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EXPLORING THE INTERPLAY BETWEEN ENGLISH LANGUAGE LEARNING STRATEGIES, LANGUAGE PROFICIENCY, AND ATTITUDE

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ABSTRACT

The major goal of the study was to determine whether people learning English as a second language at different levels of competency use different methods of language acquisition. We also wanted to see if there was a link between the frequency of method use and people's attitudes toward English language acquisition. An improved version of the online Self-Regulated Foreign Language Learning Strategy Questionnaire (SRFLLSQ) was used to collect data for this project. This iteration was based on Oxford's Strategic Self-Regulation (S2R) Model and polled 1,653 Hungarian lower secondary school students. The findings show that there are statistically significant differences in the frequency of language strategy use between highly skilled and less proficient English learners. Despite students' claims that they use it infrequently or not at all, a quantitative investigation has shown that it is a reliable predictor of both foreign language proficiency and attitude. The findings highlight the relevance of including strategy training into the language curriculum, underlining the increased importance of studying techniques in foreign language instruction

Keywords: *self-regulated foreign language learning, language learning strategies, foreign language attitude, language achievement, lower secondary students.*

1.INTRODUCTION

Acquiring a new language necessitates a wide range of essential talents and tactics. To overcome the numerous challenges that develop during the learning process, learners must possess a diverse set of interpersonal, cultural, and social abilities. They must also be informed of appropriate tension management techniques. Frequent use of learning methods in the classroom can help students become more skilled and effective language users (Wong and Nunan, 2011; Oxford, 2016). Since the mid-1970s, extensive study has been devoted to learning strategies in an attempt to define the idea and uncover the ways that aid language learners in improving (Oxford, 1990; Cohen, 1998). There is still a lot of study to be done in this sector, and there is a lot of disagreement (Thomas and Rose, 2019; Thomas et al., 2021). In 1990, 2011, and 2016, Oxford produced the leading and most widely used taxonomy of language learning systems (LLS). The author has revised the Strategic Self-Regulation (S2R) Model, a conceptual framework based on Lev Vygotsky's (1978) social theory.

She created the three-phase model as well as the theory of self-regulated learning (SRL). She classified tactics into four broad categories: social, emotive, motivational, and cognitive. Each of these categories is guided by a master category of "meta-strategies" (Oxford, 2016). She also created the Strategy Inventory for Language Learning (SILL), a tool that is used globally to measure the

efficiency of LLS. It is, nonetheless, based on her first concept. Nonetheless, connections must be made between the most modern teaching theories and how languages are being taught. Oxford's new classification, which has been popular since the early 2000s, was built on the rising concept of self-regulation. It is consequently vital to develop cutting-edge assessment tools that language educators may use in the classroom. Prior research approved the use of the SRFLLSQ, a questionnaire constructed using the Oxford S2R Model (Habók and Magyar, 2018b). More research is needed to provide a more complete knowledge of the mechanisms underpinning language learning strategies, as well as their possible implications on personality, motivation, and self-efficacy. The purpose of this study was to establish how LLS related to other critical aspects of language acquisition. Our research focuses on the attitudes and academic performance of lower secondary school students in Hungary toward the English language, as well as their use of instructional tactics and overall English proficiency.

