

FACTORS INFLUENCING LANGUAGE LEARNING STRATEGY USE AMONG PAKISTANI LEARNERS OF CHINESE LANGUAGE AT UNIVERSITY LEVEL

*Dr Sadaf Jabbar¹, Dr Saqib Altaf²

¹ Lecturer, Chinese Department, NUML, Islamabad, Pakistan. (Corresponding Author)

² School of Management, Jiangsu University, P.R.China.



ARTICLE INFO

Article History:

Received: January 31, 2025

Revised: February 21, 2025

Accepted: February 27, 2025

Available Online: March 01, 2025

Keywords:

Language Learning Strategies

Chinese Language Learners

SILL

Motivation

Language Proficiency Level

Funding:

This research journal (PIIJSS) doesn't receive any specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyrights:



Copyright Muslim Intellectuals Research Center. All Rights Reserved © 2021. This work is licensed under a Creative Commons Attribution 4.0 International License.

ABSTRACT

Research in the field of second language learning reveals that using appropriate language teaching methods help language students to become independent learners. It also improve the overall second/foreign language proficiency and develop communicative competence by facilitating the language learning process. Previous researches in this field have identified various factors that influence the choice of language learning strategies of learners. This study identifies the factors that affect their choice of language learning strategies. These factors included gender, age, academic major, duration of learning, proficiency level, and motivation. The information about the factors affecting their choice of language learning strategies was collected from various resources such as research papers, international journals, technical reports, conference papers, websites, etc. The primary data for this survey was collected by using a questionnaire designed by REBECCA L. OXFORD, (1990) and is called the Strategy Inventory for Language Learning (SILL). This quantitative study adapted this questionnaire and collected data by using convenience sampling technique because of the time and cost constraints. The sample included 350 students who were learning the Chinese language at Confucius Institute and the Chinese department (Main campus NUML) and the questionnaires were distributed among these students by researcher. SPSS version 20 software package was used to analyse data, the relationship between gender, age, academic major, duration of learning Chinese language, proficiency level, motivation level, and the use of six language learning strategies were analysed by using Pearson correlation coefficient technique.

The results showed that motivation, duration of learning, and proficiency level were the most significant factors that affect the choice of the strategies. Gender, age, and academic major on the other hand did not have a significant correlation with their choice of language learning strategies. This study is valuable for educational planners and researchers to help formulate policies related to Chinese language acquisition and pedagogy. The results of the study will provide reference and baseline information to future Chinese language teachers in Pakistan to improve the effectiveness of Chinese language teaching and learning. At the same time, it will empower Chinese language learners to achieve autonomy and help them become independent learners beyond the classroom.

*Corresponding Author's Email: sjabbar@numl.edu.pk

INTRODUCTION

The rapid economic growth and expanding global influence of China have led to a surge in interest in Chinese language education around the world, including Pakistan. In recent years, Chinese has emerged as a strategic foreign language in Pakistan due to strong political and economic ties between both countries China and Pakistan. For this reason, an increasing number of Pakistani people are now learning Chinese, either for academic advancement or professional opportunities. However, acquiring Chinese as a second or foreign language poses significant challenges, particularly due to its logographic writing system, which is vastly different from alphabetic systems like Urdu and English. Pakistani students, who are accustomed to these alphabetic scripts, often find it difficult to master Chinese characters, which adds complexity to their learning journey. This complexity highlights the need for learners to utilize effective language learning strategies that

can support their progress and enhance their proficiency in Chinese.

In recent decades, research in second language (L2) education has mostly focussed on learner-centered approaches to second language teaching in order to make language students autonomous and independent language learners (Reiss, 1985; Wenden, 1991; Tamada, 1996). Concurrently, second language acquisition research has shifted its focus from the outcomes of language learning to the processes involved in how learning takes place (Oxford, 1990). Due to this change in emphasis, language learning strategies have emerged both as integral components of various theoretical models of language proficiency (Bialystok, 1978; Canale and Swain, 1980; Ellis, 1990; Bachman and Palmer, 1996) and as a means of achieving learners' autonomy in the process of language learning (Oxford, 1990; Benson and Voller, 1997). However, research in this field has shown that not all language students use language learning strategies in the same fashion. There are a number of variables, such as proficiency level, motivation and gender, shown to have affected the type and frequency of the language learning strategies used by second/foreign language learners (O'Malley, Chamot, Stewner-Manzanares, Russo and Kupper, 1985a; Oxford and Nyikos, 1989; Ehrman and Oxford, 1990; among others).

Despite the global attention given to language learning strategies, very little research has explored this domain within the specific context of Chinese as a Foreign Language (CFL) in Pakistan. While language learning strategies have been widely studied in relation to English or other European languages, there is a significant gap in examining how Pakistani learners of Chinese approach their studies, what strategies they employ, and what learner variables influence their strategic choices. This research seeks to address that gap by exploring the language learning strategies used by Pakistani university students studying Chinese, using Rebecca Oxford's Strategy Inventory for Language Learning (SILL) as the primary analytical framework. The study investigates how various learner-related factors—such as age, gender, academic major, duration of study, proficiency level, and motivation—affect the choice and frequency of strategy use. The main objective of this study is to determine the extent to which learner-specific variables influence the use of these strategies.

This study is both timely and significant. It not only adds to the growing body of international research on

language learning strategies but also contributes context-specific insights that can help improve Chinese as a foreign language teaching and learning practices in Pakistan. Its findings will be particularly valuable for educators and policymakers seeking to enhance Chinese language instruction by tailoring pedagogical approaches to suit learners' needs. Additionally, the results will be beneficial for students by raising their awareness of effective learning strategies, thereby improving their self-directed learning and overall language performance. For teacher training programs, the study offers practical implications for integrating strategy instruction into classroom practice and developing materials that encourage strategic learning behaviors. By providing empirical evidence on the use of language learning strategies among Pakistani learners of Chinese, this research aspires to transform language classrooms into more learner-responsive environments. Encouraging conscious and contextually relevant strategy use can lead to more autonomous and motivated learners, which is essential for fostering long-term success in language learning. Ultimately, this study seeks to contribute to the development of effective teaching methodologies and learner support systems that respond to the unique challenges of Chinese as a foreign language teaching in Pakistan.

LITERATURE REVIEW & THEORETICAL FRAMEWORK

Overview of language learning strategies

Many researchers in several countries have investigated the factors that affect the use language learning strategies by second language learners. Most of the studies have used the SILL questionnaire developed by Oxford (1990). The current study intends to examine the factors that have been found to affect the use of language learning strategies: Motivation, Age & Gender, Level of proficiency and Academic Major, Duration of Learning and Educational Background. Language learning strategies refer to the techniques used by second language learners in order to regulate their own language learning. Oxford (1990) defines language learning strategies as specific actions taken by the language learner to make their language learning easier, faster, more enjoyable, and more transferable to new situations. Greater success in learning and more confidence comes when the language learners learn to use more appropriate strategies. There are

several classification systems exist in international second and foreign language learning strategies. The differences are mainly due to the use of different research methods -such as observation, interviews, or questionnaires-as well as different measuring strategies applied to diverse language tasks and contexts including foreign language learning, second language acquisition or learners with varying levels of Language 2 proficiency.

