learners may be able to maintain motivation, manage difficulties, and stay engaged in foreign language acquisition with the encouragement of self-regulated learning approaches from instructors.

Keywords: Self-regulation; Grit; Motivational Beliefs; Self-Regulated Learning; French as a Foreign Language (FFL)

INTRODUCTION

Background of Study

According to statistics, there is a growing interest in learning French as a foreign language among Malaysians. In fact, Point et al. (2021) stated that approximately 28,000 learners have registered at Alliance Française, an official French language centre in Malaysia since 1998. As the number of foreign language learners continues to increase, various challenges and hurdles have also emerged which affect both learners and educators. These challenges include difficulties in learning unfamiliar verb structures as well as other cognitive limitations associated with foreign language lessons (Kamalova, 2025; Abbasova, 2026).

Most distinctly, the motivation challenge has become the biggest academic struggle among learners. In this regard, Rahmat et al. (2021) stated that motivation is crucial in keeping learners interested and engaged in their

instructional environment. Furthermore, another study by Lebci et al. (2022) found that foreign language learners' performance is highly influenced by their motivation. Because of this, existing literature seeks to further understand these motivational challenges by examining the relationship between motivation and grit. According to Duckworth et al. (2007), grit is defined as perseverance and passion for long-term goals. As grit is closely associated with motivation, many researchers have examined the correlation between these two elements among students and, consequently, found that academic motivation has been found to be positively influenced by academic grit (Obeng et al., 2025; Parsai Moghadam et al., 2026).

Consequently, educators attempt to diversify their teaching methods to overcome challenges in foreign language learning, one of which includes self-regulated learning. Specifically, self-regulated learning is seen as a dynamic learning process which allows learners to utilize multiple techniques to improve their cognitive abilities (Aregu, 2013). As a result, this pedagogical approach has been shown to impact learners in a positive manner. Moreover, it provides learners with the opportunity to become more responsible for their language acquisition (Buzrukxo'jayeve, 2025) while simultaneously empowering them to take control of their own learning process (Ni'mah, Nasihah & Munfaati, 2025).

Considering the importance of maintaining learners' motivation and perseverance in foreign language acquisition, self-regulated strategies may therefore serve as a significant factor in supporting learners' academic engagement and language acquisition process. Hence, the interaction between motivation, grit, and self-regulated learning is therefore important to be examined in order to better comprehend learners' experiences and success in learning French as a foreign language.

Statement of Problem

Past research has highlighted the importance of self-regulation, grit, and motivational beliefs in learners' academic engagement and performance (Martin et al., 2022; Ha et al., 2023). Nevertheless, many previous studies examined these constructs separately, which limits a full understanding of how they work together to influence learning outcomes. In addition, most studies on self-regulation, grit and motivational beliefs focused on specific learner groups (Martin et al., 2022) or educational settings (Neroni et al., 2022; Ha et al., 2023), which limits understanding of whether these constructs differ across demographic groups.

Furthermore, a recent study by Arepin and Rahmat (2026) draws attention to the need for a more integrated approach that examines self-regulation, grit, and motivational beliefs together to better understand their combined role in academic success.

Therefore, this study aims to investigate the relationships between self-regulation, grit, and motivational beliefs, while also examining differences based on gender and academic discipline.

Objective of the Study and Research Questions

This study aims to examine the relationship between self-regulation, grit, and motivational beliefs among foreign language learners. Specifically, it seeks to address the following research questions:

1. Is there a significant relationship between self-regulation across gender and discipline?

H₀₁: There is no significant relationship between self-regulation across gender and discipline.

2. Is there a significant relationship between grit across gender and disciplines?

H₀₂: There is no significant relationship between grit across gender disciplines

3. Is there a significant relationship between motivational beliefs across gender and disciplines?

H₀: There is no significant relationship between motivational beliefs across gender and disciplines

4. How do learners perceive self-regulation in learning?

5. How do learners perceive grit in learning?
6. How do learners perceive motivational beliefs in learning?
7. Is there a significant relationship between self-regulation and grit?

H₀₄: There is no significant relationship between self-regulation and grit.

8. Is there a significant relationship between self-regulation and motivational beliefs?

H₀₄: There is no significant relationship between self-regulation and motivational beliefs

LITERATURE REVIEW

Theoretical Framework of the Study

Self-Determination Theory (Deci & Ryan) in Learning

Understanding why some learners continue working hard through the difficulties of learning a foreign language while others slowly lose interest requires a theory that goes beyond simple behaviour and looks at deeper reasons for motivation. Self-Determination Theory (SDT), developed by Deci and Ryan (1985), provides this explanation. SDT explains that motivation is not just one fixed idea but exists on a range, from no motivation, to external motivation, and finally to internal motivation. Internal motivation happens when learners take part in an activity because they are truly interested, curious, and see personal value in it.

According to Deci and Ryan (1985), movement along this range depends on three basic psychological needs: autonomy (feeling in control of one's learning), competence (feeling capable), and relatedness (feeling connected to others). When these needs are supported in the learning environment, learners develop autonomous motivation. This type of motivation leads to stronger engagement, higher persistence, and more meaningful learning.

This is especially important in foreign language learning, where learners need to stay committed for a long period of time. Alamer and Alrabai (2024) found that learners with more autonomous motivation showed higher engagement and continued effort over time compared to those motivated by external pressure. In a similar study, Liu et al. (2025) showed that when learners' needs for autonomy, competence, and relatedness are met, they are more motivated and more active in learning. However, when these needs are not met, learners often feel bored, which reduces their motivation and participation.