2.LITERATURE REVIEW

The Concept of Language LearningStrategies

Since the mid-1970s, the primary focus of study has been on language learning strategies, as effective foreign language acquisition is reliant on such strategies (Rubin, 1975). Rebecca Oxford's explanation of LLS is one of the most influential because she not only invented the concept but also did empirical study on it. Oxford analyzed 33 different definitions and interpretations of the phrase LLS when conducting her content analysis. She came to the following conclusion as a result of this: L2 learning strategies are intricate and dynamic patterns of thought and action that language learners choose and use in specific contexts to regulate various aspects of their lives (cognitive, emotional, and social) with the following goals in mind: (a) successfully complete language-related assignments; (b) improve language performance or usage; and/or (c) develop long-term proficiency in the language. Though plans are planned, they can also appear physically, ensuring their visibility. Learners regularly construct their techniques in novel and adaptive ways, grouping or sequencing them to meet their individual needs. Instruction can be given to methods. Learners use a variety of tactics in response to the situations they face. The degree to which two people are compatible Methods are influenced by a variety of personal and social circumstances (Oxford, 2016, p. 48). Strategic language learners choose an LLS based on the scenario at hand, their personal preferences, and their motivational goals. This makes developing a strategy for these strategies incredibly tough. As a result, the number of formulations and discussions has increased rapidly (Thomas and Rose, 2019; Thomas et al., 2021). According to Thomas et al. (2021), because of the importance of selfregulation, strategy research has transitioned from formal educational environments to learner autonomy. According to them, this is a detrimental tendency because LLS definitions downplay the role of instructors and classroom surroundings, which could potentially impact students' strategic behavior. As a result, Thomas and Rose (2019) hypothesized that self-regulation and LLS could be conceptually separate in their categorization of LLS. They created the Regulated Language Learning Strategies Continuum to demonstrate this. Dornyei and Skehan (2003) argue that the use of strategies resists categorization into the domains of emotion, cognition, or conduct. By positing that LLS can be regulated both internally and outside, the authors present a unique topic of discussion within the research.

Another key point of contention is the classification of LLS. Self-regulation theories spurred a review of Oxford's initial taxonomy of the six basic domains—cognitive, affective, metacognitive, compensatory, and social methods. Strategic Self-Regulation (S2R) is a concept that was built on Vygotsky's 1978 social theory of self-regulated learning (SRL). In her concept, she defined four important domains: cognitive, social, motivational, and affective techniques. Every one of these

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areas was controlled by a unique "master category of meta-strategies," namely metasocial, metacognitive, meta-affective, and metamotivational (Oxford, 2016). Numerous individuals revised her taxonomy, and several theorists (Dornyei, 2005; Hajar, 2019) argued that depending merely on the frequency of a method's application is not a valid measure of language acquisition.

Research on Language LearningStrategies

Despite varying opinions, researchers in the field of LLS have made commitments to conduct quantitative investigations regarding the application of LLS and its correlation with additional personal characteristics, including motivation, learning style, gender, and attitude (e.g., Habók and Magyar, 2018a, 2019; Alhaysony, 2017). The approach most frequently applied to assess the ability of second language learners in applying strategies is Oxford's Strategy Inventory for Language Learning (SILL; 1990). This poll has undergone changes to accommodate a wide assortment of languages and societies from around the globe. It is developed using her initial six strategy elements and is based on her initial taxonomy. Subsequently, further reevaluation instruments have been built applying her original taxonomy, exploring many features of effective language acquisition (Wang et al.,

Habók and Magyar (2018b), An et al. (2021), Salehi and Magyar (2018a), Božinović and Sindik (2017), Koksal and Dündar (2017), Habók and Magyar (2018b), are more works that should be reviewed. Extensive study has been undertaken to establish the most often employed set of methods by language learners (Platsidou and Sipitanou, 2015; Alhaysony, 2017; Charoento, 2017; Dawadi, 2017; Habók and Magyar, 2018a,b; Habók et al., 2021). In general, the results imply that LLS was deployed slightly. The application of cognitive, metacognitive, or compensatory methods is relatively unusual. Affective and memory-based techniques are the least frequent. Habók et al. (2021) have noticed that culture-specific variances exist in the preferences of individuals regarding strategic approaches. Their findings supported the assumption that both European and Asian cultures could benefit from the application of metacognitive approaches. Nevertheless, statistically significant disparities were observed in the affective domain with regard to the Individuals in the European group exhibited a reduced propensity to opt for strategies.

Extensive research has been conducted to examine the relationship between the implementation of strategies and other variables (Platsidou and Kantaridou, 2014; Rao, 2016; Charoento, 2017; Habók and Magyar, 2018a, 2020). Language proficiency was one of the most prevalent characteristics, although it has been the subject of controversy and definition in numerous ways. Annotated by Malpartida (2021), certain investigations have not examined language proficiency or performance on achievement tests (Raoofi et al., 2017; Taheri et al., 2019; An et al., 2021); instead, they have relied on self-ratings or course grades (Habók and Magyar, 2018a; Sánchez, 2019; Bel'irović et al., 2021). Thus, the majority of research indicates that students with greater proficiency in LLS utilize it more frequently than those with lower proficiency (Rao, 2016; Charoento, 2017; Raoofi et al., 2017; Sánchez, 2019). Students who performed better utilized metacognitive strategies more frequently, whereas those who performed worse tended to rely more on social strategies, according to Charoento (2017). According to Sánchez (2019), the most social, metacognitive, and cognitive strategies were employed by high achievers. (Rianto, 2020) Several studies indicate that learners with varying degrees of English proficiency do not employ LLS in notably dissimilar ways.