Several scholars have developed classifications of language learning strategies. Rubin (1975) categorized them into three types: Cognitive and meta-cognitive learning strategies, communication strategies, and social strategies. Cognitive strategies involve direct interaction with learning materials through memorization, practice, and reasoning, while meta-cognitive strategies focus on planning and managing one's learning. Communication strategies help learners maintain conversation despite linguistic challenges, and social strategies involve engaging with others to practice the language indirectly. O'Malley et al. (1985) offered a similar model but included socio-affective strategies, which emphasize cooperation and emotional support. Their framework also identifies meta-cognitive strategies for self-regulation and cognitive strategies for task-based learning like repetition and inference. Stern (1992) expanded this classification into five categories: management/planning, cognitive, communicative-experiential, interpersonal, and affective strategies, adding a focus on learner autonomy and emotional well-being. Oxford (1990) provided the most comprehensive taxonomy, dividing strategies into direct (memory, cognitive, and compensation) and indirect (meta-cognitive, affective, and social). Her model includes practical tactics such as using imagery, reviewing, note-taking, self-monitoring, emotional control, and interacting socially. These classifications collectively highlight that successful language learning depends not only on cognitive effort but also on emotional regulation, strategic communication, and social engagement.

Review of Literature on Factors Affecting The Use of Language Learning Strategies

One of the most crucial factors that affect the success of second language acquisition is the effective use of language learning strategies. In recent decades, many researchers have studied the impact of various factors on the use of language learning strategies. Many researchers have explored the correlation between the use of language learning strategies and the factors

such as learner motivation, learner field of study (e.g., Dreyer & Oxford, 1996), gender (e.g. Goh & Foong 1997), learner language proficiency (Wharton, 2000), learner ethnicity, and nationality. Most of these studies were carried out by using quantitative approach (i.e. the advanced learners use language learning strategies more effectively), some of the studies used question surveys especially the questionnaire developed by Oxford's (1990) Strategy Inventory for Language Learning (SILL). SILL is 'the most widely used survey instrument in language learner strategy research and more than 10,000 learners around the world have already used the SILL questionnaire in their studies. This questionnaire instrument has been translated into more than 20 languages. There is a vast literature available on language learning strategies and the impact of various factors believed to correlate with language learners' use of language learning strategies in the context of foreign language education including Chinese as foreign/second language. From these factors, language proficiency of the learner, learner motivation, their language learning style and gender have been identified as a strong factor that can affect the learners' use of different types of language learning strategies.

Language Learning Strategy Use and Gender

Numerous studies have explored the correlation between the use of language learning strategies and gender, with a significant portion of the literature supporting the notion that female learners have shown to use language learning strategies more effectively and diversely than male learners. Many studies revealed that females are more interested in social activities than males, females tend to be less competitive and more cooperative than males (Maccoby & Jacklin, 1974). Research studies also indicated that female learners are better at both first and second language acquisition than male learners (Larsen-Freeman & Long, 1991). Research has also shown that female learners surpass males in using cognitive, meta-cognitive, affective, and social strategies (Green & Oxford, 1995). Studies involving both university students and younger learners have consistently reported higher strategy use among females. Meta-analytical evidence from Oxford & Nyikos (1989) suggests a persistent trend where females not only use more strategies but also exhibit stronger inclinations toward cognitive, meta-cognitive, and social approaches. Additional studies by Dongyue, L. (2004) reinforce these findings,

highlighting that female learners tend to use compensation and affective strategies more often. Dongyue (2004) studied the correlation between the use of language learning strategies and learner language proficiency and gender. The research found statistically significant gender differences in memory, affective and the overall use of language learning strategies in favour of female learners. The results indicated that female learners tend to be better at managing and controlling their emotions than male learners. The researcher also pointed out that the difference in the frequency of the strategy use between male and female may be affected by other factors such as learners ethnic background, cultural background and language learning environment. The research conducted by Kaylani (1996) has shown the differences between male students and female students in the extent of strategy use. Her research also found that female learners use memory, cognitive, compensation and affective strategies more frequently than male learners.

Language Learning Strategy Use and Age

Age has long been recognized as a significant factor influencing the use of language learning strategies, although findings remain somewhat inconsistent across contexts and age ranges. Early research by Brown et al. (1983) revealed that younger learners tended to use strategies in a task-specific and simplistic manner, such as rote rehearsal, while older learners demonstrated more flexible, systematic, and elaborative strategy use. Similarly, Ehrman and Oxford (1989) found that adults generally employed more sophisticated strategies compared to younger learners. Oxford and Ehrman (1996) further clarified that younger learners benefit from communicative strategies to attain fluency and native-like pronunciation, whereas older learners, equipped with more advanced abstract thinking, prefer strategies focused on grammar analysis and the application of world knowledge. Studies in the Western context also show strategy variation across age groups: Oxford and Nyikos (1989) observed that learners with longer exposure to a language (five years or more) reported greater use of communicative strategies, while Devlin (1996) found mature university students (23 years or older) used meta-cognitive strategies more effectively than younger peers. Lee and Oxford (2008) additionally reported that younger learners favored social strategies (e.g., asking for help), while adults leaned toward metacognitive approaches such as planning and self-evaluation. Despite this body of

research, findings are not uniform, and age-related strategy preferences appear to vary by cultural and educational context. For instance, among Greek learners, Kazamia (2003) found no significant correlation between age and LLS use in adults aged 30–46. In contrast, Psaltou-Joycey and Sougari (2010) observed that younger learners (10-year-olds) used more cognitive, memory, affective, and social strategies compared to 14-year-olds. Similar trends were found by Platsidou (2014) who reported that younger Greek EFL learners utilized more cognitive and memory strategies, whereas older learners (age 16) favored compensation strategies. Cross-cultural comparisons further highlight differences: Lan and Oxford (2003) noted that Taiwanese elementary students favored compensation and affective strategies, while Vrettou (2011) found that Greek-speaking 6th graders preferred meta-cognitive and social strategies. Ardasheva and Tretter (2013) reported that U.S.-based ESL learners primarily used metacognitive, cognitive, and social strategies, with affective strategies least preferred. These discrepancies underscore the importance of contextual and cultural influences on strategy use (Griffiths et al., 2014). Given the lack of studies encompassing a wide age range in a single context, some researchers (e.g., Chen, 2014) have begun addressing this gap by including learners from diverse age brackets, such as ages 9 to 16, to trace developmental shifts in language learning strategies preferences more systematically.

Language Learning Strategy Use and Academic Major

Another variable that can influence learners' choice of language learning strategies is the academic discipline or field of specialization of the learners (i.e., university major) (Oxford, 1989). While this factor has received relatively less attention in research compared to others, several empirical studies have shown significant correlations. Politzer and McGroarty (1985) reported that students in engineering and science fields tended to avoid strategies deemed effective for communicative proficiency, whereas those in social sciences and humanities used them more frequently. Similarly, Chamot et al. (1987) found that university major significantly influenced second language (L2) learning strategy use, with students majoring in humanities, education, and social sciences demonstrating a greater tendency toward strategy use compared to those in computer science, mathematics, or natural sciences. Oxford and Nyikos (1989)

corroborated these findings by revealing that students in humanities/social sciences/education employed independent strategies and functional practice strategies (i.e., authentic language use) more frequently than those in other academic fields. Further support was provided by Peacock and Ho (2003), who highlighted the strategic advantages of students from certain academic disciplines in L2 acquisition. However, this general tendency is not universally observed. In a study by Gu (2002) focusing on Chinese English language learners' vocabulary learning strategies, academic major was shown to be a less decisive factor compared to variables such as gender. Although there were differences between arts and science majors, they were not as pronounced or consistent across strategy categories (Gu, 2002). Additional background variables, such as current professional role, may also influence strategy use. Ehrman and Oxford (1989) found that professionals in the field of linguistics used a variety of strategies—such as functional practice, meaning-focused strategies, formal model building, and affective strategies—than mature adult learners or native-speaking language teachers without any training in linguistics. These differences were attributed to their training and experience, as well as their intuitive cognitive style. Oxford and Nyikos (1989) suggested that motivation, often shaped by career orientation, plays a central role in determining strategy use. Similarly, Reid (1987) argued that academic major influences learning style preferences (e.g., visual, auditory, kinesthetic, tactile), which in turn may impact strategy choice.

