

The Impact of Sociological Situations, Psychological and Psychological-Situational Characteristics on Curious in Foreign Languages Learning Behaviors of Secondary Students of the Northern British International School

Pongsiri Kamkankaew

Faculty of Business Administration, North-Chiang Mai University, Thailand Email: Kpongsiri85@gmail.com ORCID: https://orcid.org/0000-0002-5885-4805

Received 23/09/2024 Revised 27/09/2024 Accepted 19/10/2024

Abstract

Background and Aim: This research explores the impact of sociological situations, psychological characteristics, and psychological-situational characteristics on the curiosity and behaviors of secondary students learning foreign languages at the Northern British International School. In today's globalized world, proficiency in foreign languages is crucial for academic and professional success. Understanding the factors that influence students' motivation and behaviors in learning languages like German and Chinese can help educators develop effective strategies to enhance their engagement and performance.

Materials and Methods: The study involves 42 students from grades 7 to 12 enrolled in foreign language courses at the Northern British International School. A purposive sampling method was used to select the participants. Data were collected using a questionnaire designed based on a comprehensive review of relevant literature. The validity of the instrument was ensured by expert evaluation, and its reliability was tested using Cronbach's alpha. Descriptive statistics and multiple regression analysis were employed to analyze the relationships between sociological situations, psychological characteristics, and psychological-situational characteristics with students' foreign language learning behaviors.

Results: The analysis revealed that psychological-situational characteristics had the strongest influence on foreign language learning behaviors, followed by sociological situations and psychological characteristics. The regression model indicated that these factors collectively explained 60.3% of the variance in learning behaviors. Specifically, positive learning environments and supportive relationships were found to significantly enhance students' curiosity and engagement in language learning.

Conclusion: The findings highlight the importance of creating a supportive and stimulating learning environment that considers both individual and contextual factors. Educators and policymakers should focus on fostering positive sociological and psychological-situational conditions to enhance students' curiosity and motivation to learn foreign languages, ultimately improving their proficiency and academic performance.

Keywords: Sociological Situations, Psychological Characteristics, Psychological-Situational Characteristics

Introduction

In the era of globalization, learning foreign languages is of paramount importance for secondary school students. Proficiency in foreign languages serves as a gateway to a promising future (Kamkankaew & Thanitbenjasith, 2023), enabling students to access educational, employment, and travel opportunities worldwide. Mastery of foreign languages allows students to access diverse sources of information and knowledge (Onishchuk et.al., 2020), and provides them with the opportunity to pursue higher education at prestigious universities abroad. Effective communication skills, which are essential in multinational companies or in careers that involve interacting with individuals from different cultures, are also developed through foreign language learning (Jubas, 2023). Moreover, foreign language skills facilitate cross-cultural communication, enrich cultural understanding, and enhance the travel experience (Brevik & Rindal, 2020). Thus, learning foreign languages is a crucial endeavor for secondary school students, equipping them with the essential skills required for future success in education, work, and living in a globalized society.



The curiosity and willingness of secondary school students to learn foreign languages are vital for their success in the global era (Gumartifa, Agustiani & Elfarissyah, 2022). Foreign languages are not only tools for communication but also for accessing information and unlocking various educational and employment opportunities. Furthermore, studying foreign languages helps develop critical 21stcentury skills such as analytical thinking, problem-solving, and effective communication (Demirci & Akcalan, 2022). Social influences, such as family support, friends who speak foreign languages, competent language teachers, schools with strong language programs (Bampenthan & Peungposop, 2016), and diverse communities, play a significant role in shaping students' attitudes and motivation towards language learning (Gould, Dieffenbach & Moffett, 2002).

In addition, intrinsic characteristics, such as openness to new experiences and determination, greatly influence students' willingness to learn foreign languages. Students who are curious about other cultures and are motivated to succeed are more likely to engage deeply in language learning (Bajpai & Saha, 2020). Situational characteristics, such as positive learning experiences, supportive relationships with teachers and peers, and a conducive learning environment, also contribute to students' enthusiasm for learning foreign languages (Haupt et al., 2020). A comprehensive understanding of the impact of social situations, intrinsic characteristics, and situational factors can help educators, parents, and policymakers create effective teaching methods and supportive environments that foster a greater eagerness among students to learn foreign languages (Demirci & Akcalan, 2022).