Few studies have examined the correlation between LLS usage and speaking abilities. Skill and the application of strategies are positively correlated, according to one study. Taheri et al. discovered in a 2019 study a statistically significant correlation between second-language proficiency and LLS. They established a statistically significant correlation between second language proficiency and compensatory, social, and cognitive processes. Additionally, Platsidou and Kantaridou (2014) discovered that the implementation of learning techniques can predict language use and an

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individual's self-perceived proficiency in the language in a statistically significant manner. Further, Rao (2016) stated that the frequency at which learners employ strategies is contingent on their English proficiency level, noting that learners with a higher level of proficiency employ strategies more frequently than those with a lesser level of proficiency. Habók and Magyar (2018a) discovered that attitudes are influenced by strategies in a manner that is statistically significant with respect to competence. Moreover, these benefits demonstrate that you will succeed academically in general. According to Beirović et al. (2021), LLS may impair students' proficiency in English as a foreign language (EFL). To provide greater specificity, it was found that cognitive techniques had a positive impact on EFL success that was statistically significant, whereas the remaining strategies did not exhibit a significant effect. An additional study by An et al. (2021) demonstrated that SRL techniques positively and directly influence students' English proficiency. Lin et al. (2021) state that the learning styles of pupils have a direct bearing on their ability to comprehend and deduce information from what they read.

An alternative field of inquiry investigates the relationship between the implementation of strategies and affective variables such as self-efficacy, motivation, attitude, and self-concept. Scholars in the field of education have discovered that students' attitudes and levels of achievement in language learning can significantly impact their progress and acquisition of knowledge (Platsidou and Kantaridou, 2014). Positive attitudes toward language learning have been associated with language learners' more consistent and effective use of LLS. Platsidou and Kantaridou (2014) demonstrated through confirmatory factor analysis that attitudes toward language learning can forecast the implementation of both direct and indirect learning strategies. According to Jabbari and Golkar (2014), students who have a positive attitude toward language learning employ cognitive, metacognitive, compensatory, and social strategies more frequently. Habók and Magyar (2018a) observed the inverse, finding that students who demonstrated proficiency in LLS were more inclined to express improved learning outcomes and a more positive attitude towards foreign language acquisition.

Evidently, this demonstrates that the study of strategies is intricately connected to other critical components of language acquisition, including attitude. Although this is accurate, there is a scarcity of scholarly assessments that examine the correlation between self-regulated foreign language learning and attitude. Also, the majority of research has focused on the utilization of strategies by tertiary education students with relatively high levels of proficiency. This study addresses the aforementioned research void by conducting an in-depth examination of the relationships between the attitudes, strategies, and English language proficiency of lower secondary students. We hypothesized, on the basis of these and similar studies (Platsidou and Kantaridou, 2014; Habók and Magyar, 2018a), that LLS could influence performance via attitude in a statistically significant way.

RESEARCH QUESTIONS

The investigation examines the three research inquiries listed below:

Which EFL method was most frequently employed by 11-year-olds in lower secondary school?

Did the students' approaches to language learning differ in a statistically significant fashion according to their proficiency in the English language?

Which method of language acquisition has a statistically significant impact on students' attitudes toward English study and their proficiency in the language?

RESEARCH METHODS

Participants

Children in Hungary begin elementary education at the age of six. This remains in effect for a period of four years. They then continue their education by attending lower secondary school. At the age of 14, students advance to upper secondary school. This study involved a total of 1,653 Grade 5 pupils

aged 11 years (Ntotal = 1,653; Nboys = 827, Ngirls = 780, Nmissing = 46) attending 64 schools in Hungary. The mandatory English as a Foreign Language (EFL) curriculum for Hungarian students commences at the age of nine. However, in certain locations, children can begin as young as six years old. Although they typically have the option between German and English, English has recently gained ground in popularity. Upper secondary education students are required to acquire a foreign language in either German, Italian, or Spanish. The choice of a second language is determined by the curriculum offered by the institution.