Language Learning Strategy Use and Duration of Learning

Literature on language learning strategies indicates a generally positive correlation between the duration of English language study and the frequency or type of strategies used by learners. Oxford and Nyikos (1989) and Griffith (2003) found that students with more years of language study reported significantly higher use of language learning strategies, particularly those oriented toward communication. Ok (2003), however, observed mixed results, found that 3rd-year students employed compensation and memory strategies more frequently than 1st-year students, who in turn favored metacognitive, cognitive, affective, and social strategies. Purdie and Oliver (1999) similarly reported that bilingual students in Australia with longer exposure to English used more cognitive and memory strategies. Magno (2010) confirmed the effect of duration on language

learning strategies usage in a study of 302 Korean students, where longer language study correlated with greater use of social and compensation strategies. Al-Buainain (2010), studying English majors in Qatar, found high to medium usage of language learning strategies across all years of study, with meta-cognitive strategies preferred and affective strategies least used. Leung and Hui (2011), in a large Hong Kong-based study, similarly found medium-level use of language learning strategies overall and a non-significant positive relationship between years of language study and language learning strategies frequency. Khalil (2005) also found that university students, who had studied English longer, used more strategies than high school students. These patterns suggest that the number of years spent learning a language does influence strategy use, although the strength of this relationship may vary. Despite these findings, Oxford's (1996) framework does not explicitly include duration of study as a primary factor, highlighting a gap in language learning strategies research. Accordingly, the study includes duration of formal English study as a key variable to investigate its role in language learning strategies use, especially in the context of Arabic-speaking learners, where empirical research remains limited.

Language Learning Strategy Use and Language Proficiency Level

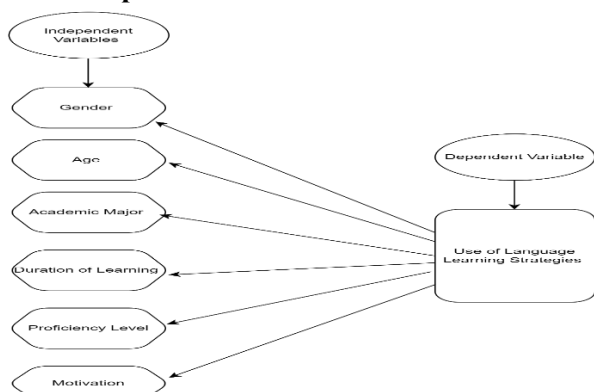
Numerous studies have consistently demonstrated a positive correlation between language learning strategy use and learners' language proficiency levels, indicating that more proficient learners tend to use a greater variety and frequency of strategies more effectively than their less proficient counterparts (Al-Buainain, 2010; Oxford & Nyikos, 1989; Park, 1997). Specifically, cognitive and meta-cognitive strategies have been strongly associated with high proficiency levels (Peacock & Ho, 2003; Ku, 1995; Lan & Oxford, 2003), while compensatory strategies are used across all levels, albeit more frequently by lower-proficiency learners (Chen, 2002). Studies such as those by Bruen (2001) further suggest that oral proficiency and years of language study positively influence strategy use. Interestingly, some researchers have noted that intermediate learners often report more conscious and varied strategy use than both beginners and advanced learners, suggesting a curvilinear relationship between proficiency and strategy application (Griffiths, 2003). Moreover, evidence from different educational contexts (e.g., Saudi Arabia, China,

Indonesia) supports the finding that higher proficiency learners consistently report more frequent use of learning strategies across all six SILL categories with Oxford (2011) emphasizing that learners' self-perception of language proficiency further predicts their strategy use.

Language Learning Strategy Use and Motivation

Motivation is widely recognized as a crucial factor affecting the success of second language acquisition, intricately linked with learners' strategic approaches to language learning. Gardner's (1985) socio-educational model underscores motivation as comprising effort, desire, and positive attitudes toward the learning activity, distinguishing between integrative motivation—driven by a genuine interest in integrating with the target language community—and instrumental motivation, which is goal-oriented, such as passing exams or securing employment. Oxford and Nyikos (1989) found that the degree of expressed motivation was the most significant factor influencing the choice of language learning strategies among university students, with highly motivated learners employing a broader range of strategies, including formal rule-related practices and functional usage. Ehrman (1990) observed that adult learners at the U.S. Foreign Service Institute, motivated by career advancement, frequently utilized communication-oriented strategies, highlighting how specific motivational goals shape strategy selection. Dörnyei (2001) emphasized that motivation determines why individuals engage in an activity, the duration of their engagement, and the intensity of their efforts. Pintrich and Schunk (2002) further elaborated on this by illustrating how motivation influences classroom learning behaviors and the adoption of self-regulated learning strategies. Collectively, these studies suggest a reciprocal relationship between language learning strategies and motivation: heightened motivation leads to the employment of diverse and effective strategies, which in turn can enhance motivation, creating a positive feedback loop that facilitates language learning success.

1. Conceptual Framework



RESEARCH METHODOLOGY

This study utilized a quantitative research design approach, by collecting quantitative data and analyze statistical data to identify trends and patterns. A structured questionnaire was used to collect data from Chinese language learners, enabling the researcher to quantify the use of language learning strategies and the factors influencing their adoption. The design was appropriate for achieving the research objectives, as it facilitated the identification, ranking, and statistical interpretation of variables based on the students' responses. The population comprised all Chinese language learners enrolled in various Confucius Institutes across Pakistan. These learners represented a diverse group of university students at different proficiency levels of Chinese language learners and educational backgrounds. A purposive sampling technique was adopted to select the sample for the study. Specifically, 350 university students learning Chinese at the Confucius Institute, Islamabad, were selected as participants. The rationale for using purposive sampling was to ensure that only those individuals who were actively engaged in learning Chinese and could provide relevant insights into language learning strategy use were included in the study. The sample represented various levels of Chinese language proficiency, ranging from HSK Level 1 to HSK Level 5. The primary data collection tool for this study was a structured questionnaire. The instrument was adapted from Oxford's (1990) Strategy Inventory for Language Learning (SILL) version 5.1, a widely used and validated tool designed to assess learners' use of language learning strategies.

- The SILL questionnaire consists of 50 items grouped into 6 categories:
- Memory Strategies (Nine items): Involving techniques like grouping, imagery, and reviewing.
- Cognitive Strategies (Fourteen items): Including practices such as summarizing, analyzing, and reasoning.
- Compensation Strategies (Six items): Strategies used to overcome gaps in knowledge, such as guessing meaning or using gestures.
- Metacognitive Strategies (Nine items): Strategies for planning, monitoring, and evaluating learning activities.
- Affective Strategies (Six items): Related to emotional management and motivation, such as self-encouragement and anxiety reduction.
- Social Strategies (Six items): Including asking for help and cooperating with others.

The questionnaire also contained a demographic section with items related to gender, age, academic major, motivation for learning Chinese, and weekly hours spent on Chinese language learning outside the classroom. Responses to the SILL items were recorded using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To ensure the validity and clarity of the research instrument, the questionnaire was reviewed by two field experts prior to data collection. Their feedback was incorporated to improve the comprehensiveness and reliability of the research tool.

The data for this study was collected from Confucius Institute and Chinese Department, NUML Islamabad. The questionnaires were distributed in classrooms during regular Chinese language classes (HSK 1 to HSK 5 levels) with the assistance of class teachers. The researcher personally administered the surveys and remained present throughout to provide clarification if needed. Students were informed of the voluntary nature of their participation, assured of the confidentiality of their responses, and told there were no right or wrong answers. Questionnaires were completed during class time and collected immediately upon completion to ensure a high response rate and reduce the risk of missing data. Once data collection was complete, responses were reviewed for accuracy and completeness, and SPSS version 20 was used for data analysis. Descriptive statistics, including frequencies, means, and standard deviations, were used to determine the overall patterns in the use of language learning strategies.