The Northern British International School, established in 2003, offers education from early childhood to upper secondary levels, following the United Kingdom curriculum. For upper secondary students, the school offers German and Chinese as foreign languages. However, in the academic year 2022, a report on student progress in these languages indicated that 20% of upper secondary students did not meet the school's academic performance standards (The Northern British International School, 2022). This research aims to explore the influence of social situations, intrinsic characteristics, and situational factors on the foreign language learning behaviors of secondary students at the Northern British International School. The findings will provide valuable insights for teachers to design learning activities and manage classrooms in ways that enhance students' enthusiasm for learning foreign languages. This will ultimately help students meet the academic performance standards set by the school for German and Chinese language proficiency.

Objectives

To investigates the impact of sociological situations, psychological and psychological-situational characteristics on curious in foreign languages learning behaviors of secondary Students at the Northern British International School.

Literature review

This research reviews the concepts of sociological situations, psychological characteristics, psychological-situational characteristics, and curiosity in foreign language learning behaviors as follows.

Foreign language learning behaviors

Foreign language learning behaviors encompass a wide range of actions and strategies that students employ in their efforts to acquire a new language (Brevik & Rindal, 2020). These behaviors are influenced by individual differences and contextual factors, and they include practices such as participating in class discussions, engaging with language learning resources, and applying the language in real-life contexts (Kongsamai, Intarakanhaeng & Tantiwiwat, 2020). Active behaviors, like speaking and writing in the target language, indicate a high level of engagement and curiosity (Bluemke et.al., 2024). On the other hand, passive behaviors, such as listening and observing without active participation, can reflect either a preference for cautious learning or a lack of confidence in language skills (Tulgar, 2018).

Moreover, effective language learners often exhibit behaviors that involve the use of specific learning strategies (Mekhajorn & Panthumnawin, 2020). These can include cognitive strategies, like summarizing or translating, and metacognitive strategies, such as planning and monitoring one's own learning progress (Gumartifa, Agustiani & Elfarissyah, 2022). For example, a student who regularly reviews vocabulary, practices pronunciation, and self-assesses their progress is demonstrating proactive



learning behaviors. These behaviors are typically associated with a higher degree of curiosity and a stronger commitment to mastering the language (Demirci & Akcalan, 2022).

Understanding foreign language learning behaviors is essential for educators aiming to support student success. By recognizing the diverse strategies and practices that students use, teachers can tailor their instruction to meet individual needs, encouraging positive learning behaviors (Tulgar, 2018). This can involve creating opportunities for students to actively use the language in meaningful contexts or providing feedback that helps students reflect on and improve their learning strategies. Ultimately, fostering effective language learning behaviors contributes to a deeper, more sustained engagement with the language, enhancing overall proficiency and satisfaction with the learning process (Kongsamai Intarakanhaeng & Tantiwiwat, 2020).

Sociological situations

Sociological situations refer to the various social environments and contexts in which students are immersed, and these have a significant influence on their learning behaviors, particularly in the context of foreign language acquisition (Hitlin & Long, 2009). Factors such as family background, peer influence, and community support play a crucial role in shaping students' attitudes and motivations towards learning new languages (Stenalt & Lassesen, 2022). For instance, students who grow up in multilingual families or communities are more likely to view foreign languages as a natural part of communication. This exposure often fosters a curiosity and eagerness to learn, as students see language as a tool for connecting with different cultures and broadening their horizons (Stenalt, 2021).

Moreover, the educational environment, including the school's ethos and the attitudes of teachers and classmates, also contributes significantly to shaping language learning behaviors (Hitlin & Kirkpatrick Johnson, 2015). In schools where language learning is encouraged and valued, students are more likely to develop positive attitudes towards studying foreign languages (Stenalt, 2021). Peer influence can either motivate or discourage students depending on whether their friends value and engage in language learning (Stenalt & Lassesen, 2022). In essence, sociological situations create a framework of expectations, norms, and values that influence how students perceive the importance of foreign language learning and their willingness to invest time and effort into it. Based on the studies by Bampenthan & Peungposop (2016) Stenalt (2021) and Stenalt & Lassesen (2022), the researcher proposes the following hypothesis:

H1 Sociological situations have an impact on curious in foreign languages learning behaviors of secondary Students at the Northern British International School.

Psychological characteristics

Psychological characteristics play a pivotal role in shaping the learning behaviors of secondary students, particularly in the context of foreign language acquisition (Hynninen et.al., 2005). These characteristics encompass various internal attributes such as motivation, self-efficacy, anxiety levels, and cognitive styles (Gould, D., Dieffenbach, K., & Moffett, A. (2002). For example, students with high intrinsic motivation are more likely to engage actively in language learning activities because they find personal satisfaction and enjoyment in mastering a new language. This intrinsic drive can significantly enhance their curiosity, making them more willing to explore complex linguistic concepts and engage with diverse language resources beyond the classroom (Murphy et.al., 2021).

