

From Discovery to Mastery: Malaysian Students' Approach to Italian Vocabulary Learning Strategies

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Abstract

Proficiency in vocabulary has been identified as the most critical skill for effective communication in foreign languages. Consequently, employing Vocabulary Learning Strategies (VLS) is essential for students to efficiently retain and apply new vocabulary. Recognizing the pivotal role of vocabulary and VLS in foreign language acquisition, this study addresses gaps in the existing literature regarding the use of VLS among university students learning Italian as a Foreign Language (IFL) in Malaysia. The research aims to identify the most and least utilized VLS by these learners and to evaluate their awareness of the diverse strategies available. Using a modified version of Schmitt's (1997) Vocabulary Learning Strategies Questionnaire, data were collected from 494 participants, predominantly non-advanced IFL learners. Participants rated their use of 65 individual strategies on a 5-point Likert scale, with the data analyzed through statistical methods. The findings indicate that learners were moderate users of VLS overall. Discovery strategies (Determination and Social) were the most frequently employed, followed by Consolidation strategies (Cognitive, Metacognitive, and Memory), with Consolidation-Social strategies being the least used. Popular strategies among participants included those involving technology, cross-linguistic applications, peer interaction, and rote learning. Conversely, strategies involving pictorial aids, deep cognitive processing, mnemonics, and metacognition were the least utilized. The study highlights several socio-educational factors influencing VLS use: (a) students' autonomous learning capabilities, (b) the multilingual context, (c) social-interactive teaching approaches, and (d) the need for targeted VLS training to boost students' confidence and enhance their IFL vocabulary acquisition skills.

Keywords: Italian as a Foreign Language, Malaysia, University Students, Vocabulary Learning Strategies (VLS).

Introduction

Acquiring proficiency in foreign languages (FLs) entails mastering various linguistic components, such as phonetics, writing systems, spelling, culture, syntax, and pragmatics.

Among these, vocabulary has been widely recognized as the most critical element, as highlighted by numerous scholars (e.g., Folse, 2004; Davies & Pearse, 2000; McCarthy, 1990; Laufer & Sim, 1985). A limited knowledge of FL vocabulary represents a significant barrier for learners, impeding their ability to perform essential language tasks, including listening, reading, writing, and speaking. While FL learners generally acknowledge the importance of vocabulary, acquiring new words often proves challenging, particularly in contexts where learners lack access to native speakers or where the target language, such as Italian, is not commonly spoken—an issue faced by learners in Malaysia.

To address these challenges, vocabulary acquisition requires tailored approaches that accommodate the diverse needs of FL learners. Students must develop personalized methods to discover the meanings of new words and consolidate their vocabulary knowledge. This necessitates the use of *Vocabulary Learning Strategies* (VLS), defined by Oxford (1990: 8) as strategies involved in "the acquisition, storage, retrieval, and use of [vocabulary] information." Research indicates that learners tend to adopt VLS they perceive as effective and suitable (e.g., Nation, 2001, 1990; Schmitt & Schmitt, 1995; Oxford & Scarcella, 1994). However, learners may not naturally master these strategies, underscoring the need for FL instructors to provide explicit instruction in VLS to help students become autonomous and effective learners (Cameron, 2001).

Statement of the Problem

Despite the critical role of VLS in language acquisition, there is a notable gap in research concerning their use among Malaysian learners of Italian as a Foreign Language (IFL). This study seeks to address this gap by examining the most and least frequently used VLS among university students in Malaysia and evaluating their awareness of the range of strategies available. By identifying the strategies students find most effective and how these techniques are applied, this research aims to provide valuable insights for enhancing the teaching and learning of IFL. A comprehensive understanding of VLS diversity will enable educators and researchers to develop resources, tasks, activities, and assignments that are better suited to the educational context and help learners have a more effective learning process.

Research Questions

This study is guided by the following research questions:

- (1) What are the most and least frequently used Vocabulary Learning Strategies among Malaysian university learners of Italian?
- (2) Are Malaysian university students of Italian high, medium, or low users of Vocabulary Learning Strategies? To what extent are they aware of the range of Vocabulary Learning Strategies?