Participating children spoke English at the elementary or novice level (A1–A2). Seventeen percent of the students comprising the sample devoted no more than two hours per week to English study. A subset of the participants (N = 303) devoted five or more hours per week to language study (N = 357); however, approximately half of the language learners (N = 884) only did so for three hours per week. Additionally, it was discovered that 67 students dedicated six hours or more per week to English study. Furthermore, none of the twenty-five students who were queried responded to this inquiry.

Instrument

The Self-Regulated Foreign Language Learning Strategy Questionnaire (SRFLLSQ) underwent revisions and was updated subsequent to its initial evaluation and endorsement (Habók and Magyar, 2018b). We revisited the emotional domain while examining the most recent research on the theories that underpin international LLS investigation. We augmented the questionnaire with a motivational section by referencing pertinent scholarly works. By incorporating motivated and metamotivational components into the measuring instrument, we adhered to Oxford's Strategic S2R Model. In conclusion, the survey inquired into four distinct categories of strategies: metacognition consisted of eight questions, cognition of six, affectivity of eight, social of eight, motivation of four, and metamotivation of four (refer to Appendix for further details). The fifth graders expressed their opinions using a five-point Likert scale.

The five categories span from "Never or almost never true of me" to "Always or almost always true of me." In addition to the evaluation instrument, a historical questionnaire inquired about the students' foreign language academic achievements, which indicated their proficiency in speaking and understanding English (1 denoted failing, the lowest grade, and 5 represented excellent, the highest grade). In addition, they utilized a five-point Likert scale, this time comprising values from 1 to 5, to indicate their emotional state regarding Chinese language learning.

Procedure

The initiative was initially approved by the Institutional Review Board of the Doctoral School of Education at the University of Szeged. It was determined that the study design adheres to the IRB's regulations. The institutions that were participating obtained written consent from the parents of the participating children. Schools were then provided with the opportunity to register for the examination. During the call, the purpose of the measurement was communicated to the institutions. Upon accepting the offer, the institutions were provided with additional data collection instructions and a hyperlink to the Online Diagnostic Assessment System (eDia). The University of Szeged Center for Research on Learning and Instruction designed, oversees, and operates this system (Csapó and Molnár, 2019). The participants of the investigation willingly engaged in it. They remained completely anonymous after entering the system using an official student assessment code generated by the Hungarian Educational Authorities. As a result, the experts encountered difficulty in ascertaining the identification code, they were not granted access to the students' test scores. Thus, absolute seclusion was maintained. Students are well-versed in the eDia system due to their frequent utilization of it for assessments throughout the academic day. The first graders acquired the essential

ICT competencies through online learning, which they had already possessed. The responses to the present survey were obtained through the act of marking radio keys. Students have access to a distinct classroom where they can study. The respondents completed the questionnaire in their native Hungarian subsequent to logging in, as their proficiency in English was insufficient to provide accurate responses in a foreign language. It took five hours to construct the instrument. Although instructors were willing to provide assistance in completing the form, it was not mandatory. Perhaps the students requested assistance with any technological difficulties they encountered.

3.DATA ANALYSIS

We initially applied a classic test in SPSS Statistics 23.1 to examine the means, standard deviations, and reliability of the questionnaire items. Our group's perspective on the frequency of strategy implementation was the focus of our inquiry. An independent sample t-test was additionally employed to examine the correlation between the students' English language proficiency, demeanor, and utilization of the strategies. Wei and Hu (2019) and Wei et al. (2019) instructed us to use the following to calculate effect size: under

Size-wise, 0.01 is approximately average, 0.02 is enormous, and 0.09 is enormous. It is not much, 0.005. The effect size index cutoff values obtained using R2 unsquared are as follows: 0.07, 0.10, 0.14, and 0.30, which correspond to the categories of small, medium, large, and very large, respectively. We employed route analysis to construct a mental representation of the potential interconnections and consequences among our variables. In order to assess the goodness-of-fit indices, we employed a variety of cut-off values for fit indices, including Chi-square values, the Tucker-Lewis index (TLI), the normed fit index (NFI), and the comparative fit index (CFI) (Kline, 2015). Acceptance criteria for the TLI, NFI, and CFI all included a threshold value of 0.95. Additionally, an acceptable RMSEA value of 0.8 was determined (Kline, 2015).