Overall, these studies show why SDT is important for this study. To understand success in learning French as a foreign language, it is not enough to look at what learners do. It is also important to understand their feelings, needs, and beliefs about learning. SDT helps explain these deeper aspects of learner motivation.

Motivation and Grit in Learning

Motivation in learning a foreign language is a mixture of internal and external factors that encourages learners to engage in and concentrate on the learning process (Gardner, 2010). It refers to learners' willingness to incorporate themselves into a different language than their spoken languages. Grit is widely recognised as a valuable non-cognitive attribute and positive personality characteristics that contributes to educational achievement, continuous learning, and overall personal development (Duckworth et al., 2007; Duckworth and Quinn, 2009). The concept of grit is generally explained through two major components, namely persistence of effort (PE) and consistency of interest (CI). Persistence of effort describes an individual's determination to continue striving toward long-term objectives when faced with setbacks, difficulties, or failure. In contrast, consistency of interest refers to the ability to maintain sustained focus and commitment towards particular goals and activities over an extended period in order to build relevant skills and competencies (Duckworth & Quinn, 2009). These two dimensions are considered essential elements that influence individual motivation,

performance and achievement. Both motivation and grit are closely related in learning, as motivation drives learners to begin and stay engaged, while grit helps them persist through challenges and maintain long-term commitments to their goals. Learners with higher motivation and grit levels are more willing to take on challenging tasks and persevere through demanding situations, thereby enhancing their personal growth, motivation, and development in learning. According to Duckworth et al. (2007), learners achieve better academic performance and higher grade point averages (GPAs) with higher motivation and grit levels, besides cognitive intelligence as another indicator of success.

Past Studies

Past Studies on Motivation and Grit in Learning

Numerous studies have been conducted to examine learners' motivation and grit in learning foreign languages from various perspectives. A study by Zhang and Xu (2025) explored cognitive motivation among 190 Chinese university graduates who studied foreign languages and later applied those languages in their professional careers. The study focused on how learners' motivation are shaped by the number of languages that they had acquired which was examined through both quantitative and qualitative methods. Findings from ANOVA and thematic analysis revealed that cognitive motivation is significantly influenced by language needs of learners and the degree of their multilingualism. The authors concluded that learners who learned two languages maintained a more stable level of motivation compared to those who learned three or more languages. The study indicated that it is important for a learner to balance linguistic challenges and contextual relevance in order to maintain their motivation across language use in their daily lives.

In another study, researchers examined the instrumental and integrative aspects of motivation among learners acquiring French as a foreign language as the main objective of their research (Somiya & Rahman, 2025). A random sampling technique was used to select 96 learners from the Centre for Modern Languages at Bangladesh University of Professionals to participate in the study by answering a set of questionnaires. By adapting the motivation theory proposed by Gardner and Lambert, the authors found that learners were motivated to learn French as a foreign language for both instrumental and integrative reasons. These aspects complemented each other, alongside other elements such as attitudes and skills, in further motivating learners during their lessons. In addition, this study contributed to the literature by finding that the writing component of French language learning was the least impactful. Therefore, educators should place greater emphasis on writing activities to help overcome this issue.

Past research has also examined different perspectives of grit among learners learning foreign languages. Wu, Tian, and Jin (2024) studied the relationship between grit, particularly in terms of consistent effort and sustained interest in long-term goals, and affect balance among learners studying foreign languages. Findings from the study, which were obtained through online surveys involving 394 learners studying English as a second language, indicated that grit and affect balance were significantly correlated with both behavioural and affective engagement. However, the two components of grit exhibited different results, as no significant relationship was found between consistency of interest and learning engagement. Meanwhile, perseverance of effort was found to be significantly and positively correlated with learners' learning engagement. Affect balance in this study played a partially mediating role in the relationship between perseverance of effort and behavioural engagement, and a fully mediating role in the relationship between perseverance of effort and affective engagement. The study found that grit is indeed important in learning foreign languages, with affect balance serving as a distinct element within this relationship.

Overall, past studies have explored different aspects of learners' motivation and grit in learning foreign languages. Previous researchers have examined various aspects of motivation, including cognitive motivation as well as instrumental and integrative motivation. Past literature has also highlighted studies on grit among foreign language learners, as well as studies that investigated both motivation and grit together. However, the literature, particularly in the field of foreign language studies, continues to seek further insights and broader coverage regarding learners' motivation and grit. Hence, this study aims to investigate the interrelationship among

motivation, grit, and self-regulated learning among learners of French as a foreign language, with the aim of extending the existing body of literature.

Conceptual Framework of the Study

Motivation plays a crucial role in enabling learners to succeed academically (Rahmat & Thasrabiab, 2024). Another important factor besides motivation is grit. A person with grit is persistent about succeeding in their task

According to Martin et al. (2022), motivation is derived from grit. Motivational beliefs and self-regulated learning strategies. Grit comprises learners' consistency of interest and perseverance. Next, motivational beliefs refer to self-efficacy, intrinsic value, and test anxiety. Lastly, self-regulated learning strategies comprise cognitive strategy use and self-regulation.

Self-regulation in learners makes them less reactive and more proactive. The self-regulated learners are known to engage in several parts of the thought process. The first part is planning, the second part is monitoring; the third is control and the last part is reflection. Hence, this study explores the relationship between self-regulation with grit and motivation.