Literature Review

Numerous attempts have been made to categorize Vocabulary Learning Strategies (VLS). These taxonomies often differ significantly, as most are derived from empirical studies relying on students' self-reports of their most frequently used learning strategies (Saengpakdeejit, 2014). The following sections provide an overview of the most frequently cited VLS taxonomies, with particular focus on Schmitt's (1997) taxonomy, which forms the basis for data collection in this study. Special attention is given to its application in examining VLS usage

among students learning Italian as a Foreign Language (IFL), a domain that has thus far received limited scholarly attention.

Vocabulary Learning Strategy Taxonomies

Oxford (1990) classified learning strategies in her *Strategies Inventory for Language Learning* (SILL) questionnaire into two primary categories: *Direct strategies*, encompassing *Memory*, *Cognitive*, and *Compensation* strategies, and *Indirect strategies*, which include *Metacognitive*, *Affective*, and *Social* strategies. Similarly, Rubin and Thompson (1994) proposed a VLS taxonomy comprising a *Direct Approach* and an *Indirect Approach*, supplemented by *Mnemonic* strategies for acquiring new vocabulary. Gu and Johnson (1996) and Gu (2003, 2018) introduced an alternative VLS framework through the *Vocabulary Learning Questionnaire* (VLQ), emphasizing two main categories: *Metacognitive* and *Cognitive* strategies. *Metacognitive* strategies incorporated *Beliefs* about vocabulary learning and *Metacognitive Regulation*, while *Cognitive* strategies included *Inferencing*, *Note-Taking*, *Dictionary Use*, *Rehearsal*, *Encoding*, and *Activation* techniques. Nation (2001) developed a classification system that divided VLS into three broad categories: *Planning*, *Source*, and *Processes*. This taxonomy outlined strategies spanning from the preparation phase to the consolidation of vocabulary. Lawson and Hogben (1996) proposed a VLS taxonomy based on their study of 15 Australian university students learning Italian as a Foreign Language (IFL). Their findings revealed that learners employed various strategies, with four categories emerging as the most favored. *Repetition* strategies, such as word reading, writing, and rehearsal exercises, were the most widely used, as they are straightforward and require minimal cognitive effort. *Word Feature Analysis*, including spelling, word classification, and suffix identification, was the second most common category. *Simple Elaboration* strategies, such as exercises involving word translation, contextual usage, and cross-language comparisons, were also prevalent. Finally, *Complex Elaboration* strategies, involving advanced exercises like contextual usage, paraphrasing, and mnemonic techniques, were the least utilized but still significant in enhancing vocabulary acquisition.

Schmitt's (1997) Vocabulary Learning Strategy Taxonomy

Schmitt (1997) developed the *Vocabulary Learning Strategies Questionnaire* (VLSQ), which categorizes 58 specific VLS into two main groups: *Discovery* (DIS) strategies and *Consolidation* (CON) strategies. The 14 *Discovery* strategies enable learners to identify the meanings of unfamiliar words, while the 44 *Consolidation* strategies are designed to help students reinforce, modify, enhance, memorize, and recall newly acquired vocabulary. Schmitt's taxonomy further divides these categories into two subgroups for *Discovery* strategies and four subgroups for *Consolidation* strategies.

The *Discovery-Determination* (DIS-DET) subgroup focuses on helping students independently determine the meanings of unknown words by consulting technological resources, such as dictionaries and translation tools, analyzing contextual and discursive usage, and identifying interlinguistic cognates. *Discovery-Social* (DIS-SOC) strategies involve learners collaborating with peers, classmates, or instructors to uncover the meanings of new vocabulary.

Consolidation strategies encompass a broader range of approaches. *Consolidation-Social* (CON-SOC) strategies enable learners to reinforce vocabulary through social interactions with others. *Consolidation-Memory* (CON-MEM) strategies involve linking existing vocabulary

knowledge with new words using mental and morphosemantic activities, including imaginative thinking in both verbal and visual forms and categorizing words based on their morphological and semantic features. *Consolidation-Cognitive* (CON-COG) strategies entail mechanical learning tasks, such as taking notes, maintaining glossaries, and practicing new words through repetition, both orally and in writing. Finally, *Consolidation-Metacognitive* (CON-MET) strategies empower students to monitor their foreign language learning processes through decision-making and self-evaluation. These strategies often include exposure to multimedia resources in the target language, such as movies and songs, and the practical application of recently acquired vocabulary.