To identify and rank the factors influencing strategy use, responses to the demographic and motivational items were analyzed. Furthermore, inferential statistical techniques, including multiple regression analysis, were employed to assess the predictive power of independent variables such as motivation, gender, age, academic major, proficiency level, and duration of Chinese language learning. The aim was to determine which factors significantly influenced the use of language learning strategies among the participants. Data was presented and interpreted with the aid of tables and graphs, providing visual representation of trends and relationships. Based on the findings, conclusions were drawn and recommendations for future research and pedagogical practice were made.

FINDINGS AND DISCUSSION

In order to analyze data, both descriptive and inferential statistics were used (learners' scores in the SILL questionnaire). The aim was to comprehensively reveal influence of different variables on students' language strategic patterns in terms of overall use and all six categories. Pearson correlation coefficient test was utilized to analyze the

correlation between gender, age, academic major, duration of learning Chinese language, proficiency level, motivation level and the use of six language learning strategies. The results are shown in the following tables.

Gender and Language Learning Strategies

Table-1: Gender: Overall Use and Frequency in the Different Categories

1. Categories	2. Male 3. (N=246)		4. Female 5. (N=104)	
	6. Mean	7. S.D.	8. Mean	9. S.D.
10. Memory	11. 3.15	12. 0.83	13. 3.36	14. 0.76
15. Cognitive	16. 3.23	17. 0.82	18. 3.29	19. 0.83
20. Compensation	21. 3.18	22. 0.79	23. 3.38	24. 1.00
25. Metacognitive	26. 3.66	27. 0.95	28. 3.74	29. 0.99
30. Affective	31. 3.41	32. 0.80	33. 3.17	34. 0.91
35. Social	36. 3.76	37. 0.98	38. 3.68	39. 1.04
40. Overall Use	41. 3.40	42. 0.70	43. 3.44	44. 0.80

Table-1 presents the descriptive statistics of the 6categories described in the SILL questionnaire items and overall use arranged by gender. The result shows a different strategic pattern from the both genders male and females. The most frequently used strategies by male respondents are social strategies $M=3.76$, $S.D=0.98$, whereas female respondents preferred to use meta-cognitive strategies $M=3.74$, $S.D=0.99$. Similarly the least used strategies by males are memory strategies $M=3.15$, $S.D=0.83$, whereas females least used strategies are affective strategies $M=3.17$, $S.D=0.91$. In the order males preferred social, meta-cognitive, affective, cognitive, compensation and memory strategies whereas females liked meta-cognitive, social, compensation, memory, cognitive, and affective strategies.

Table-2: The correlation between gender and Chinese learning strategies.

	Memory strategies	Cognitive strategies	Compensation strategies	Meta-cognitive strategies	Affective Strategies	Social Strategies	Overall Use
Gender	.115*	.036	.106*	.035	.132*	.034	.024
Sig. (2-tailed)	.031	.505	.047	.489	.013	.524	.656

**Correlation is significant at the 0.05 level (2-tailed)*

Pearson correlation coefficient was utilized to analyse the correlation between gender and the use of 6 language learning strategies. The results indicate that there is no significant correlation between gender and overall language learning strategy use. However, a significant correlation was found between memory strategies, compensation strategies and affective strategies with gender but the correlation coefficient is weak i.e memory strategies ($r = .115$ $p < 0.05$), compensation strategies ($r = .106$, $p < 0.05$), affective strategies ($r = .132$ $p < 0.05$). There is no significant correlation between gender and cognitive strategies, meta-cognitive strategies and social strategies.

The study reveals that both male and female CFL (Chinese as a Foreign Language) learners in Pakistan

use language learning strategies at medium to high frequency, though with differing preferences: males favor social strategies, while females prefer metacognitive strategies. Despite these tendencies, statistically significant gender differences were found only in the use of memory, compensation, and affective strategies, with no significant differences in cognitive, metacognitive, and social strategies. These findings align with several previous studies (e.g., Goh & Kwah, 1997; Gu, 2002; Hong-Nam & Leavell, 2006) that suggest gender is not a major determinant in language learning strategies choice, though they contrast with numerous others (e.g., Oxford & Nyikos, 1989; Ehrman & Oxford, 1989; Green & Oxford, 1995) which consistently show females as more frequent and diverse strategy users. Cultural context, particularly the conservative nature of Pakistani society, may explain why female students do not exhibit the typically stronger use of social strategies found in other contexts. While many researchers argue that females have cognitive and social advantages in language learning, the lack of gender-based strategy use in this study suggests that such differences may not universally apply and could be influenced by broader socio-cultural variables.

Age and Language Learning Strategies

Table-3: Age: Overall Use and Frequency in the Different Categories

Table-3 present the descriptive statistics of the six categories described in the SILL items arranged by age. The result shows quite similar strategic pattern from the students with different age groups. The most frequently used strategies by students of group 1, 2 and 3 are social strategies i.e below 20 Group 1 (M=3.80, S.D=0.96), 21-30 group 2 (M=3.70, S.D=1.02), and 31-40 Group 3 (M=3.72, S.D=1.10) whereas frequently used strategies by respondents belonging to group 4 are meta-cognitive strategies i.e 41-50 Group 4 (M=4.12, S.D=0.58). The least used strategies by group 1, 3 and 4 are memory

Categories	Below 20 (Group 1) (N=98)		21-30 (Group 2) (N=219)		31-40 (Group 3) (N=23)		41-50 (Group 4) (N=10)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Memory	3.20	0.75	3.25	0.81	2.78	0.92	3.48	0.94
Cognitive	3.23	0.70	3.27	0.85	2.92	0.89	3.67	0.94
Compensation	3.22	0.74	3.24	0.87	3.06	1.16	3.90	0.89
Metacognitive	3.63	0.94	3.70	0.97	3.57	1.02	4.12	0.58
Affective	3.41	0.75	3.30	0.86	3.21	0.97	3.86	0.98
Social	3.80	0.96	3.70	1.02	3.72	1.10	4.01	0.65
Overall Use	3.41	0.64	3.41	0.75	3.21	0.77	3.84	0.73

strategies Group 1 (M=3.20, S.D=0.75), Group 3 (M=2.78, S.D=0.92), Group 4 (M=3.48, S.D=0.94) whereas least used strategies of Group 2 are compensation strategies (M=3.24, S.D=0.87). In the

order the students from Group 1 preferred social, metacognitive, affective, cognitive, compensation and memory strategies, Group 2 preferred social, meta-cognitive, affective, cognitive, memory and compensation strategies, Group 3 liked social, metacognitive, affective, compensation, cognitive and memory strategies and Group 4 preferred metacognitive, social, compensation, affective, cognitive and memory strategies.

Table-4: The correlation between age and Chinese learning strategies.

		Memory strategies	Cognitive strategies	Compensation strategies	Meta-cognitive strategies	Affective Strategies	Social Strategies	Overall Use
Age	Correlation coefficients	-.018	.016	.056	.051	.003	-.006	.021
	Sig. (2-tailed)	.732	.770	.297	.341	.956	.907	.697

****Correlation is significant at the 0.01 level (2-tailed)**

***Correlation is significant at the 0.05 level (2-tailed)**

Pearson correlation coefficient was utilized to analyse the relationship between age difference and the use of six language learning strategies. The result indicates that there is no significant correlation between age and overall language learning strategy use. When all six language learning strategies are correlated with age it is found that there is no significant correlation between age and six language learning strategies i.e. memory, cognitive, compensation, metacognitive, affective and social strategies.