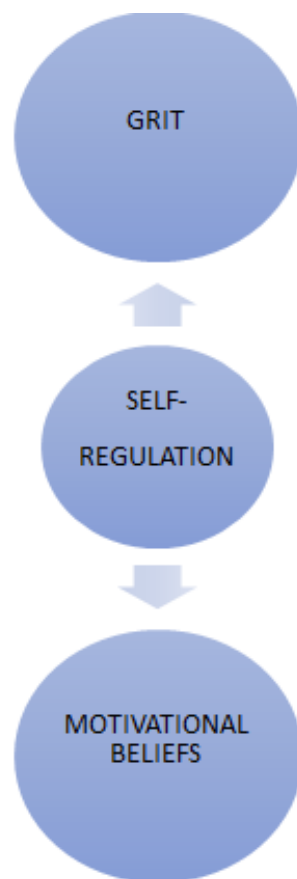


Figure 1- Conceptual Framework of the Study

Influence of Self-Regulation on Grit and Motivation

METHODOLOGY

This quantitative study aims to examine the influence of self-regulation on grit and motivation. A convenience sample of 277 participants was involved in the survey. The study employed a 5-point Likert-scale questionnaire adapted from Martin et al. (2022) to measure the variables presented in Table 3. Table 1 outlines the Likert scale categories used in the study, where 1 represents Never, 2 Rarely, 3 Sometimes, 4 Very Often, and 5 Always.

Table 1 - Likert Scale Use

1	Never
2	Rarely
3	Sometimes
4	Very Often
5	Always

Table 2 - Distribution of Items in the Survey

PART	VARIABLE		CONSTRUCT	No Of Items	Total Items
TWO	GRIT	i	CONSISTENCY OF INTEREST	6	12
		ii	PERSEVERANCE	6	
THREE	MOTIVATIONAL BELIEFS	i	SELF-EFFICACY	6	17
		ii	INTRINSIC VALUE	7	
		ii	TEST ANXIETY	4	
FOUR	SELF-REGULATED LEARNING STRATEGIES	i	SELF-REGULATION	7	7
	TOTAL NO OF ITEMS				36 (.852)

Table 2 presents the distribution of items in the survey. Part Two comprises 12 items measuring grit. Part Three consists of 17 items assessing motivational beliefs, while Part Four includes 7 items focusing on self-regulated learning strategies.

Table 3 - Reliability Levels, Cronbach's Alpha Ranges, and Their Interpretations

Reliability Level	Cronbach's Alpha range	Interpretation
Excellent	0.9 and above	Indicates very high internal consistency
Good	0.80-0.89	Reflects strong internal consistency
Acceptable	0.70-0.79	Indicates acceptable internal consistency
Questionable	0.60-0.69	Reflects questionable internal consistency
Poor	Below 0.6	Indicates poor internal consistency

To assess the internal consistency of the instrument, a reliability analysis was carried out. Table 3 presents the distribution and interpretation of Cronbach's alpha values. According to Ahmad et al. (2024), alpha coefficients ranging from 0.70 to 0.90 indicate acceptable to excellent reliability.

Table 2 further reports the reliability results of the survey instrument. The overall Cronbach's alpha value for the 36 items is .852, indicating a good level of internal consistency. Based on this result, the instrument is considered reliable for use in this study. Subsequent analyses were conducted using SPSS to address the research questions.

FINDINGS AND DISCUSSION

Demographic Analysis

According to Zienefuss et al. (2021), demographic information is typically presented in percentage form to demonstrate sample representation and support the generalizability of findings to a wider population. This approach also helps to describe the key characteristics of the participants. Using percentages provides a clear and straightforward summary of the sample composition.

Table 4 - Percentage for Demographic Profile

Question	Demographic Profile	Categories	Percentage (%)
1	Gender	Male	22%
		Female	78%
2	Disciplines	Science	63%
		Non-Science	37%

Table 4 presents the demographic profile of the respondents based on gender and academic discipline. The findings show that female respondents constituted the majority of the participants, representing 78% of the sample, while male respondents accounted for 22%. In terms of academic discipline, most respondents were from science-based fields, comprising 693% of the participants, whereas 37% were from non-science disciplines. These findings indicate that the study sample was predominantly female and largely represented by learners from science-related academic backgrounds.

Inferential Statistics

According to Shah (2024), the t-test serves three primary purposes in inferential statistics. First, it is used to compare means by examining whether the average scores of two groups, or a single group against a known value, differ significantly beyond what could be expected by chance.

Second, the t-test is applied in hypothesis testing, where researchers evaluate claims about group means, such as determining whether an intervention has a significant effect or whether there are differences between two independent groups.

Finally, the t-test is used to identify statistically significant differences. It generates a p-value, and when this value is below the accepted significance level (commonly 0.05), it indicates that the observed difference is statistically meaningful. This allows researchers to make informed conclusions about the populations represented by the samples.

Findings for Self-Efficacy

This section presents data to answer research question 1: Is there a significant relationship between self-regulation across gender and discipline?

H₀₁: There is no significant relationship between self-efficacy across gender and discipline.

Table 5 - T-test for self-regulation across gender and discipline.

		MEAN	SD	T/F-Statistics <i>df</i>	p-value	OUTCOME
Gender	Male	3.52	0.46	t(275)=-2.311	0.022	H ₀ Rejected
	Female	3.67	0.46			
Disciplines	Science	3.65		t(275)=0.069	0.945	H ₀ Accepted
	Non-Science	3.64				

A two-sample t-test was performed to compare self-regulation across gender and discipline. There was a significant difference in self-regulation across gender (t(275)=-2.311; p=0.022) but no significant difference for discipline (t(275)=0.069, p=0.945). The null hypothesis is rejected for gender but accepted for disciplines for H₀₁.