Research on Vocabulary Learning Strategies Among Learners of Italian as a Foreign Language

The research by Lawson and Hogben (1996), mentioned earlier, remains one of the limited studies investigating the application of *Vocabulary Learning Strategies* (VLS) among learners of Italian as a Foreign Language (IFL). An earlier attempt was made by Oxford and Nyikos (1989), who conducted a comparative study involving 1,200 American university students learning Italian, French, Spanish, German, and Russian, using Oxford's *Strategies Inventory for Language Learning* (SILL). Their findings revealed that formal rule-based strategies were favored by students, while communicative-functional strategies were the least employed. The study concluded that "students were concerned more with grade-getting in a traditional academic environment than with developing communicative competence" (Oxford et al., 1988: 321). Another study employing the SILL framework was conducted by Dinelli and Clulow (2002), which explored strategies for retaining written IFL vocabulary among 37 first-year students with varying proficiency levels in the target language. The analysis showed that most strategies surveyed were widely utilized. Contextual clues and learning from one's own mistakes were commonly employed by both advanced and non-advanced students, whereas visual, picture-based strategies were the least favored. However, differences emerged between proficiency levels. Non-advanced learners frequently relied on note-taking and rarely used dictionary-based strategies, which were more common among advanced students. Conversely, advanced learners seldom used vocabulary lists and rehearsal exercises, whereas non-advanced students infrequently adopted reading-based strategies. To date, only one study on IFL learning has employed Schmitt's (1997) VLSQ. Gökhan Karacan and Dikilitaş (2020) examined the VLS used by 103 bilingual Turkish-Italian high school students, distinguishing between simultaneous bilinguals (acquiring both languages concurrently) and sequential bilinguals (learning the two languages consecutively). The researchers found that students were moderate to high-level VLS users, exhibited no significant differences in strategy preferences, and reported Social strategies as the most frequently used, while Metacognitive strategies were the least employed.

As illustrated above, existing research has given limited attention to the use of VLS among IFL learners. This study aims to fill this gap by focusing on the VLS employed by Malaysian university students learning Italian. The methodology, findings, discussion, and implications for teaching and learning are presented in the subsequent sections.

Materials and Methods

Participant Profile

The study involved 494 undergraduate students from three Malaysian universities. The majority of participants were female (65.8%, N = 325), with ages ranging from 17 to 22 years

(76.7%, N = 379). Most participants (90.3%, N = 446) had studied or were currently studying Italian as a foreign language (IFL) for one to three semesters (94.2%, N = 465), primarily as an elective course (84.6%, N = 418). A smaller portion (15.4%, N = 76) were enrolled in undergraduate programs specializing in Italian language and culture or Italian Design. Consequently, most participants were at a beginner level in Italian, with all falling within the A1 proficiency level, as per the Common European Framework of Reference for Languages (CEFR). The majority of participants were in their first (51.6%, N = 255) or second (32.8%, N = 162) year of study, with diverse academic backgrounds. In addition to Italian language, culture, and design, their fields of study included art and social sciences (31.4%, N = 155), information and communication (21.9%, N = 108), engineering (19%, N = 94), and digital sciences (11.7%, N = 58). All participants were multilingual, fluent in both English and Malay, which were spoken daily. Most spoke three (55.1%, N = 272) or four (20%, N = 99) languages, including Tamil, Mandarin, and various Malaysian indigenous languages (e.g., Dusun, Kadazan, Iban), along with additional foreign languages such as Italian, French, German, Japanese, and Korean.

Instrument: The Vocabulary Learning Strategies Questionnaire (VLSQ)

This study employed Schmitt's (1997) *Vocabulary Learning Strategies Questionnaire* (VLSQ), which has been previously used by several scholars, including Almosa (2024), Yee Chin et al. (2021), Gökhan Karacan and Dikilitaş (2020), Laffey (2020), Kai-Chee and Wee-Ling (2019), and Vo and Jaturapitakkul (2016).