The study reveals that learners across all age groups use language learning strategies with medium to high frequency, with adult and older learners tending to employ strategies—particularly metacognitive and social—more frequently than younger ones, though differences are often not statistically significant. While younger learners Favor social strategies like seeking help or discussing with peers, older learners show a preference for metacognitive strategies such as planning and evaluating their learning. Several studies (e.g., Oxford & Nyikos, 1989; Devlin, 1996; Lee & Oxford, 2008) confirm that strategy use evolves with age and learning experience, with mature learners leveraging cognitive maturity, self-regulation, and rich social and life experiences to favor strategies aligned with their developmental stage. However, memory strategies tend to decline with age, partly due to reduced short-term memory capacity in older learners. Some findings (e.g., Platsidou & Sipitanou, 2014) show that while overall strategy use may decrease with age, compensation strategies—used to overcome knowledge gaps—tend to increase, reflecting greater learner adaptability.

Academic Major and language learning strategies

Table-5: Academic Major: Overall Use and Frequency in the Different Categories

Categories	Social Sciences (N=238)		Science (N=112)	
	Mean	S.D.	Mean	S.D.
Memory	3.20	0.81	3.25	0.82
Cognitive	3.23	0.81	3.30	0.84
Compensation	3.21	0.85	3.31	0.89
Metacognitive	3.69	0.93	3.67	1.02
Affective	3.33	0.84	3.35	0.86
Social	3.73	1.00	3.76	1.00
Overall Use	3.40	0.71	3.44	0.76

Table-5 present the descriptive statistics of the six categories described in the SILL items arranged by academic major. The result shows quite similar strategic pattern from the social science group and science group. The most frequently used strategies by both groups are social strategies social sciences (M=3.73, S.D=1.00), Sciences (M=3.76, S.D=1.00), whereas the least used strategies by both groups are memory strategies social sciences (M=3.20, S.D=0.81), sciences (M=3.25, S.D=0.82). In the order, the students with social sciences major preferred social, metacognitive, affective, cognitive, compensation and memory strategies, similarly the students of science group also liked social, metacognitive, affective, compensation, cognitive and memory strategies.

Table-6: The correlation between Academic Major and Chinese learning strategies.

		Memory strategies	Cognitive strategies	Compensation strategies	Meta-cognitive strategies	Affective Strategies	Social Strategies	Overall Use
Academic Major	Correlation coefficients	.027	.040	.058	.006	.012	.015	.028
	Sig. (2-tailed)	.613	.454	.277	.904	.823	.783	.597

****Correlation is significant at the 0.01 level (2-tailed)**

***Correlation is significant at the 0.05 level (2-tailed)**

Pearson correlation coefficient was utilized to analyse the relationship between academic major and the use of six language learning strategies. The result indicates the data in the above table indicates that there is no significant correlation between Academic major and overall language learning strategy use. When all six language learning strategies are correlated with Academic major it is found that there is no significant correlation found between academic major and memory, cognitive, compensation, metacognitive, affective and social strategies.

The study found no statistically significant difference in the overall use of language learning strategies among students from different academic majors, likely due to similar Chinese language courses and instructional methods across disciplines. However, science majors used strategies slightly more frequently, particularly cognitive strategies, likely influenced by their course structure emphasizing critical thinking and problem-solving. Social strategies were used most, and memory strategies least, across all majors. These findings align with

prior research (e.g., McMullen, 2009; Alkahtani, 2016; Rao & Liu, 2011) that reported similar strategy use across disciplines, attributed to shared educational experiences and course demands. Nevertheless, other studies (e.g., Oxford & Nyikos, 1989; Zhenhui, 2005; Ouyang, 2018) found significant differences, with social science students often using more strategies, particularly compensation and metacognitive ones, due to differences in learning preferences, career goals, and curricula. These discrepancies suggest that while institutional context can standardize learning behaviours, individual and disciplinary factors still influence strategy preferences.

Duration of Learning and Language Learning Strategies

Table-7: Duration of Learning: Overall Use and Frequency in the Different Categories

Categories	Less than 1 yrs Group 1 (N=129)		1-3 yrs Group 2 (N=206)		3-5 yrs Group 3 (N=13)		More than 5 yrs Group 4 (N=2)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Memory	3.11	0.79	3.26	0.82	3.34	0.57	4.66	0.47
Cognitive	3.13	0.68	3.30	0.90	3.42	0.69	4.64	0.50
Compensation	3.10	0.83	3.29	0.87	3.70	0.90	3.75	0.11
Metacognitive	3.61	0.90	3.71	1.01	3.87	0.68	4.44	0.31
Affective	3.27	0.82	3.37	0.86	3.51	0.86	3.16	0.94
Social	3.66	1.02	3.77	1.01	4.03	0.46	3.91	0.82
Overall Use	3.31	0.69	3.45	0.75	3.64	0.56	4.09	0.42

Table-7 presents the descriptive statistics of the six categories described in the SILL items arranged by duration of learning. The result shows quite different strategic pattern from the students having different duration of learning. The most frequently used strategies by group 1, 2 and 3 are social strategies i.e Group 1 (M=3.66, S.D=1.02), Group 2 (M=3.77, S.D=1.01), Group 3 (M=4.03, S.D=0.46) and group 4 are memory strategies (M=4.66, S.D=0.47) whereas the least used strategies by Group 1 are compensation strategies (M=3.10, S.D=0.83), Group 2 and 3 are memory strategies i.e Group 2 (M=3.26, S.D=0.82), Group 3 (M=3.34, S.D=0.57) and Group 4 are affective strategies (M=3.16, S.D=0.94). In the order, the students from group1 preferred social, metacognitive, affective, cognitive, memory and compensation strategies, the students from group 2 preferred social, metacognitive, affective, cognitive, compensation and memory strategies, students from group 3 preferred social, metacognitive, compensation, affective, cognitive and memory strategies and the students from group 4 liked strategies in the following order i.e memory, cognitive, metacognitive, social, compensation and affective strategies.

Table-8: The correlation between duration of learning and Chinese learning strategies.

		Memory strategies	Cognitive strategies	Compensation strategies	Meta-cognitive strategies	Affective Strategies	Social Strategies	Overall Use
Duration of Learning	Correlation coefficients	.129*	.136*	.147**	.079	.058	.071	.124*
	Sig. (2-tailed)	.016	.011	.006	.139	.278	.183	.021

****Correlation is significant at the 0.01 level (2-tailed)**

***Correlation is significant at the 0.05 level (2-tailed)**

Pearson correlation coefficient was utilized to analyse the relationship between duration of learning and the use of six language learning strategies. The result indicates that there is a significant correlation between duration of learning and overall strategy use i.e ($r=.124$ $p < 0.01$). When all six language learning strategies are correlated with duration of learning it is found that there is a significant correlation between duration of learning and memory strategies, cognitive strategies, and compensation strategies. i.e. memory strategies ($r=.129$ $p < 0.01$), cognitive strategies ($r=.136$ $p < 0.01$) and compensation strategies ($r=.147$ $p < 0.01$). There is no significant correlation found between duration of learning and metacognitive, affective and social strategies.

This study, along with several others, demonstrates a generally positive correlation between the duration of language learning and the use of language learning strategies (LLSs), with longer study periods often linked to increased and more diverse strategy use, particularly in memory, cognitive, compensation, metacognitive, affective, and social strategies. However, patterns vary across learner groups and contexts; for example, beginners tend to favor social strategies, while more experienced learners rely more on memory strategies. Some research highlights exceptions, showing no significant impact or even negative relationships between study duration and strategy use, which may be influenced by factors such as learning environment, motivation, instructional methods, and cultural context. Additionally, motivation often emerges as a more significant predictor of strategy use than experience alone. Differences in strategy preference are also noted between learners with or without additional exposure, such as study abroad, affecting their reliance on communicative versus memory-based strategies. Overall, the interplay between duration, motivation, experience, and context shapes learners' strategic approaches to language acquisition.