Findings for Grit

This section presents data to answer research question 2: Is there a significant relationship between grit across gender and disciplines?

H₀₂: There is no significant relationship between grit across gender disciplines

Table 6 - T-Test for grit across gender and discipline

		MEAN	SD	T/F-Statistics <i>df</i>	p-value	OUTCOME
Gender	Male	3.34	0.36	t(275)=.964	0.333	H ₀ Accepted
	Female	3.28	0.41			
Disciplines	Science	3.28		t(275)=-5.11	0.610	H ₀ Accepted
	Non-Science	3.31				

A two-sample t-test was performed to compare grit across gender and discipline. There were no significant differences for gender and disciplines. The null hypothesis is rejected for gender but accepted for disciplines for H₀₁₂.

Findings for Motivational Beliefs

This section presents data to answer research question 3: Is there a significant relationship between motivational beliefs across gender and disciplines?

H₀₃: There is no significant relationship between motivational beliefs across gender and disciplines

Table 7 - T-Test for motivational beliefs across gender and discipline

		MEAN	SD	T/F-Statistics <i>df</i>	p-value	OUTCOME
Gender	Male	3.65	0.65	t(275)=-1.766	0.079	H ₀ Accepted

	Female	3.75	0.39			
Disciplines	Science	3.78	0.36	$t(275)=3.051$	0.003	H_0 Rejected
	Non-Science	3.64	0.42			

A two-sample t-test was performed to compare self-regulation across gender and discipline. There was no significant difference in self-regulation across gender but there is a significant difference for discipline ($t(275)=3.051$, $p=0.003$). The null hypothesis is accepted for gender but rejected for disciplines for H_{03} .

Descriptive Statistics

As noted by Vetter (2017), presenting the mean and standard deviation is a fundamental requirement in descriptive analysis to summarize the collected data. The mean (M) represents the arithmetic average or central tendency of the scores. Meanwhile, the standard deviation (SD) indicates the extent to which individual responses vary from the mean, thereby illustrating the degree of dispersion or variability present within the sample.

A lower standard deviation suggests that respondents' scores are relatively consistent and clustered near the average, while a higher standard deviation implies that the responses are more widely distributed. Consequently, a larger standard deviation is an indicator of greater diversity among learners' perceptions within the dataset.

Findings for Self-Regulation

This section presents data to answer research question 4: How do learners perceive self-regulation in learning?

Table 8 - Mean (M) and Standard Deviation (SD) for SELF-REGULATION

ITEM	M	SD
SRLSSRQ1 I ask myself questions to make sure I know the material I have been studying.	3.98	2.82
SRLSSRQ2 When work is hard I either give up or study only the easy parts.	2.89	0.97
SRLSSRQ3 Even when study materials are dull and uninteresting, I keep working until I finish.	3.84	0.74
SRLSSRQ4 Before I begin studying, I think about the things I will need to do to learn.	3.95	0.76
SRLSSRQ5 I often find that I have been reading for class but don't know what it is all about.	3.16	0.91
SRLSSRQ6 When I'm reading, I stop once in a while and go over what I have read.	3.71	0.85
SRLSSRQ7 I work hard to get a good grade even when I don't like a class.	3.98	0.88

Table 8 presents the mean and standard deviation scores for learners' self-regulation. Overall, the mean values suggest a moderate to high level of self-regulated learning among the respondents. Item SRLSSRQ1 "I ask myself questions to make sure I know the material I have been studying" and item SRLSSRQ 7 "I work hard to get a good grade even when I don't like a class", both have the highest mean ($M = 3.98$). This means that learners check and make sure they understand their French lesson and study hard even though they did not enjoy the class. The lowest mean is for item SRLSSRQ 2 "When work is hard I either give up or study only the easy parts" ($M = 2.89$). These findings show that learners tend to give up when facing difficulties in French class or they just focus on the easier task.

Findings for grit

This section presents data to answer research question 5: How do learners perceive grit in learning? In the context of this study, this is measured by (i) consistency of interest and (ii) perseverance.

Table 9 - Mean (M) and Standard Deviation (SD) for CONSISTENCY OF INTEREST

ITEM	M	SD
GCIQ1 I often set a goal but later choose to pursue a different one.	3.07	0.76
GCIQ2 New ideas and new projects sometimes distract me from previous ones.	3.04	0.96
GCIQ3 I become interested in new pursuits every few months.	3.21	0.97
GCIQ4 My interests change from year to year.	3.17	1.02
GCIQ5 I have been obsessed with a certain idea or project for a short time but later lost interest.	2.80	1.02
GCIQ6 I have difficulty maintaining my focus on projects that take more than a few months to complete.	2.82	1.06

Based on Table 9, the Consistency of Interest subscale indicates that participants showed moderate levels of goal and interest instability overall. The highest mean was recorded for GCIQ3 ("I become interested in new pursuits every few months," $M = 3.21$, $SD = 0.97$), followed closely by GCIQ4 ("My interests change from year to year," $M = 3.17$, $SD = 1.02$), suggesting a noticeable tendency among respondents to shift their focus and interests over time. Setting a goal but later pursuing a different one ($M = 3.07$, $SD = 0.76$) and being distracted by new ideas and projects ($M = 3.04$, $SD = 0.96$) also scored around the midpoint, reflecting a moderate degree of goal inconsistency. In contrast, the lowest means were observed for short-lived obsessions with ideas or projects ($M = 2.80$, $SD = 1.02$) and difficulty maintaining focus on long-term projects ($M = 2.82$, $SD = 1.06$), though these items also showed the greatest variability in responses. Notably, since the Consistency of Interest items are negatively worded, these moderate scores suggest that respondents do not demonstrate particularly strong consistency of interest, which may reflect some challenges in sustaining long-term focus and commitment to a single goal or passion.