The VLSQ consists of two parts: the first collects sociodemographic and educational data from the participants, while the second is based on Schmitt's (1997) original VLSQ. The original questionnaire, written in English, was revised to better suit the Malaysian educational context and practices relevant to this study. The revisions were informed by prior research (e.g., Yee Chin et al., 2021; Laffey, 2020; Kai-Chee & Wee-Ling, 2019; Vo & Jaturapitakkul, 2016) and included simplifying the language, providing examples and visual aids for clarity, and incorporating technological strategies (e.g., smartphone dictionaries, language apps, and other online tools). The final version of the questionnaire contains 65 items, divided into 18 Discovery and 47 Consolidation VLS. These include 13 Determination (DIS-DET), 5 Discovery-Social (DIS-SOC), 3 Consolidation-Social (CON-SOC), 27 Memory (CON-MEM), 10 Cognitive (CON-COG), and 7 Metacognitive (CON-MET) strategies. The VLSQ uses a 5-point Likert scale with response options ranging from 'never used' (1 point) to '(almost) always used' (5 points). The finalized questionnaire was validated by a group of experts and native Italian-speaking academics to ensure its appropriateness for IFL learners. To assess the reliability of the revised VLSQ, a pilot study was conducted in December 2023 with 75 students studying Vietnamese and French at a university in Brunei Darussalam. The results of the pilot study indicated strong internal consistency (reliability), with a Cronbach's alpha of .923, which is considered excellent according to DeVellis (1991), who suggests that an alpha value of at least .70 indicates good reliability. Following this, the questionnaire was converted into an online format using *Qualtrics* survey software, facilitating its distribution across the three Malaysian universities where the study took place.

Data Collection

The *Vocabulary Learning Strategies Questionnaire* (VLSQ) was administered throughout the academic year 2023/2024. The researchers disseminated the VLSQ link via WhatsApp to the

instructors of Italian as a Foreign Language (IFL). In turn, the instructors forwarded the link to their students through WhatsApp, institutional platforms, or email. The majority of participants completed the questionnaire independently and asynchronously. However, some instructors preferred to guide their students through the questionnaire during IFL lessons. Students were informed about the objectives and procedures of the research. By completing the survey, participants consented to participate voluntarily and anonymously in the investigation of vocabulary learning strategies. They were instructed to respond as honestly as possible and were given approximately 15 to 30 minutes to complete the questionnaire.

Data Analysis

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS) Version 20 to identify the most and least frequently used VLS among Malaysian IFL students, as well as their level of awareness regarding these strategies. The reliability of the data demonstrated high internal consistency, with a Cronbach's alpha of 0.956.

Descriptive statistics, including means and standard deviations, were employed for analysis. Non-parametric methods were applied, given the p-value of less than 0.05, as indicated by the Kolmogorov-Smirnov and Shapiro-Wilk tests of normality for the Italian as a Foreign Language VLSQ. To assess statistically significant differences in the usage of categorical, sub-categorical, and individual VLS, Wilcoxon Signed Ranks tests (z value) were conducted, with a significance level set at $p < 0.05$.

Oxford's (1990) framework, which aligns with the objectives of this study, was used to interpret the VLS usage scores of students. According to this framework, scores ranging from 3.50 to 5.00 indicate high strategy use, scores from 2.50 to 3.49 represent medium use, and scores from 1.00 to 2.49 correspond to low use.

Results and Discussion

This section first addresses the analysis of the most and least frequently employed individual *Vocabulary Learning Strategies* (VLS) among Malaysian students of Italian as a foreign language (IFL) (Research Question 1). It then proceeds with an aggregated analysis to identify overarching trends and assess whether learners demonstrated awareness of the diversity of available VLS (Research Question 2). To achieve these objectives, several descriptive statistical tables are presented, with findings discussed accordingly throughout the section.

The Most Frequently Used Vocabulary Learning Strategies

Table 1 presents the mean scores, organized in descending order, along with the corresponding standard deviations for the most frequently used VLS by Malaysian IFL students.