Proficiency level and language learning strategies

Table-9: Proficiency: Overall Use and Frequency in the Different Categories

Categories	Low (N=216)		Medium (N=128)		High (N=6)	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Memory	3.18	0.80	3.26	0.82	3.57	0.96
Cognitive	3.18	0.79	3.35	0.87	3.61	0.86
Compensation	3.17	0.84	3.35	0.90	3.41	0.52
Metacognitive	3.59	0.97	3.83	0.94	3.92	0.51
Affective	3.30	0.86	3.41	0.82	3.16	0.64
Social	3.64	1.05	3.89	0.91	4.00	0.51
Overall Use	3.34	0.73	3.52	0.72	3.61	0.45

Table-9 present the descriptive statistics of the six categories described in the SILL items arranged by proficiency level. The result shows little different strategic pattern from the students with low, medium and high proficiency level. The most frequently used strategies by all three groups are social strategies i.e Low ($M=3.34$, $S.D=0.73$), Medium ($M=3.52$, $S.D=0.72$), High ($M=3.61$, $S.D=0.45$), whereas the least used strategies by low proficiency group are compensation strategies ($M=3.17$, $S.D=0.84$), medium proficiency group are memory strategies ($M=3.26$, $S.D=0.82$) and high proficiency group are affective strategies ($M=3.16$, $S.D=0.64$). In the order, the students with low proficiency level preferred social, metacognitive, affective, memory, cognitive and compensation strategies, students with medium proficiency level preferred social, meta-cognitive, affective, cognitive, compensation and memory strategies and students with high proficiency level liked social, meta-cognitive, cognitive, memory, compensation and affective strategies.

Table-10: The correlation between proficiency level and Chinese learning strategies.

		Memory strategies	Cognitive strategies	Compensation strategies	Meta-cognitive strategies	Affective Strategies	Social Strategies	Overall Use
Proficiency Level	Correlation coefficients	.069	.115*	.104	.126*	.041	.124*	.794**
	Sig. (2-tailed)	.199	.032	.052	.018	.444	.020	.000

****Correlation is significant at the 0.01 level (2-tailed)**

***Correlation is significant at the 0.05 level (2-tailed)**

Pearson correlation coefficient was utilized to analyse the relationship between proficiency level and the use of six language learning strategies. The result indicates that there is a significant correlation between proficiency level and overall strategy use i.e ($r=.794$ $p < 0.01$). When all six language learning strategies are correlated with proficiency level it is found that there is a significant correlation between proficiency level and cognitive strategies, metacognitive strategies, and social strategies. i.e cognitive strategies ($r=.115$ $p < 0.01$), metacognitive strategies ($r=.126$ $p < 0.01$) and social strategies ($r=.124$ $p < 0.01$). There is no significant correlation found between proficiency level and memory, compensation and affective strategies.

This comprehensive review of multiple studies across diverse contexts consistently demonstrates a positive, often linear relationship between language proficiency level and the frequency and variety of language learning strategies employed by learners. Higher proficiency learners tend to use more strategies overall, especially metacognitive and cognitive strategies, reflecting greater awareness,

deliberate planning, and control over their learning processes and emotions. Lower proficiency learners often rely more on affective strategies to manage emotional factors like confidence. While some studies note advanced learners may report less conscious strategy use due to automatization, the general consensus is that proficiency both influences and is influenced by strategy use, creating a reciprocal cycle that enhances motivation, self-esteem, and language mastery. Variations exist depending on learner age, educational background, and context, but the trend remains that greater proficiency correlates with more strategic and effective language learning.

Motivation and language learning strategies

Table-11: Motivation: Overall Use and Frequency in the different Categories

Categories	Highly Motivated (N= 239)		Lowly Motivated (N= 111)	
	Mean	S.D.	Mean	S.D.
Memory	3.35	0.81	2.92	0.74
Cognitive	3.37	0.81	2.98	0.80
Compensation	3.35	0.83	3.01	0.90
Metacognitive	3.79	0.93	3.45	0.98
Affective	3.39	0.82	3.23	0.89
Social	3.87	0.95	3.46	1.04
Overall Use	3.52	0.71	3.18	0.70

Table-11 presents the descriptive statistics of the six categories described in the SILL items arranged by motivation level. The result shows quite similar strategic pattern from highly motivated and lowly motivated students. The most frequently used strategies by both groups are social strategies i.e highly motivated (M=3.87, S.D=0.95), lowly motivated (M=3.46, S.D=1.04), whereas the least used strategies by both groups are memory strategies i.e highly motivated (M=3.35, S.D=0.81), lowly motivated (M=2.92, S.D=0.74). In the order, highly motivated students preferred social, metacognitive, affective, cognitive, compensation and memory strategies, and lowly motivated students also liked social, metacognitive, affective, compensation, cognitive and memory strategies.

Table-12: The correlation between motivation and Chinese learning strategies.

		Memory strategies	Cognitive strategies	Compensation strategies	Meta-cognitive strategies	Affective Strategies	Social Strategies	Overall Use
Motivation	Correlation coefficients	.242**	.223**	.181**	.162**	.089	.187**	.218**
	Sig. (2-tailed)	.000	.000	.001	.002	.095	.000	.000

****Correlation is significant at the 0.01 level (2-tailed)**

***Correlation is significant at the 0.05 level (2-tailed)**

Pearson correlation coefficient was utilized to analyse the relationship between motivation and the

use of six language learning strategies. The result indicates that there is a significant correlation between motivation and overall strategy use i.e ($r = .218$ $p < 0.01$). When all six language learning strategies are correlated with motivation it is found that there is a significant correlation between motivation and memory strategies, cognitive strategies, compensation strategies, meta-cognitive strategies, and social strategies i.e memory strategies ($r = .242$ $p < 0.01$), cognitive strategies ($r = .223$ $p < 0.01$), meta-cognitive strategies ($r = .162$ $p < 0.01$), compensation strategies ($r = .181$ $p < 0.01$), and social strategies ($r = .187$ $p < 0.01$). There is no significant correlation found between motivation and affective strategies.

The findings across multiple studies consistently demonstrate that motivation significantly influences the frequency and variety of language learning strategy use. Learners with higher levels of intrinsic motivation tend to employ cognitive, metacognitive, affective, and social strategies more frequently and broadly than those with primarily extrinsic motivation. This pattern is supported by research on diverse learner groups, including Spanish, Thai, Chinese, and university students, showing that highly motivated learners use a wider range of strategies and engage more actively in self-directed learning. Statistical analyses such as ANOVA and regression confirm motivation as one of the strongest predictors of strategy use, with intrinsically motivated students consistently outperforming their less motivated peers in strategic language learning behaviors. These results underscore motivation's central role in effective language acquisition and learners' strategic choices.

IMPLICATIONS FOR TEACHING CHINESE LANGUAGE IN PAKISTAN

The results of the study have several implications for Chinese language teaching in the Pakistani context. Language learning strategies are an integral part of mastering all four skills in Chinese language learning. Bacon (1992) pointed out that when language learners are aware of the various language learning strategies, they can better select, use, evaluate, and modify those strategies that are most effective for the success of their language learning acquisition. Therefore, Chinese language learners should be given training to understand a variety of language learning strategies in all skills. In particular, we should introduce the characteristics of good

learners and good learners' language learning strategies in order to cultivate their awareness as how and when to use language learning strategies. Therefore the teachers should focus on creating conditions in class for the use of these strategies while learning Chinese language. Students must be motivated to use these strategies in order to improve their language learning proficiency in listening speaking reading and writing skills, they must be guided on how to enrich the their language, and allowed to create their own learning styles through different language learning strategies.