Self-efficacy, or a student's belief in their ability to succeed in specific tasks, is another critical psychological factor influencing language learning behaviors (Park et.al., 2020). Students with strong self-efficacy are more likely to set challenging language goals for themselves, persist in the face of difficulties, and employ effective learning strategies (Kelly et.al., 2024). Conversely, those with low self-efficacy might avoid challenging tasks or give up easily, thereby limiting their opportunities to develop language skills (Cummings et.al., 2022). Additionally, psychological characteristics like language learning anxiety can hinder students' willingness to participate in class or engage with the language, as fear of making mistakes or being judged can overwhelm their natural curiosity and interest in learning ().

Understanding these psychological characteristics is essential for educators aiming to foster a supportive learning environment (Wichianwan et.al., 2018). By addressing factors such as motivation and self-efficacy, and by creating strategies to reduce anxiety, teachers can better support students' curiosity and engagement in foreign language learning. This, in turn, can lead to more effective language acquisition and a more positive overall learning experience. Based on the studies by Wichianwan et.al. (2018) Park et.al. (2020) and Gould, Dieffenbach & Moffett (2002), the researcher proposes the following hypothesis:



H2 Psychological characteristics have an impact on curious in foreign languages learning behaviors of secondary Students at the Northern British International School.

Psychological-situational characteristics

Psychological-situational characteristics refer to the dynamic interplay between a student's psychological traits and the immediate learning environment (Bajpai & Saha, 2020). These characteristics are crucial in shaping how students respond to specific learning situations, particularly in the context of foreign language acquisition (Haupt et.al., 2020). Factors such as the presence of supportive teachers, the structure of learning activities, and the emotional climate of the classroom can significantly influence a student's level of curiosity and engagement (Sakdapat & Bhanthumnavin, 2020). For instance, a student who generally feels anxious about speaking in public may exhibit greater willingness to participate in language activities if the classroom environment is perceived as non-judgmental and encouraging.

Additionally, psychological-situational factors include the impact of task design on student engagement (Kuecuekbalaban, et.al. 2017). Well-designed activities that are appropriately challenging and relevant to students' interests can stimulate their curiosity and motivate them to explore the language further (Boualar,2018). For example, a task that involves real-life problem-solving using the target language can help students see the practical value of learning and encourage them to go beyond rote memorization. On the other hand, monotonous or overly difficult tasks may reduce interest and lead to disengagement, regardless of a student's inherent motivation or curiosity (Demirci & Akcalan, 2022).

Understanding these psychological-situational characteristics is essential for creating a learning environment that nurtures curiosity in foreign language learning (Gumartifa, Agustiani & Elfarissyah, 2022). By carefully considering the situational context in which learning occurs, educators can design activities and interactions that align with students' psychological needs, thereby promoting more positive learning behaviors (Haupt et.al., 2020). This approach can help bridge the gap between a student's inherent psychological traits and their situational responses, ultimately leading to a more effective and engaging learning experience. Based on the studies by Boualar (2018) Bajpai & Saha (2020) and Sakdapat & Bhanthumnavin (2020), the researcher proposes the following hypothesis:

H3 Psychological-situational characteristics have an impact on curious in foreign languages learning behaviors of secondary Students at the Northern British International School.

Conceptual Framework

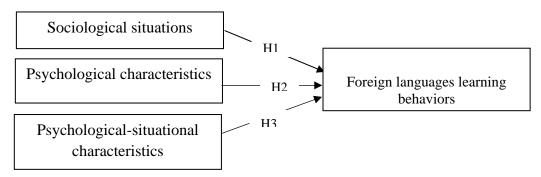


Figure 1 Conceptual Framework

Methodology

This study employs a quantitative cross-sectional analytical design. The research methodology is outlined as follows:

Population and Sample Group

The population for this research comprises 42 students from grades 7 to 12 (Year 8 to 13) at the Northern British International School. A purposive sampling method was employed, selecting all students from these grades as the target group for the study. All participants are enrolled in German and Chinese language courses as part of their foreign language studies.





Research Instrument

A questionnaire was developed as the research instrument based on a comprehensive review of relevant literature. To ensure content validity, the questionnaire was evaluated by three experts: one specializing in curriculum and instruction, one in Chinese language teaching, and one in German language teaching. The content validity index (CVI) provided by these experts ranged from 0.70 to 1.00. The reliability of the instrument was assessed using Cronbach's alpha coefficient, which yielded values between 0.75 and 0.95, indicating good to excellent internal consistency (Shrestha, 2020).