Table 1

The Most Frequently Used Individual Vocabulary Learning Strategies by Malaysian Students of Italian as a Foreign Language (Mean Scores in Descending Order; SD; N = 494).

Rank	VLS Item	Statement	M	SD
1	DIS-DET_10	I use an online translator (<i>Google Translate, Papago, DeepL Translator, Generative AI</i> , etc.) to find out the meaning of the new word.	4.14	.91
2	DIS-DET_9	I use an online dictionary (<i>Google Dictionary, Dictionary.com, Reverso</i> , etc.) to find out the meaning of the new word.	4.06	.93
3	CON-COG_55	I take notes in class.	4.05	.90
4	DIS-DET_8	I use a smartphone dictionary app to find out the meaning of the new word.	4.01	.96
5	CON-COG_49	I say the word repeatedly to memorize it.	3.79	.97
6	CON-MEM_35	I study the sound (pronunciation) of the new word.	3.75	.91
7	DIS-SOC_17	I ask classmates or friends for the meaning of the new word.	3.67	.94
8	CON-MEM_37	I pronounce a new word aloud when trying to memorize it.	3.66	1.03
9	DIS-DET_3	I relate the new word to a similar one in another known language (cognates, similar words; or words with similar sound).	3.51	.96
	CON-MEM_38	I visualize the form, spelling, or characters of the new word.	3.51	.97
11	CON-MEM_34	I study the spelling/writing form of the new word.	3.50	.95
	CON-COG_51	I keep my personal vocabulary notebook to study/revise new words.	3.50	1.12
	CON-COG_50	I write the word repeatedly to memorize it.	3.50	1.07

In general, participants exhibited a moderate level of strategy use, with 73.85% (48 out of 65) of the VLS falling within the moderate range (mean scores between 2.50 and 3.49). The findings indicated that thirteen VLS, representing 20% of the strategies, were the most frequently used by students, with mean scores ranging from 4.14 to 3.50 (overall mean: 3.74). However, the standard deviations, ranging from .90 to 1.12, suggest considerable variation in participants' responses regarding the frequency of VLS usage.

These thirteen most frequently used VLS can be categorized into five major types, comprising three Discovery and two Consolidation strategy dimensions:

(1) *Discovery-Determination Technologically Integrated VLS*: Students frequently utilized online translators (DIS-DET_10) and dictionaries, both online (DIS-DET_9) and via smartphone apps (DIS-DET_8). This common use of technologically integrated strategies aligns with findings from other studies on VLS usage among Asian students, such as Wu's (2005) study of Taiwanese students learning English as a foreign language (EFL), and Laffey's (2020) research on Korean EFL learners. Furthermore, dictionary-based strategies have been found to be particularly popular among IFL students (e.g., Lawson & Hogben, 1996), as well as among

other Asian foreign language learners (e.g., Saengpakdeejit, 2014; Asgari & Ghazali, 2011), due to their ability to support learning through accurate word pronunciation and contextual usage (Asgari & Ghazali, 2011; Carter, 1987).

(2) *Discovery-Determination Cross-Language VLS*: Similar to the findings of Lawson and Hogben (1996), Malaysian IFL learners frequently employed cross-language strategies, such as identifying interlinguistic cognates (DIS-DET_3), to infer the meaning of new words. Learners may benefit from the morphological, semantic, and phonetic similarities between Italian and English words (e.g., *intelligente* [Italian] and *intelligent* [English], *ristorante* [Italian] and *restaurant* [English], *città* [Italian] and *city* [English]). Consequently, multilingual and multicultural environments, such as those in Malaysia, provide an advantageous socio-educational context for learning foreign languages (Colombo & Ghimenton, 2023).

(3) *Discovery-Social Peer-Based VLS*: Malaysian IFL students regularly sought assistance from their classmates or friends (DIS-SOC_17) to understand the meaning of new words, through direct translation, synonyms, or paraphrasing. This finding mirrors the results of Schmitt (1997), among others, who reported that asking peers was a common social VLS among Japanese EFL students.