Teachers must be trained in two ways related to their own teaching situations: Identify students' current learning strategies through various methods such as surveys, interviews, diaries, think-alouds, or classroom observations (Cohen, 1998; O'Malley and Chamot, 1990; Oxford, 1990). Teachers should help learners to identify which strategies are most relevant to their learning styles, tasks, goals, motivations, attitudes, and personality types through formal assessment techniques (Gardner, 1985; Oxford, 1990) or through informal classroom activities and discussions. Many studies have shown the positive impact of language learning strategy training. Strategy training should be designed and implemented systematically over the long term. The teachers should give learners the opportunity to discuss the new strategies in other similar types of language tasks such as listening and speaking, reading and writing Chinese characters and practice using them in these tasks. When students are involved in new language tasks, reminders for strategy use should be gradually reduced so that they can use strategies automatically and independently in other tasks related to all skills. Carefully designed communicative situations for implicit teaching language through role-playing, simulations, special topics, case studies, professional discussions, etc. have also been shown to be very effective in Chinese language teaching. Make use of rich research resources and technological means, such as the Internet, wechat, email, and many others. These technologies can stimulate students' interest, provide excellent opportunities for interaction with native Chinese speakers and also provide opportunities for individual, collaborative and classroom vocabulary activities, and can also evaluate, monitor and regulate the process of using Chinese language materials for communicative purposes.

In conclusion, Chinese language learners should be given guidance to understand which strategies are

best to improve their listening, speaking, reading, writing and communication skills. Providing them with strategy training would be an effective way to achieve this goal. When conducting strategy training, it is first necessary to clarify which strategies Chinese students use in language learning tasks related to all four skills, and then systematically evaluate the effectiveness of the strategies using different measurement methods. Then, the teaching can focus on those strategies that seem to be effective and beneficial, especially for students with poor listening, speaking reading or writing skills. Conducting strategy training in an explicit way can make it easier for students to perceive strategies and use them more independently and autonomously in improving their listening speaking reading and writing skills.

CONCLUSION

This study examined the impact of six variables—gender, age, academic major, duration of learning, proficiency level, and motivation—on the use of language learning strategies (LLS) among university students learning Chinese language in Pakistan. Overall, all groups reported medium to high frequency use of LLS, with mean scores ranging from 2.78 to 4.66 across different variables. Both genders used LLS moderately to frequently (male $M=3.15-3.76$; female $M=3.17-3.74$), with males favoring social strategies and females preferring metacognitive strategies. Age groups ($M=2.78-4.12$) and academic majors (social sciences $M=3.20-3.73$; science $M=3.25-3.76$) showed similar strategic patterns, predominantly using social and metacognitive strategies, with no significant correlations across most strategies. Duration of learning groups ($M=3.10-4.66$) and proficiency levels (low $M=3.17-3.64$; medium $M=3.26-3.89$; high $M=3.16-4.00$) exhibited more variation, with statistically significant differences found in memory, cognitive, and compensation strategies for duration, and cognitive, metacognitive, and social strategies for proficiency levels ($p < .05$).

Motivation also significantly influenced LLS usage ($M=2.92-3.87$), with highly motivated students tending to use social strategies more frequently. Significant correlations were observed between motivation and five strategy types—memory, cognitive, compensation, metacognitive, and social strategies ($p < .05$)—but not affective strategies. Generally, social strategies were the most frequently used across all variables, while memory and affective

strategies were least used depending on group. These findings suggest that while demographic factors like age and major have limited impact on LLS choice, motivational factors and proficiency level play a stronger role in shaping students' strategic language learning behavior.

RECOMMENDATIONS

Based on the data analysis results of this survey, the following recommendations are made:

Recommendations on Education

In this new world, it is necessary to change the attitude towards language learning/teaching. Language courses should be redesigned according to the rapidly changing needs of learners and the changing environment. There should be a connection between all stakeholders/institutions responsible for planning and implementing language programs and end-users (i.e. organizations/companies looking for language experts). Education experts should train language graduates and develop human resource development plans by improving the market relevance of language courses/syllabi.

Recommendations on Teachers

Well-trained teachers should be appointed to teach languages. Teacher education courses should introduce both pre-service and in-service training modules to familiarize teachers with the guidance and assessment of affective language learning strategies. Teachers should be empowered to develop and promote learners' strategy systems, autonomy, self-direction and self-evaluation. Teachers should understand students and understand their interests, motivations, learning styles and individual differences. They can prepare a short questionnaire to assess/understand the language learning requirements of students at the beginning of their course.

Suggestions on Teaching Materials

The traditional view of language teaching that language students are only exposed to language tasks without introducing higher-level thinking skills should be replaced by an approach that considers strategies as an important component of the curriculum. Curriculum and material developers should evaluate the language learning already present in the language curriculum/syllabus and integrate

strategy training into teacher-related materials, lesson planning and course design.

Suggestions on Pedagogy

Students should be provided with an environment conducive to language learning stimulation in the classroom. Teaching materials for language learning should be reduced. Students should be properly guided to use technology/mobile/apps for language learning inside and outside the classroom. Teachers should develop their understanding of the issues, the practicality of strategy training in each specific context, the role of first language culture, and pedagogical concerns related to strategy training. Language learning strategy teaching should be included in the primary syllabus.

Suggestions for Future Research

This study used a survey instrument SILL questionnaire to collect data regarding students use of language learning strategies and the impact of various factors on their language learning strategy use. As this research is based on a self reported questionnaire where the participants can be biased as they can overestimate or underestimate the frequency of use of certain strategies, this subjectivity can be constraint therefore future research can use other approaches with different methods or instruments, such as qualitative methods including interviews, diaries, class observation, to obtain information from participants. Future research can include many other variables e.g. nationality, preferences, family background, etc. The new era of technology especially artificial intelligence has also impacted the students learning environment therefore future research should also focus on new technologies and language learning tools and their impact on students learning, curriculum development and teachers professional development. As the world is going through a process of constant change, the language learners are also challenged by new situations therefore they seek new strategies for learning (Oxford & Lin, 2011). AI era has opened new research dimensions, so future research needs to expand and diversify and should explore how to integrate language Learning strategy instruction into the language curriculum in new AI world.