Table 10 - Mean (M) and Standard Deviation (SD) for PERSEVERANCE OF EFFORT

ITEM	M	SD
GCPQ1 I have achieved a goal that took years of work.	3.22	0.96
GCPQ2 I have overcome setbacks to conquer an important challenge.	3.49	0.80
GCPQ3 Setbacks don't discourage me.	3.25	0.94
GCPQ4 I finish whatever I begin.	4.03	0.75
GCPQ5 I am a hard worker.	3.79	0.79
GCPQ6 I am diligent.	3.67	0.79

The results presented in Table 10 reveal that respondents generally exhibited a strong sense of perseverance of effort across all six items. Among the items measured, the highest mean score was obtained for GCPQ4 ("I finish

whatever I begin," $M = 4.03$, $SD = 0.75$), indicating that the majority of participants consistently follow through on tasks they have started. This was closely followed by GCPQ5 ("I am a hard worker," $M = 3.79$, $SD = 0.79$) and GCPQ6 ("I am diligent," $M = 3.67$, $SD = 0.79$), both reflecting a well-established work ethic among the respondents. GCPQ2 ("I have overcome setbacks to conquer an important challenge," $M = 3.49$, $SD = 0.80$) also yielded a relatively favorable mean, suggesting that participants have demonstrated resilience in meaningful situations. The lowest scores were recorded for GCPQ3 ("Setbacks don't discourage me," $M = 3.25$, $SD = 0.94$) and GCPQ1 ("I have achieved a goal that took years of work," $M = 3.22$, $SD = 0.96$), with the latter two items also showing the greatest degree of response variability. These findings collectively suggest that while respondents display commendable levels of diligence and task commitment, their perseverance in the face of prolonged challenges and discouragement is comparatively less consistent.

Findings for motivational beliefs

This section presents data to answer research question 6: How do learners perceive motivational beliefs in learning? In the context of this study, this is measured by (i) self-efficacy, (ii) intrinsic value, and (iii) test anxiety.

Table 11 - Mean (M) and Standard Deviation (SD) for SELF-EFFICACY (6 items)

ITEM	M	SD
MBSEQ1 Compared with other students in this French class, I expect to do well.	3.39	0.89
MBSEQ2 I'm certain I can understand the ideas taught in this course	3.78	0.69
MBSEQ3 I expect to do very well in this class.	3.81	0.81
MBSEQ4 Compared with others in this class, I think I'm a good student	2.89	0.90
MBSEQ5 I am sure I can do an excellent job on the problems and tasks assigned for this class.	3.63	0.76
MBSEQ6 I know that I will be able to learn the material for this class	3.88	0.71

Table 11 presents the mean and standard deviation for self-efficacy as one of the motivational beliefs. On average, the mean ranges from the lowest of 2.89 to the highest of 3.88. From the table, the results showed that item MBSEQ6 "I know that I will be able to learn the material for this class" shows the highest mean value ($M = 3.88$), with a standard deviation of 0.71, indicating that learners are efficient in handling the class materials and are more independent. Meanwhile, item MBSEQ4 "compared with others in this class, I think I'm a good student" has the lowest mean value ($M = 2.89$) with a standard deviation of 0.90, indicating that learners did not do a big comparison between themselves and their classmates.

Table 12 - Mean (M) and Standard Deviation (SD) for INTRINSIC VALUE (9 items)

ITEM	M	SD
MBIVQ1 I prefer class work that is challenging so I can learn new things.	3.48	0.76
MBIVQ2 It is important for me to learn what is being taught in this class.	4.21	0.68
MBIVQ3 I like what I am learning in this class.	4.15	0.77
MBIVQ4 I think I will be able to use what I learn in this class in other classes.	3.93	0.78
MBIVQ5 Even when I do poorly on a test I try to learn from my mistakes.	4.41	0.66

MBIVQ6 I think that what I am learning in this class is useful for me to know.	4.29	0.72
MBIVQ 7 I think that what we are learning in this class is interesting.	4.35	0.66

Table 12 has shown significant mean values for all items. Item MBIVQ5 “Even when I do poorly on a test I try to learn from my mistakes” recorded the highest mean value ($M = 4.41$), suggesting that respondents had positive intrinsic value regarding foreign language learning in the class, with a standard deviation of 0.66. Meanwhile, item MBIVQ1 “I prefer class work that is challenging so I can learn new things” recorded the lowest mean value ($M = 3.48$) with standard deviation ($SD = 0.76$), revealing that not all learners value challenging tasks when it comes to foreign language class work.