4.RESULTS

Descriptive Analysis

The questionnaire generated excellent responses from all categories (Table 1). Throughout the cohort, the level of strategy implementation was moderate. The emotional domain had the highest frequency of strategy usage, while the metasocial strategies area had the lowest. The inspiring field was used the most frequently among the matching parameters, as indicated in Table 1.

We also compared the frequency with which proficient students used specific approaches to their less proficient counterparts. Students were separated into two groups (Table 2) based on their competency in both verbal and written English. Individuals with average, middle, or below-average grades were labeled as "less competent learners." Individuals who received excellent or outstanding grades were classified as "more proficient learners." Students with high test scores (N = 810) exhibited their skills in the English language program through remarkable presentations. A sample of 500 lessees received high scores at regular periods. It was revealed that participants (N = 229) with ordinary school grades had severe knowledge gaps. Those who obtained poor grades, on the other hand, were asked to improve their language skills in a variety of domains that were either more difficult or less so (N = 65). Finally, the nine students who obtained a failing grade face a serious quandary that must be resolved. Forty people did not submit any information. The pupils' mean EFL test score was 4.2 (SD = 0.89), which is an exceptional performance. According to the data, significantly more proficient students used techniques in all disciplines on a more frequent basis. The affective factor had much greater effect sizes than average, whilst the remaining factors had relatively low effect sizes.

Fields	Crb alpha	M (SD)	M (SD)
Metacognitive	0.79	3.47(0.74)	3.46(0.70)
Cognitive	0.72	3.43(0.78)	
Meta-affective	0.73	3.28(0.77)	3.55(0.72)
Affective	0.83	3.82(0.81)	
Metasocial	0.88	3.19(0.98)	3.28(0.92)
Social	0.85	3.41(0.94)	
Metamotivational	0.76	3.45(0.98)	3.60(0.84)
Motivational	0.66	3.75(0.90)	20210201010

TABLE 1 | Frequency of language learning strategy use in Grade 5.

TABLE 2 | Frequency of language learning strategy use among less and more proficient learners.

Fields	Less proficient learners M (SD)	More proficient learners M (SD)	t	r (effect size)
Metacognitive	3.02(0.71)	3.58(0.71)	-12.21*	0.085
Cognitive	3.07(0.74)	3.51(0.76)	-9.28*	0.050
Meta-affective	3.07(0.77)	3.33(0.76)	-5.24*	0.017
Affective	3.26(0.79)	3.96(0.76)	-13.85*	0.113
Metasocial	2.82(0.88)	3.27(0.98)	-7.30*	0.032
Social	2.98(0.86)	3.50(0.93)	-8.78*	0.046
Metamotivational	3.14(0.96)	3.51(0.98)	-5.91*	0.021
Motivational	3.32(0.97)	3.84(0.86)	-9.34*	0.052

Multivariate Analyses

Finally, we investigated the impact of applying the plan on attitudes and English language competency. We evaluated the strategies and their related meta-strategies as interdependent components based on Oxford's Strategic S2R Model, which asserts that meta-strategies have a major impact on strategies. Each component of the method was statistically related (r = 0.45-0.25, p 0.001). The model fit values obtained were satisfactory. The RMSEA is 0.061, the chi-square is 35.574, the df is 5, the p is 0.000, the CFI is 0.995, the TLI is 0.977, and the NFI is 0.994.

It is possible to conclude that plan implementation has a considerable impact on both attitude and English language proficiency (Figure 1). The metasocial and social aspects, as well as the metaemotional and affective dimensions, were found to have a considerable influence on students' views regarding the English language. There is a clear relationship between an individual's English skill and their behavior. Individuals' English proficiency was also influenced by the cognitive and metacognitive domains. Although it was indirect, the metaaffective and affective categories, as well as the metasocial and social qualities, had an impact. There was no detectable influence of motivational or metamotivational factors on mood or English language competency.