(4) *Consolidation Traditional and Rote Learning VLS*: Five of the most frequently used strategies (38.46%, 5/13) were linked to traditional and mechanical learning techniques. These included oral (CON-COG_49, CON-MEM_37) and written (CON-COG_50) rehearsal exercises, as well as note-taking (CON-COG_55) and personal vocabulary notebook keeping (CON-COG_51). These strategies are widely regarded as effective tools for improving foreign language proficiency (Schmitt, 1997). Additionally, these VLS allow students to record information in ways that align with their individual learning styles, thus aiding vocabulary understanding, recall, and retrieval. Repetition exercises, note-taking, and personal notebooks are common practices among foreign language learners, as these strategies are viewed as pragmatic and valuable. The present study's findings are consistent with global studies that identify these five VLS as highly frequently used (e.g., Yee Chin et al., 2021; Hüseyin, 2019; Vo & Jaturapitakkul, 2016; Zare, 2012; Dinelli & Clulow, 2002; Kudo, 1999; Schmitt, 1997; Lawson & Hogben, 1996).

(5) *Consolidation Memory-Related VLS*: Three memory-related strategies were particularly favored by students. These strategies involve deep cognitive processing, such as analyzing the morphological and semantic structure (CON-MEM_38, CON-MEM_34) and phonetic features (CON-MEM_35) of new words. These strategies engage both auditory and visual representations of new vocabulary, which are integrated into the learner's existing vocabulary knowledge (Schmitt, 1997). Several factors may explain students' preference for these memory-based strategies. Yee Chin et al. (2021) noted that such methods directly stimulate the senses, aiding students in memorizing, recalling, and retaining vocabulary items. Furthermore, beginner students are more likely to use these mnemonic VLS to retain word structures, while more advanced learners require fewer such strategies as their vocabulary and language proficiency expand (Oxford, 2003).

The Least Frequently Used Vocabulary Learning Strategies

Table 2 presents the ranking of the least frequently used strategies, with only four (6.15%) VLS showing minimal popularity among the students (mean scores ranging from 2.41 to 2.18, and standard deviations ranging from 1.12 to 1.01).

Table 2

The Least Used Individual Vocabulary Learning Strategies by Malaysian Students of Italian as a Foreign Language (Means in Descending Order; SD; N = 494).

Rank	VLS Item	Statement	M	SD
62	CON_COG_54	I use flash cards and/or postcards and/or post-its to remember the new word.	2.41	1.09
63	CON_MEM_28	I use scales for gradable adjectives, including the new word. Some examples with English scale adjectives: White ⇒ Grey ⇒ Black; Cold ⇒ Cool ⇒ Warm ⇒ Hot.	2.39	1.12
64	CON_MEM_27	I use semantic maps like word webs, including the new word.	2.34	1.08
65	DIS_DET_12	I use flash cards to find the word meaning.	2.18	1.01

The strategies least utilized by students relate to the use of flashcards, postcards, and post-its (CON_COG_54 and DIS_DET_12). These methods are often avoided by students, as evidenced in previous studies (e.g., Tahmina, 2023; Laffey, 2020; Rabadi, 2016; Lee, 2007; Dinelli & Clulow, 2002). The creation of cards and images for each new word was considered too labor-intensive unless these resources were already created and readily available (Lee, 2007).

Furthermore, participants reported infrequent use of more complex mental processing strategies, such as relating and organizing new vocabulary using semantic maps (CON_MEM_27) or scale adjectives (CON_MEM_28). This finding aligns with earlier research (e.g., Schmitt, 1997; Oxford et al., 1988), which suggests that non-advanced learners—such as the majority of the IFL Malaysian students in this study—tend to favor simpler, less cognitively demanding strategies compared to more advanced learners. As Kudo (1999) noted, complex and mnemonic strategies require greater student involvement, including focused attention, cognitive effort, and more time spent on learning, which are skills typically associated with advanced language learners.

Aggregated Analysis of Vocabulary Learning Strategies Usage

To address the second research question, an aggregated analysis of the participants' use of *Vocabulary Learning Strategies* (VLS) was conducted. The findings from the comparison of Discovery and Consolidation categories, as presented in Table 3, indicate that Malaysian students were overall moderate users of VLS when studying newly encountered vocabulary (overall mean for DIS/CON: 3.25).