Data Collection

Primary data were collected using a quantitative survey administered to students from grades 7 to 12 (Year 8 to 13) at the Northern British International School during September and October 2023. In addition, secondary data were obtained from relevant research articles to support the study.

Data Analysis

Upon completion of data collection, descriptive statistics, including mean, standard deviation, skewness, and kurtosis, were used to assess the normality of the data distribution. The relationships between variables were analyzed using correlation analysis. Hypothesis testing was conducted using the Enter Multiple Regression Analysis method to determine the influence of various factors on foreign language learning behaviors.

Results

Based on the research objective, which is to investigates the impact of sociological situations, psychological and psychological-situational characteristics on curious in foreign languages learning behaviors of secondary Students at the Northern British International School, the researcher has structured the presentation of the research findings as follows:

Results of the normal distribution test of the data

The results of the normal distribution test, as shown in Table 1, indicate that the variables under study exhibit varying degrees of skewness and kurtosis. The mean scores (μ) for sociological situations (SOS), psychological characteristics (PYC), psychological-situational characteristics (PSC), and learning behaviors (Y_LEB) were 3.97, 4.25, 4.10, and 3.77, respectively, with standard deviations (S.D.) ranging from 0.806 to 0.949. The skewness (SK) values for all variables were positive, indicating a rightward skew, with psychological characteristics (PYC) showing the highest skewness at 0.991. The kurtosis (KU) values were within acceptable limits for all variables, although psychological characteristics (PYC) exhibited a slightly higher kurtosis value of 1.631, suggesting a more peaked distribution compared to the others (Chatterjee & Simonoff, 2013). Overall, the data demonstrate a reasonable approximation to normal distribution, which supports the suitability of further statistical analyses such as correlation and regression

Table 1 Results of the normal distribution test of the data

Varibles	μ	S.D.	SK	KU
sociological situations (SOS)	3.97	0.949	0.802	0.462
psychological characteristics (PYC)	4.25	0.892	0.991	1.631
psychological-situational characteristics	4.10	0.806	0.746	0.716
(PSC)				
learning behaviors (Y_LEB)	3.77	0.938	0.922	0.758

Results of the analysis of the relationship between variables

The results of the correlation analysis, as presented in Table 2, indicate a statistically significant relationship between all variables at the 0.001 level. The correlation coefficient between sociological situations (SOS) and curiosity in language learning behavior (Y_CLB) is 0.791, suggesting a strong positive relationship. Similarly, psychological characteristics (PYC) and psychological-situational characteristics (PSC) show significant positive correlations with Y_CLB, with coefficients of 0.718 and 0.734, respectively. Additionally, the high correlation among the independent variables (SOS, PYC,





and PSC) indicates potential multicollinearity; however, the tolerance values (ranging from 0.789 to 0.991) and VIF values (ranging from 1.009 to 1.267) fall within acceptable limits, suggesting that multicollinearity is not a significant issue in this analysis (Montgomery, Peck & Vining, 2021).

Table 2 Results of the analysis of the relationship between variables

	Y_LEB	SOS	PYC	PSC	Tolerance	VIF
Y_CLB	1.000				-	-
SOS	0.791**	1.000			0.991	1.009
PYC	0.718**	0.752**	1.000		0.789	1.267
PSC	0.734**	0.759**	0.763**	1.000	0.795	1.257

^{**}Note: Statistically significant at the 0.001 level.

Results of research hypothesis testing

Prior to testing the research hypothesis using Enter Multiple Regression Analysis, the researcher specified the equation with the independent variables as sociological situations (SOS), psychological characteristics (PYC), and psychological-situational characteristics (PSC), and the dependent variable as learning behaviors (Y_LEB). The equation is defined as follows:

$$Y_LEB = a + b1 SOS + b2 PYC + b3 PSC$$

The results of the regression analysis presented in Table 3 indicate that the model significantly predicts learning behaviors (Y_LEB) among secondary students at the Northern British International School, with an R value of 0.735 and an R² value of 0.603. This suggests that approximately 60.3% of the variance in learning behaviors can be explained by the independent variables: sociological situations (SOS), psychological characteristics (PYC), and psychological-situational characteristics (PSC). The overall model is significant, as indicated by the F-value of 25.329 and a p-value of 0.000, demonstrating that the combination of these predictors reliably accounts for changes in the dependent variable.