DISCUSSION

We looked at how fifth-grade lower secondary students aged 11 used tactics to improve their language ability, as well as their attitudes toward the English language. The primary study question was to determine which LLS was more frequently used by the sample. In a fairly limited deployment of the metasocial domain, a moderate level of strategic implementation was seen. The use of strategies was most common in the emotive area. Our findings are similar to recent scholarly investigations into the moderate application of techniques. Nonetheless, the sample members' tactics

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differ greatly (Platsidou and Sipitanou, 2015; Alhaysony, 2017; Charoento, 2017; Dawadi, 2017; Habók and Magyar, 2018a,b, 2019, 2020; Habók et al., 2021). Furthermore, Raoofi et al. (2017) discovered in their research that the implementation of social techniques was rather limited. Furthermore, students with higher levels of proficiency used learning approaches more frequently than students with lower levels of proficiency, which is a significant statistical finding. This phenomena, like the results found by Charoento, has the potential to be applied to any domain of strategy. Our second investigation looked on the differences in LLS usage across people with varying levels of English ability. We used the individual's EFL schooling grade as an indicator of their English speaking and comprehension skills in the sample. The mean offered information about the sample's collective skill level. A statistically significant finding suggests that students in all groups used LLS more frequently. These findings are similar with other studies (Rao, 2016; Charoento, 2017; Raoofi et al., 2017; Sánchez, 2019). Unlike previous study, we discovered that learners with lower skill favored the affective field and used incentive tactics more frequently than those with higher skill. Furthermore, the technique makes use of both



Rearranging the samples in the same order indicated that, at their peril, both groups resorted to social and metasocial methods. This could be due to the fact that the bulk of the sample comprised of people with A1-A2 proficiency, which is similar to being unable to initiate a conversation with a native speaker. Even more adept speakers find it more difficult to engage with others due to their inability to comprehend much of the more advanced terminology and syntax used by more experienced individuals. The study of the effect of LLS on attitude and English language competency discovered that LLS did, in fact, alter a number of antecedent factors in a statistically meaningful way. In addition to the metacognitive and cognitive domains, attitudes were discovered to have a direct impact on English ability. The impact of the emotional and metacognitive domains, on the other hand, was secondary to that of the social and metaaffective domains. According to data analysis, the motivational and metamotivational domains had no direct or indirect influence on mood or English language competency. Motivating variables are unique components; thus, they may play

different roles in predicting linguistic achievement. Prior research (Platsidou and Kantaridou, 2014; Habók and Magyar, 2018a) has found that attitudes have a considerable impact on the ability to foresee language achievement and facilitate strategy execution. In conclusion, how people approach language acquisition is a statistically significant predictor in their level of success with the English language.

5.CONCLUSION

The primary goal of the study was to find empirical proof that approaches for supporting elementary and beginning-level students in learning English were beneficial. The sample's execution of strategies differed slightly from that of prior research due to the students' preference for motivational and emotional domain techniques. This could be because young children are more prone to use emotional methods that match their personality features than cognitive strategies that need more information, specific learning styles, and awareness. Because of their likely limited ability to communicate in a foreign language, the subjects used minimal social tactics. A statistically significant conclusion relating the different degrees of competency was that students with higher levels of proficiency used techniques more frequently. In contrast, the organizations' approaches to using strategies were very similar. Individuals with lower degrees of competency used motivational strategies, whereas those with higher levels of proficiency used emotive domain techniques. According to this finding, students who are more confident in their abilities are more willing to express their opinions and discuss their experiences studying English. Less skilled learners usually strive to display their drive at this stage of growth by striving for perfection, exerting effort, and projecting a positive self-perception. The study also revealed the importance of mindset. Based on the results, it is reasonable to conclude that strategies can influence language achievement at the primary or novice level. Furthermore, the study found that a student's attitude is a strong predictor and connection of the aforementioned characteristics. This highlights the importance of teaching children effective learning skills, which may lead to higher academic accomplishment.

LIMITATIONS

There are several flaws with the study that need be addressed. Initially, the poll was delivered to fifth-grade students engaged in English courses targeted for novice or fundamental learners. This renders generalizability unprovable; additional study including students with greater levels of skill and academic accomplishment is required. Distinguishing across affective domains was also difficult in the first version of the poll. The emotional and meta-affective domains of LLS were identified through a study of the domains scored by this measurement instrument. However, more refinement is required. Furthermore, further research is needed to identify what inspires people. Furthermore, it is vital that the research looks into latent variables like self-efficacy, self-esteem, and self-concept.