Table 3

Overall Findings Between Categories of Vocabulary Learning Strategies Usage by Malaysian Students of Italian as a Foreign Language (Means in Descending Order; SD; N = 494), and Wilcoxon Signed Ranks Test.

Rank	VLS Item	Descriptive Statistics		Wilcoxon Test	
		M	SD	z	p
1	DIS	3.36	.54	11.46	.00
2	CON	3.14	.60		

The ranking scores for Discovery and Consolidation strategies were similar; however, Discovery strategies were slightly preferred by students (mean difference between DIS/SOC: 0.22), a trend confirmed by a statistically significant between-mean difference (Wilcoxon Signed Ranks Test, DIS/CON: $z = 11.46$, $p = .00$). This finding suggests two key observations: first, IFL Malaysian students demonstrated moderate awareness of the variety of VLS available. This aligns with previous studies on various Asian foreign language student populations (e.g., Ta'amneh, 2021; Gökhan Karacan & Dikilitaş, 2020; Rabadi, 2016; Vo & Jaturapitakkul, 2016; Harun & Zawawi, 2014; Jafari & Kafipour, 2013; Shamis, 2003; Wharton, 2000; Park, 1997). Second, IFL Malaysian students were more focused on addressing immediate vocabulary challenges, such as understanding the meanings of unfamiliar words (DIS strategies), while engaging less in Consolidation activities (e.g., recall, retrieval, and memorization practices).

Table 4

Overall Findings Between Subcategories of Vocabulary Learning Strategies Usage by Malaysian Students of Italian as a Foreign Language (Means in Descending Order; SD; N = 494).

Rank	VLS Item	M	SD
1	DIS_DET	3.36	.53
	DIS_SOC	3.36	.76
3	CON_COG	3.24	.69
4	CON_MET	3.16	.73
5	CON_MEM	3.12	.62
6	CON_SOC	2.91	.75

As anticipated, the frequency of usage for the six subcategories (see Table 4) displayed moderate means (ranging from 3.36 to 2.91), with standard deviations spanning moderate to high levels (ranging from .53 to .76). The most frequently used VLS were Discovery-Determination (DIS_DET) and Discovery-Social (DIS_SOC), both with a mean of 3.36. These findings reinforce the previous trend of a higher application of Discovery strategies over Consolidation ones. The results were further corroborated by Wilcoxon Signed Ranks tests, which revealed significant variance in means between DIS_DET and DIS_SOC on the one hand, and the four Consolidation subcategories—Cognitive (CON_COG), Metacognitive (CON_MET), Memory (CON_MEM), and Social Consolidation (CON_SOC)—on the other (z values ranging from 4.14 to 13.51, $p = .00$).

The popularity of Discovery-Determination strategies suggests that IFL Malaysian students were more inclined to independently explore the meanings of newly encountered words, indicating the development of individual, autonomous learning skills. The frequent use of Discovery-Social strategies highlights that learners sought clarification from lecturers, peers, and friends regarding unfamiliar words. This suggests that IFL lecturers may have adopted an

interactive teaching approach, promoting language use, participation, and communication between teachers and students to foster an engaging, collaborative environment. Rivers (1987) posits that interactive teaching, particularly at beginner levels, emphasizes intentional communication, places less emphasis on grammar, and involves students in shared tasks, practical exercises, and collaborative projects. Moreover, students often feel more comfortable learning new vocabulary with their peers, which can enhance their cooperative learning skills (Kai-Chee & Wee-Ling, 2019).

Conversely, Consolidation-Social strategies were the least frequently used, as indicated by this study (Wilcoxon Signed Ranks Test between CON_SOC and the other subcategories: z values ranged from -13.51 to -7.37, $p = .00$). The limited vocabulary and communication skills of novice students in the target foreign language, coupled with a lack of interaction with native Italian speakers outside the classroom (CON_SOC_21, "I interact with native speakers": $M = 3.03$, $SD = 1.04$), may explain the low frequency of using social strategies for consolidation.