REFERENCES

- Al-Buainain, H. (2010). Language learning strategies employed by English majors at Qatar University: Questions and queries. *Journal of English Language and Literature*, 4(2), 92-120.
- Ardasheva, Y., & Tretter, T. R. (2013). Strategy Inventory for Language Learning–ELL Student Form: Testing for factorial validity. *The Modern Language Journal*, 97(2), 474–489. <http://dx.doi.org/10.1111/j.1540-4781.2013.12011.x>
- Bachman, L.F. and A.S. Palmer. 1996. *Language testing in practice*. New York: Oxford University Press.
- Benson, P. and P. Voller (eds.). 1997. *Autonomy and independence in language learning*. London: Longman.
- Bialystok, E. 1978. A theoretical model of second language learning. *Language Learning*, 28, pp. 69–83.
- Bruen, J. (2001). Strategies for success: Profiling the effective learner of German. *Foreign Language Annals*, 34(3), 216–225.
- Canale, M. and M. Swain. 1980. Theoretical bases of communicative approaches to second language teaching and testing. *Applied Linguistics*, 1, pp. 1–47.
- Chamot, A., O'Malley, J., Kupper, L., & Impink-Hernandez, M. (1987). *Study of learning strategies in foreign language instruction: First year report*. Rosslyn, Va.: Interstate Research Associates.
- Chen, M. L. (2014). Age differences in the use of language learning strategies. *English language teaching*, 7(2), 144-151.
- Devlina, M. (1996). *Older and Wiser? A comparison of the learning and study strategies of mature age and younger teacher education students*. Higher Education Research & Development, 15(1), 51-60.
- Dörnyei, Z., & Clément, R. (2001). Motivational characteristics of learning different target languages: Results of a nationwide survey. *Motivation and second language acquisition*, 23(3), 399-432.
- Dreyer, C and R L Oxford 1996. Learning strategies and other predictors of ESL proficiency among Afrikaans speakers in South Africa. In R L Oxford (ed). *Language learning strategies around the world: Cross-cultural perspectives*. Honolulu: Second Language Teaching and Curriculum Center, University ofHawai'i at Manoa
- Ehrman, M., & Oxford, R. L. (1989). Effect of sex differences, career choice, and logical type on adults' language learning strategies. *The Modern Language Journal*, 73, 1-13.
- Ellis, R. (1990). *Understanding Second Language Acquisition*. Oxford: Oxford University Press.
- Gardner, R.C. 1985. *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold.
- Goh, C., and Kwah, P. 1997. Chinese ESL students' learning strategies: A look at frequency, proficiency and gender. *Hong Kong Journal of Applied Linguistics*, 2, 39-53.
- Green, J. M., & Oxford, R. (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly*, 29(2), 261–297.
- Griffiths, C. (2003). Patterns of language learning strategy use. *System*, 31(3), 367-383.
- Griffiths, C., & Oxford, R. L. (2014). The twenty-first century landscape of language learning strategies: Introduction to this special issue. *System*, 43, 1-10.
- Gu, Y. (2002). Gender, academic major, and vocabulary learning strategies of Chinese EFL learners. *RELC Journal*, 33, 35-54.
- Kaylani, C. (1996). The influence of gender and motivation of EFL learning strategy use in Jordan. In R. Oxford, (ed.) *Language Learning Strategies Around the World: Cross-cultural perspectives* (pp. 75-88). Honolulu: University of Hawai'i: Second Language Teaching and Curriculum Center.
- Kazamia V. (2003). *Language learning strategies of Greek adult learners of English*. Unpublished doctoral dissertation. The University of Leeds, United Kingdom.
- Khalil, A. (2005). Assessment of language learning strategies used by Palestinian EFL learners. *Foreign language annals*, 38(1), 108-117.
- Lan, R., & Oxford, R. L. (2003). Language learning strategy profiles of elementary school students in Taiwan. *IRAL*, 41, 339-379. <http://dx.doi.org/10.1515/iral.2003.016>
- Lee, K. R., & Oxford, R. (2008). Understanding EFL learners' strategy use and strategy awareness. *Asian EFL Journal*, 10(1), 7-32.
- Leung, Y. B. (2011). Language learning strategy of Hong Kong Putonghua learners. *Educational Research Journal*, 26(1), 17-39.
- Larsen-Freeman, D., and Long, M. 1991. *An introduction to second language acquisition research*. Oxford: Oxford University Press.

- Maccoby, E.E & Jacklin, C.N. (1974). *The psychology of sex differences*. Stanford: Stanford University Press.
- Magno, C. (2010). Korean students 'language learning strategies and years of studying English as predictors of proficiency in English. *Teaching English to Speakers of Languages Journal*, 2, 39-61.
- Ok, L. K. (2003). The relationship of school year, sex and proficiency on the use of learning strategies in learning English of Korean junior high school students. *Asian EFL Journal*, 5(3), 1-36.
- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language learning*, 35(1), 21-46.
<http://dx.doi.org/10.1111/j.1467-1770.1985.tb01013.x>
- Oxford, R. 1990. *Language learning strategies: What every teacher should know*. Boston: Heinle & Heinle.
- Oxford, R. L. (1996). (Ed.) *Language learning strategies around the world: Crosscultural perspectives*. Honolulu, HI: University of Hawaii Press.
- Oxford, R. L., & Burry-Stock, J. A. (1995). Assessing the use of language learning strategies worldwide with the ESL/EFL version of the Strategy Inventory for Language Learning. *System*, 23(2) 153–175.
- Oxford, R.L., and Ehrman, M.E, and Nyikos, M. 1988. *Vive la difference? Reflections on sex differences in use of language learning strategies*. *Foreign Language Annuals*, 24/4, 321-329.
- Oxford, R. and M. Nyikos. 1989. Variables affecting choice of language learning strategies by university students. *Modern Language Journal*, 73, pp. 291–300.
- Oxford, R. L., & Ehrman, M. E. (1995). Adults' language learning strategies in an intensive foreign language program in the United States. *System*, 23(3), 359-386.
[http://dx.doi.org/10.1016/0346-251X\(95\)00023-D](http://dx.doi.org/10.1016/0346-251X(95)00023-D)
- Oxford, R. and M. Ehrman. 1995. Adults, language learning strategies in an intensive foreign language program in the United States. *System*, 23, pp. 359–386.
- Peacock, M. and B. Ho. 2003. Student language learning strategies across eight disciplines. *International Journal of Applied Linguistics*, 13, pp. 179–200.
- Park, G-P 1997. 'Language learning strategies and English proficiency in Korean university students'. *Foreign Language Annab*, 30, 2: 211-21
- Pintrich, P. R. (2002). The role of metacognitive knowledge in learning, teaching, and assessing. *Theory into practice*, 41(4), 219-225.
- Psaltou-Joycey, A. (2010). *Language learning strategies in the foreign language classroom*. Thessaloniki: University Studio Press.
- Psaltou-Joycey, A., Sougari A. M., Agathopoulou, E., & Alexiou, T. (2014). Use of strategies by Greek EFL learners. Paper presented at the Early Language Learning 2014 conference (ELL 2014). 12-14 June, UMEA University, Sweden.
- Politzer, R., & McGroarty, M. (1985). An exploratory study of learning behaviors and their relationship to gains in linguistic and communicative competence. *TESOL Quarterly*, 19, 103-124.
- Psaltou-Joycey, A., & Sougari, A. (2010). Greek young learners' perceptions about foreign language learning and teaching. In A. Psaltou-Joycey & M. Mattheoudaki (Eds.), *Advances in research on language learning and teaching: Selected Papers* (pp. 387-401). Thessaloniki: Greek Applied Linguistics Association.
- Purdie, N., & Oliver, R. (1999). Language learning strategies used by bilingual school-aged children. *System*, 27(3), 375-388.
- Reiss, M.A. 1985. The good language learner: Another look. *Canadian Modern Language Review*, 41, pp. 511–523.
- Reid, J. M. (1987). The learning style preferences of ESL students. *TESOL Quarterly*, 21, 87-109
- Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly*, 9(1), 41–51.
- Stern, H. H. (1992). *Issues and Options in Language Teaching*. Oxford: Oxford University Press
- Tamada, Y. 1996. The relationship between Japanese learners' personal factors and their choices of language learning strategies. *Modern Language Journal*, 80, pp. 120– 131.
- Vrettou, A. (2011). Patterns of language learning strategy use by Greek-speaking young Learners of English. Unpublished PhD thesis, Department of Theoretical and Applied Linguistics, School of English, Aristotle University of Thessaloniki.
- Wenden, A.L. 1991. *Learner strategies for learner autonomy*. New York: Prentice-Hall.
- Wenden, A., & Rubin, J. (1987). *Learner Strategies in Language Learning*. New Jersey: Prentice Hall.
- Wharton, G. (2000). Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning*, 50(2), 203–243.