PEDAGOGICAL IMPLICATIONS

Clearly, the study shows that students' learning styles have a substantial impact on their language acquisition. In Hungary, fifth-grade kids fail to learn English. In terms of vocabulary, syntax, and phonetics, Hungarian and English are markedly different languages. Because they typically see rules as vague conceptions, these students have trouble establishing a correlation between the rules they follow and the definitions of the concepts they verbalize and produce. Furthermore, what one hears and reads might be influenced by a variety of situations. The findings highlight the importance of LLS instruction and how it might help language learners achieve higher success. It is critical to deliberate about thoughtful strategy implementation. Plan training is strongly advised for instructors to incorporate within their classes. Strategy training can be delivered in two ways: as a stand-alone course or as a sub-course within another subject. The incorporation of strategy courses into a certain academic area aids students' grasp of that

knowledge. General strategy classes, for example, provide students with skills that may be used to a range of disciplines, such as writing and reading. Language learning systems, on the other hand, recompense pupils for studying foreign language vocabulary or grammatical standards.

Furthermore, the study found that temperament and motivation have a statistically significant impact on a person's language acquisition proficiency. As a result, it is vital to create a welcoming and pleasant environment that encourages learning. As a result of our research, we now have a better knowledge of these critical educational concerns.

DATA AVAILABILITY STATEMENT

The datasets discussed in this article are difficult to access since they are confidential and cannot be released. Please send an email to habok@edpsy.u-szeged.hu to acquire access to the datasets. AH.

ETHICS STATEMENT

The human subjects investigations were evaluated and authorized by the IRB at the Doctoral School of Education at the University of Szeged. In order to enroll a participant in this study, their legal guardian or next of kin provided written consent.

AUTHOR CONTRIBUTIONS

AH and AM were in charge of the study's design, data collecting, and analysis, as well as assisting with the manuscript's preparation. The research was assisted and supervised by General Motors (GM). Each author contributed to the final version of the text and worked closely with the others to revise and improve it.

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REFERENCES

- Alhaysony, M. (2017). Language learning strategies use by Saudi EFL students: the effect of duration of English language study and gender. Theor. Prac. Lang. Stu. 7, 18–28. doi: 10.17507/tpls.0701.03
- 2. An, Z., Wang, C., Li, S., Gan, Z., and Li, H. (2021). Technology-assisted self- regulated English language learning: associations with English language self-efficacy, English enjoyment, and learning outcomes. Front. Psychol. 11:558466. doi: 10.3389/fpsyg.2020.558466
- 3. Bećirović, S., Brdarević-Čeljo, A., and Polz, E. (2021). Exploring the relationship between language learning strategies, academic achievement, grade level, and gender. J. Lang. Educ. 7, 93–106. doi: 10.17323/jle.2021.10771
- 4. Božinović, N., and Sindik, J. (2017). Construction of the questionnaire on foreign language learning strategies in specific Croatian context. Coll. Antropol. 41, 61–71.
- 5. Charoento, M. (2017). Individual learner differences and language learning strategies. Contem. Educ. Res. J. 7, 57–72. doi: 10.18844/cerj.v7i2.875
- 6. Cohen, A. D. (1998). Strategies in Learning and Using a Second Language.
- 7. Harlow: Longman.
- 8. Csapó, B., and Molnár, G. (2019). Online diagnostic assessment in support of personalized teaching and learning: The eDia system. Front. Psychol. 10:1522.doi: 10.3389/fpsyg.2019.01522
- 9. Dawadi, S. (2017). Language learning strategies profiles of EFL learners in Nepal. Eur. J. Educ. Soc. Sci. 2, 42–55. https://files.eric.ed.gov/fulltext/ED578188. pdf
- 10. Dörnyei, Z. (2005). The Psychology of the Language Learner: Individual Differences in Second Language Acquisition. Mahwah, NJ: Lawrence Erlbaum.
- 11. Dörnyei, Z., and Skehan, P. (2003). "Individual differences in second language

JNAO Vol. 12, No. 2, (2021)

learning," in The Handbook of Second Language Acquisition. eds. C. J. Doughty and M. H. Long (Oxford: Blackwell), 589–630.Habók, A., Kong, Y., Ragchaa, J., and Magyar, A. (2021). Cross-cultural differences in foreign language learning strategy preferences among Hungarian. Chinese