Cognitive strategies ranked third in terms of frequency of use among students and first within the Consolidation strategies (Wilcoxon Signed Ranks Test: CON_COG/CON_SOC, $z = 9.71$; CON_COG/CON_MEM, $z = 4.87$; CON_COG/CON_MET, $z = 2.96$; $p = .00$). The frequent application of cognitive rote-learning strategies is consistent with research on language acquisition, as these strategies allow students to engage directly with language material (Oxford, 2003) and enhance vocabulary retention with minimal mental effort (Vo & Jaturapitakkul, 2016; Wenden, 1987). These insights are particularly relevant in the educational context of this study. Indeed, both Metacognitive and Memory strategies, which require deeper mental engagement, focused attention, and constant self-assessment, ranked similarly and were positioned fourth and fifth, respectively. These findings align with the results of other studies indicating that Memory (e.g., Wharton, 2000; Alqarni, 2018) and Metacognitive strategies (e.g., Ta'amneh, 2021; Yee Chin et al., 2021; Gökhan Karacan & Dikilitaş, 2020; Kai-Chee & Wee-Ling, 2019; Rabadi, 2016; Harun & Zawawi, 2014; Schmitt, 2000) are among the least preferred strategies among students.

Conclusion: Implications for Teaching and Learning and Future Research

This study examined the most and least frequently used Vocabulary Learning Strategies (VLS) by Malaysian university students learning Italian as a foreign language (IFL; research question 1), as well as their awareness of the variety of VLS available to them (research question 2). The findings emphasize the significance of three key socio-educational factors influencing the selection of VLS among participants.

(1) Relevance of the Students' VLS and Independent Learning Skills: The results revealed that students predominantly favored *simple elaboration* (Lawson & Hogben, 1996) strategies, which are widely used by foreign language learners globally. These strategies included technologically integrated, cross-linguistic, peer-interactive, and rote learning techniques such as repetition exercises, note-taking, and the use of notebooks. In contrast, more *complex elaboration* (Lawson & Hogben, 1996) strategies, such as picture-based methods and deeper mental, mnemonic, and metacognitive strategies, were less frequently employed. Additionally, the findings indicated that Discovery strategies (both Determination and Social) were the most commonly applied, followed by Consolidation strategies (Cognitive,

Metacognitive, and Memory, with Consolidation-Social being the least used). These preferences suggest that Malaysian IFL learners have developed autonomous learning skills, enabling them to independently infer the meanings of new words based on their prior knowledge and learning experiences (Yee Chin et al., 2021).

(2) Relevance of Multilingual Environments: The results highlighted the advantage of multilingual socio-educational settings in fostering the use of cross-linguistic strategies. This finding suggests that instructors should encourage students to capitalize on their multilingual abilities, as these skills can serve as valuable resources for both inferring the meanings of unfamiliar words and enhancing vocabulary recall (Vo & Jaturapitakkul, 2016).

(3) Relevance of the Instructors' Teaching and Learning Approach: The study found that students benefitted from the social-interactive teaching and learning approach employed by IFL instructors, which encourages the use of social strategies among students. This underscores the importance of the educational practices adopted by lecturers. Overall, students demonstrated a moderate level of VLS usage, indicating a reasonable awareness of the strategies they employed. However, as Oxford (1990) argued, while a moderate application of VLS reflects sufficient awareness, there is room for further development. Therefore, instructors should be proactive in promoting students' knowledge of VLS. It is recommended that IFL lecturers introduce short-term training sessions to enhance students' confidence and improve their vocabulary learning capabilities. Emphasis should be placed on memory and metacognitive VLS, as this would not only bolster learners' vocabulary skills but also foster their independence as effective foreign language learners.

This research offers valuable insights for both language teachers and learners, enhancing their understanding of the VLS preferred by Malaysian students studying Italian. By raising awareness about the use of VLS, the findings contribute to improving the teaching and learning of IFL.

Looking ahead, it is suggested that future studies explore the awareness of VLS among IFL learners in Malaysia in greater depth. Given the large sample size in the present study, the impact of learners' socio-demographic, educational, and linguistic profiles on their VLS preferences warrants further investigation.

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