Table 13 - Mean (M) and Standard Deviation (SD) for TEST ANXIETY (4 items)

ITEM	M	SD
MBTAQ1 I am so nervous during a test that I cannot remember facts I have learned.	3.21	0.99
MBTAQ2 I have an uneasy, upset feeling when I take a test.	3.07	1.04
MBTAQ3 I worry a great deal about tests.	3.53	0.99
MBTAQ4 When I take a test I think about how poorly I am doing.	3.41	1.10

The mean and standard deviation scores for learners’ test anxiety are presented in Table 13. Overall, the findings indicate that learners experienced a high to moderate level of test anxiety. The highest mean score was recorded for MBTAQ3 ($M = 3.53$, $SD = 0.99$), showing that learners felt anxious about tests. Likewise, learners also thought about their poor performance during tests (MBTAQ4, $M = 3.41$, $SD = 1.10$). The mean scores for items MBTAQ3 and MBTAQ4 show that the responses were quite high. Besides that, learners felt so uneasy during tests that they were unable to recall the facts they had studied (MBTAQ1, $M = 3.21$, $SD = 0.99$). The lowest mean score was recorded for MBTAQ2 ($M = 3.07$, $SD = 1.04$), indicating that learners felt worried and uncomfortable when sitting for tests. In general, the standard deviation values show that the responses were moderately varied among the learners.

Exploratory Statistics

As noted by He (2024), correlation serves as a fundamental statistical approach to assess both the intensity and orientation of the connection between two specific variables. This method is frequently utilized in research to characterize the associations among variables while maintaining that such relationships do not necessarily indicate causation. Consequently, this section outlines the findings derived from the correlation analysis conducted to resolve the research questions.

In addition, He (2024) clarifies that a correlation coefficient is typically deemed statistically significant when the p-value is below the 0.05 threshold. Within this framework, positive correlation values span from 0.1 to 1.0, where values between 0.1 and 0.3 signify a weak positive relationship, scores from 0.3 to 0.5 denote a moderate positive relationship, and values ranging from 0.5 to 1.0 indicate a strong positive relationship among the constructs.

Findings for the Relationship between self-regulation and grit

This section presents data to answer research question 7: Is there a significant relationship between self-regulation and grit?

H_{03} : There is no significant relationship between self-regulation and grit

Findings for the Relationship between self-regulation and motivational beliefs

This section presents data to answer research question 8: Is there a significant relationship between self-regulation and motivational beliefs?

H₀₄: There is no significant relationship between self-regulation and motivational beliefs

Table 14 - Correlation between Self-Regulation, Grit and Motivational Beliefs

Correlations				
		SELF_REGULATION	GRIT	MOTIVATIONAL_BELIEFS
SELF_REGULATION	Pearson Correlation	1	.366**	.447**
	Sig. (2-tailed)		<.001	<.001
	N	277	277	277
GRIT	Pearson Correlation	.366**	1	.384**
	Sig. (2-tailed)	<.001		<.001
	N	277	277	277
MOTIVATIONAL_BELIEFS	Pearson Correlation	.447**	.384**	1
	Sig. (2-tailed)	<.001	<.001	
	N	277	277	277
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 14 shows there is a moderate positive relationship between self-regulation and grit($r=.366^{**}$) and ($p=<.001$). There is also a moderate positive relationship between self-regulation and motivational beliefs ($r=.447^{**}$) and ($p=<.001$).

CONCLUSION

Summary of Findings and Discussions

This study investigated the relationships between self-efficacy, grit, motivational beliefs, self-regulation, and related psychological factors among learners of French as a foreign language. Overall, the findings demonstrate that the psychological factors studied are closely related to one another. These three factors support learners in their learning. The results also show that self-regulation plays an important role in learning. Learners with stronger self-regulation tend to have higher levels of grit and more positive motivational beliefs. This suggests that self-regulation helps learners stay motivated, confident, and persistent when learning a foreign language.

In relation to gender differences, the study found that there were no significant differences in self-efficacy, grit, and motivational beliefs across gender among learners of French as a foreign language. The results of the independent samples t-test showed that gender did not significantly influence learners' motivational beliefs. Therefore, the null hypothesis (H₀₁) was accepted. This indicates that male and female learners share similar levels of confidence, perseverance, and motivation in learning French. This finding supports the study by Guo et al. (2023), who reported that gender did not significantly affect learners' motivation, grit, self-regulated

learning strategies, or language proficiency. Similarly, Martin et al. (2022) suggested that individual learning experiences and self-regulated learning strategies play a greater role in influencing motivational beliefs and grit than gender differences. Therefore, the findings suggest that gender is not a key factor affecting learners' self-efficacy, grit, and motivational beliefs. These constructs appear to be moderately consistent across both male and female learners.

In terms of academic disciplines, the results similarly revealed no significant differences between science and non-science learners in self-efficacy, grit, and motivational beliefs. This indicates that learners from different disciplinary backgrounds demonstrate comparable levels of self-efficacy, grit, and motivational beliefs in learning French as a foreign language. This finding suggests that disciplinary background does not appear to shape or differentiate learners' motivational and psychological characteristics in this context. This result can be linked to prior research which suggests that motivation and grit are not strongly discipline-dependent. Gardner (2010) explained that language learning motivation is formed by a combination of internal and external influences. As a result, learners from different academic disciplines may experience similar levels of motivation.

In the same way, according to Duckworth et al. (2007) and Duckworth and Quinn (2009), grit consists of perseverance of effort and consistency of interest, both of which help individuals achieve long-term goals regardless of their academic discipline. Overall, the findings demonstrate that the psychological factors studied are closely related to one another. These three factors support learners in their learning. The results also show that self-regulation plays an important role in learning. Learners with stronger self-regulation tend to have higher levels of grit and more positive motivational beliefs. This suggests that self-regulation helps learners stay motivated, confident, and persistent when learning a foreign language.

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In the same way, according to Duckworth et al. (2007) and Duckworth and Quinn (2009), grit consists of perseverance of effort and consistency of interest, both of which help individuals achieve long-term goals regardless of their academic discipline.