- 12. Mongolian University Students. Heliyon 7, 1–7. doi: 10.1016/j.heliyon.2021.e06505
- 13. Habók, A., and Magyar, A. (2018a). The effect of language learning strategies on proficiency, attitudes and school achievement. Front. Psychol. 8:2358.doi: 10.3389/fpsyg.2017.02358
- Habók, A., and Magyar, A. (2018b). Validation of a self-regulated foreign language learning strategy questionnaire through multidimensional modelling. Front. Psychol. 9:1388. doi: 10.3389/fpsyg.2018.01388
- 15. Habók, A., and Magyar, A. (2019). The effects of EFL reading comprehension and certain learning-related factors on EFL learners' reading strategy use. Cog. Educ. 6, 1–19. doi: 10.1080/2331186X.2019.1616522
- Habók, A., and Magyar, A. (2020). The role of students' approaches in foreign language. Cog. Educ. 7, 1–21. doi: 10.1080/2331186X.2020.1770921Hajar, A. (2019). A critical review of research on language learning strategies used by Arab learners of English. Stu. Self-Access Learn. J. 10, 239–257. doi: 10.37237/100303 Jabbari, M. J., and Golkar, N. (2014). The relationship between EFL learners' language learning attitudes and language learning strategies. Int. J. Ling. 6,161– 167. doi: 10.5296/ijl.v6i3.5837Kline, R. B. (2015). Principles and Practice of Structural Equation Modeling.4th Edn. New York, NY: Guilford.
- 17. Köksal, D., and Dündar, S. (2017). Factors affecting the use of self-regulated l2 learning strategies in Turkish FLE context. J. Lang. Ling. Stu. 13, 1–16. doi: 10.16986/HUJE.2017033805
- 18. Lin, L., Lam, W.-I., and Tse, S. K. (2021). Motivational strategies, language learning strategies, and literal and inferential comprehension in second language Chinese reading: A structural equation modeling study. Front. Psychol. 12:707538. doi: 10.3389/fpsyg.2021.707538
- Malpartida, W. M. F. (2021). Language learning strategies, English proficiency and online English instruction perception during covid-19 in Peru. Int. J. Instr. 14, 155–172. doi: 10.29333/iji.2021.14410a
- 20. Oxford, R. L. (1990). Language Learning Strategies: What Every Teacher Should Know. Boston: Heinle and Heinle.
- 21. Oxford, R. L. (2011). Teaching and Researching Language Learning Strategies. Harlow: Longman/Pearson Education.
- 22. Oxford, R. L. (2016). Teaching and Researching Language Learning Strategies: Self-Regulation in Context. 2nd Edn. New York: Routledge.
- Platsidou, M., and Kantaridou, Z. (2014). The role of attitudes and learning strategy use in predicting perceived competence in school-aged foreign language learners. J. Lang. Lit. 5, 253– 260. doi: 10.7813/jll.2014/5-3/43
- 24. Platsidou, M., and Sipitanou, A. (2015). Exploring relationships with grade level, gender and language proficiency in the foreign language learning strategy use of children and early adolescents. Int. J. Res. Stu. Lang. Learn.4, 83–96. doi: 10.5861/ijrsll.2014.778
- 25. Radwan, A. A. (2011). Effects of L2 proficiency and gender on choice of language learning strategies by university students majoring in English. AsianEFL J. 13, 114–162.
- 26. Rao, Z. (2016). Language learning strategies and English proficiency: interpretations from information-processing theory. Lang. Learn. J. 44, 90–106. doi: 10.1080/09571736.2012.733886
- 27. Raoofi, S., Binandeh, M., and Rahmani, S. (2017). An investigation into writing strategies and writing proficiency of university students. J. Lang. Teach. Res. 8, 191–198. doi:

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10.17507/jltr.0801.24Rianto, A. (2020). A study of language learning strategy use among Indonesian EFL university students. Reg. J. 13, 231–256. doi: 10.18326/rgt.v13i2.231-256 Rubin, J. (1975). What the 'good language learner' can teach us. TESOL Q.9, 41–51. doi: 10.2307/3586011