Evidence from earlier studies also suggests that these findings are consistent across different academic streams. Grit plays a huge role for learners across all academic streams (Wu, Tian & Jin, 2024; Somiya & Rahman, 2025; Zhang & Xu, 2025). Foreign language learning engagement was found to be greater among learners who are grittier, particularly perseverance of effort (Wu, Tian & Jin, 2024). In line with this, learners' communication needs and multilingual backgrounds have more influences on motivation rather than their academic disciplines (Zhang & Xu, 2025). Additionally, extrinsic and intrinsic motivational orientations are revealed by learners from different groups (Somiya & Rahman, 2025), validating that self-efficacy, grit, and motivational beliefs appear to remain unchanged regardless of learners' academic disciplines.

Regarding self-regulation, most learners believe that as active participants in their own learning, they get to plan and monitor their effort during learning activities which validate the findings that their ability to manage their learning process are regarded positively. The results are in line with the fact that self-regulated learning strategies are linked with academic success (Guo et al., 2023; Ueno & Park, 2025), even though the efficacy may differ depending on learning settings and learner's traits. Overall, learners seem to possess decent self-regulation skills. Nonetheless, in diverse learning contexts, they may still require guidance and practice to use these skills more efficiently.

For grit, there are two dimensions examined: consistency of interest and perseverance of effort (Duckworth et al., 2007; Duckworth & Quinn, 2009). The findings suggest that learner's perseverance of effort was stronger by looking at their hard work, task completion, and determination when facing challenges. On the other hand, they reported that to remain focused over a long run was rather difficult and at one point, they changed their attention, which was discovered in the current study. The result reflects the view put forward by Wu et al. (2024), who observed that perseverance of effort contributes more to learning engagement than consistency of interest.

In relation to motivational beliefs, which were investigated through three areas: self-efficacy, intrinsic value, and test anxiety, it was shown that learners usually have a positive outlook and are confident during their learning experience. They rely more on their own abilities, hence, the findings imply that their motivation is mostly rooted from their personal competence, which aligns with Self-Determination Theory (Deci & Ryan, 1985). It also agrees with previous studies (Lebci et al., 2022; Martin et al., 2022; Neroni et al., 2022; Rahmat & Thasrabiab, 2024), which examined the interconnections between self-efficacy, self-regulated learning, active participation and academic performance.

Finally, two significant findings were obtained from the correlation analysis. First, those who take control of their learning are more likely to keep working toward their long-term goals, which shows that there is a significant positive correlation between self-regulation and grit. Second, those who regulate their learning are also more confident and motivated, which demonstrates that self-regulation and motivational beliefs are positively related. These two main findings provide further support for the findings of Martin et al. (2022), Rahmat and Thasrabiab (2024), Liu et al. (2025), Arepin and Rahmat (2026), and Parsai Moghadam et al. (2026).

Overall, the findings of this study suggest that self-regulation is an important factor that supports both motivational beliefs and grit among learners. Although gender and academic discipline do not have a significant effect on these psychological factors, self-regulation plays a key role in maintaining motivation, persistence, and effective learning in foreign language contexts.

Implications and Suggestions for Future Research

Constructed on the review of literature, it is demonstrated that self-regulation, grit, and motivational beliefs are closely interconnected psychological constructs that influence learners' engagement and persistence in foreign language learning. The findings of this study further confirm that these constructs are not isolated, but work together in shaping learners' learning experiences. In particular, self-regulation plays a central role in strengthening both grit and motivational beliefs, while demographic factors such as gender and academic discipline do not significantly differentiate learners' psychological profiles.

Theoretical and Conceptual Implications

The findings of this study contribute to the theoretical understanding of motivational and self-regulatory frameworks in several ways. First, the study supports Self-Determination Theory (Deci & Ryan, 1985) by demonstrating that learners' motivational beliefs are strongly linked to internal competence and autonomy rather than external comparisons. This reinforces the idea that motivation in language learning is primarily internally driven.

Second, the findings build on Martin et al. (2022) by showing that learners see self-regulation as a skill that is still developing. It involves planning, monitoring, and persistence, but learners still struggle when tasks become more difficult. This supports the view that self-regulation is not fixed, but changes depending on the situation and learning demands.

Third, the study supports Duckworth's grit theory (Duckworth et al., 2007; Duckworth & Quinn, 2009) by showing that perseverance of effort is stronger than consistency of interest among learners.

This suggests that grit is made up of different components that do not grow at the same pace. Some learners may persevere strongly, but over time they tend to show less and less interest and become less consistent gradually.

Finally, the studies by Arepin and Rahmat (2026), Obeng et al. (2025), and Martin et al. (2022) support the strong relationship between self-regulation, grit, and motivational beliefs. Their findings suggest that these constructs are working together rather than independently. As a whole, the current study provides an in-depth understanding of foreign language learning experiences.

Pedagogical Implications

Given the essential role of self-regulation and its connections with grit and motivational beliefs, instructors should strongly support learners in enhancing self-regulated learning abilities. Learners are then guided to identify specific goals, monitor their progress, reflect on their activities by journaling, completing checklists, and engaging in structured activities.

Additionally, since it was demonstrated that consistency of interest is lower than perseverance of effort, learners should be exposed to varied, meaningful, and authentic learning activities in order for them to maintain interest over a longer period of time. At the same time, they will be more involved and it may help reduce boredom.

Finally, since gender and academic discipline do not significantly influence learners' grit and motivational beliefs, the findings suggest that no further investigation into different teaching strategies is required. To assist learners in developing self-regulation, grit, motivation and resilience, indifferent learning methods could be adopted for both genders and across all academic streams.

Suggestions for Future Research

In the domain of self-regulation, grit, and motivational beliefs in foreign language learning, several recommendations can be made for future studies based on the findings of the current study.

To begin with, the findings demonstrated that self-regulation and perseverance are still developing in the literature. To explore how self-regulation, grit, and motivational beliefs change over time, future researchers may consider conducting longitudinal studies as this would provide a deeper understanding of how these constructs develop as learners gain more experience in acquiring French or other foreign languages.

In addition, additional psychological variables, such as language anxiety, academic resilience, or learning strategies, may be added to future studies. This would provide more insight on how self-regulation works together with motivation and grit.

Furthermore, different research methodologies, such as a qualitative approach could be adopted to investigate learning processes. To gain a deeper understanding on how learners regulate their motivation in authentic learning situations, interviews or focus group discussions may be conducted.

Finally, to improve the ability to generalise the findings and enable more extensive comparisons across different learning contexts, future studies involving larger and more diverse populations are encouraged.

To conclude, future studies are recommended to look at how teaching strategies like structured goal setting, reflection activities, or techniques to reduce anxiety can enhance self-regulation and motivation. This would help instructors better understand how to support foreign language learners.

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APPENDIX

Grit, Motivation And Self- Regulated Learning

(This instrument is adopted from Martin et al., 2022)

PART	VARIABLE		CONSTRUCT	No Of Items	Total Items
TWO	GRIT	i	CONSISTENCY OF INTEREST	6	12
		ii	PERSEVERANCE OF EFFORT	6	
THREE	MOTIVATIONAL BELIEFS	i	SELF-EFFICACY	6	17
		ii	INTRINSIC VALUE	7	
		ii	TEST ANXIETY	4	
FOUR	SELF-REGULATED LEARNING STRATEGIES	i	SELF-REGULATION	7	7
	TOTAL NO OF ITEMS				36

(i) Consistency Of Interest

ITEM	1	2	3	4	5
GCIQ1 I often set a goal but later choose to pursue a different one.					
GCIQ2 New ideas and new projects sometimes distract me from previous ones.					
GCIQ3 I become interested in new pursuits every few months.					
GCIQ4 My interests change from year to year.					
GCIQ5 I have been obsessed with a certain idea or project for a short time but later lost interest.					
GCIQ6 I have difficulty maintaining my focus on projects that take more than a few months to complete.					

(ii) Perseverance Of Effort

ITEM	1	2	3	4	5
GCPQ1 I have achieved a goal that took years of work.					
GCPQ2 I have overcome setbacks to conquer an important challenge.					

GCPQ3 Setbacks don't discourage me.					
GCPQ4 I finish whatever I begin.					
GCPQ5 I am a hard worker.					
GCPQ6 I am diligent.					

Part 2- Motivational Beliefs

A. SELF-EFFICACY

ITEM	1	2	3	4	5
MBSEQ1 Compared with other students in this French class, I expect to do well.					
MBSEQ2 I'm certain I can understand the ideas taught in this course					
MBSEQ3 I expect to do very well in this class.					
MBSEQ4 Compared with others in this class, I think I'm a good student					
MBSEQ5 I am sure I can do an excellent job on the problems and tasks assigned for this class.					
MBSEQ6 I know that I will be able to learn the material for this class					

B. Intrinsic Value

ITEM	1	2	3	4	5
MBIVQ1I prefer class work that is challenging so I can learn new things.					
MBIVQ2It is important for me to learn what is being taught in this class.					
MBIVQ3I like what I am learning in this class.					
MBIVQ4I think I will be able to use what I learn in this class in other classes.					
MBIVQ5Even when I do poorly on a test I try to learn from my mistakes.					
MBIVQ6 I think that what I am learning in this class is useful for me to know.					
MBIVQ7 I think that what we are learning in this class is interesting.					

C. Test Anxiety

ITEM	1	2	3	4	5
MBTAQ1 I am so nervous during a test that I cannot remember facts I have learned.					
MBTAQ2 I have an uneasy, upset feeling when I take a test.					
MBTAQ3 I worry a great deal about tests.					

MBTAQ4 When I take a test I think about how poorly I am doing.

Part Three- Self-Regulated Learning Strategies

D. Cognitive Strategy Use

ITEM	1	2	3	4	5
SRLSCSUQ1 When I study, I put important ideas into my own words.					
SRLSCSUQ2 I always try to understand what the teacher is saying even if it doesn't make sense.					
SRLSCSUQ3 When I study for a test, I try to remember as many facts as I can.					
SRLSCSUQ4 When studying, I copy my notes over to help me remember material.					
SRLSCSUQ5 When I study for a test, I practice saying the important facts over and over to myself.					
SRLSCSUQ6 When I am studying a topic, I try to make everything fit together.					
SRLSCSUQ7 When reading I try to connect the things, I am reading about with what I already know.					

E. Self-Regulation

ITEM	1	2	3	4	5
SRLSSRQ1 I ask myself questions to make sure I know the material I have been studying.					
SRLSSRQ2 When work is hard I either give up or study only the easy parts.					
SRLSSRQ3 Even when study materials are dull and uninteresting, I keep working until I finish.					
SRLSSRQ4 Before I begin studying, I think about the things I will need to do to learn.					
SRLSSRQ5 I often find that I have been reading for class but don't know what it is all about.					
SRLSSRQ6 When I'm reading, I stop once in a while and go over what I have read.					
SRLSSRQ7 I work hard to get a good grade even when I don't like a class.					