Specifically, the psychological-situational characteristics (PSC) variable had the strongest influence on learning behaviors, with a standardized beta coefficient (B) of 0.477, a t-value of 3.216, and a p-value of 0.000, indicating a highly significant effect. Sociological situations (SOS) also showed a significant positive relationship with learning behaviors, with a beta coefficient of 0.136, a t-value of 3.128, and a p-value of 0.002. Similarly, psychological characteristics (PYC) were found to have a significant positive effect, with a beta coefficient of 0.122, a t-value of 2.495, and a p-value of 0.013. The Durbin-Watson statistic of 1.415 suggests that there is no significant autocorrelation in the residuals, supporting the validity of the model. These findings highlight the important role that both individual and contextual factors play in influencing students' engagement and curiosity in foreign language learning.

Table 3 regression analysis results

Independent	Dependent Varible: Y_LEB						
Varibles	b	SE	ß	t	p-value		
a (constant)	0.546	0.312	-	1.749	0.035*		
SOS	0.134	0.438	0.136	3.128	0.002*		
PYC	0.165	0.366	0.122	2.495	0.013*		
PSC	0.520	0.456	0.477	3.216	0.000*		

 $R = 0.735 R^2 = 0.603 R^2_{change} = 0.601 F = 25.329 Sig.$ No. F = 0.000 Durbin-Watson = 1.415

Prediction Equations in Raw Score Form



^{**}Note: Statistically significant at the 0.001 level.



The prediction equation for learning behaviors (Y_CLB) in raw score form, using sociological situations (SOS), psychological characteristics (PYC), and psychological-situational characteristics (PSC) as independent variables, is expressed as:

$$Y_LEB = 0.546 + b1 \ 0.134(SOS) + b2 \ 0.165(PYC) + b3 \ 0.520(PSC)$$

This equation indicates that for every unit increase in sociological situations, psychological characteristics, and psychological-situational characteristics, the learning behaviors (Y_CLB) increase by 0.134, 0.165, and 0.520 units, respectively, holding other variables constant.

Prediction Equations in Standard Score Form

The prediction equation in standard score form (using beta coefficients) is expressed as:

$$Z LEB = b1 \ 0.136(Z SOS) + b2 \ 0.122(Z PYC) + b3 \ 0.477(Z PSC)$$

This equation shows the relative contribution of each standardized independent variable to the prediction of learning behaviors. The beta coefficients suggest that psychological-situational characteristics (PSC) have the strongest impact on learning behaviors, followed by sociological situations (SOS) and psychological characteristics (PYC), respectively.

Discussion

The results of the research show a significant impact of sociological situations, psychological characteristics, and psychological-situational characteristics on foreign language learning behaviors among secondary students at the Northern British International School. These findings align well with previous academic studies that suggest these factors are crucial in shaping how students approach and engage in learning foreign languages. For instance, sociological situations, such as family and peer influences, create a learning environment where curiosity in language learning can either be nurtured or diminished, consistent with the works of Bampenthan & Peungposop (2016) Stenalt (2021) and Stenalt & Lassesen (2022). The positive beta coefficient of 0.136 in the results highlights the importance of these external factors, confirming the hypothesis that sociological environments significantly influence students' language learning behaviors.

Similarly, psychological characteristics like motivation, self-efficacy, and anxiety were found to have a positive and significant effect on learning behaviors, in line with the theoretical framework established by researchers like Wichianwan et.al. (2018) Park et.al. (2020) and Gould, Dieffenbach & Moffett (2002). The research shows that students with strong self-efficacy and intrinsic motivation engage more deeply with the learning process, which mirrors prior findings that these internal characteristics drive proactive learning behaviors. The beta coefficient of 0.122 underscores that psychological traits are essential in fostering curiosity and active participation in language learning.

The strongest predictor in the model, psychological-situational characteristics, with a beta coefficient of 0.477, suggests that the immediate learning environment, including teacher support and the structure of learning activities, has the most substantial impact on students' curiosity and engagement in foreign language learning. This finding is consistent with the research of Boualar (2018) Bajpai & Saha (2020) and Sakdapat & Bhanthumnavin (2020), who emphasized the importance of designing engaging tasks and creating a positive classroom atmosphere to enhance learning behaviors. Overall, the results affirm the proposed hypotheses and highlight the importance of both individual and situational factors in shaping foreign language learning behaviors.

Knowledge Contribution

The research on the impact of sociological situations, psychological characteristics, and psychological-situational factors on curiosity in foreign language learning behaviors of secondary students at the Northern British International School contributes significantly to the understanding of language learning in a diverse educational environment. The study highlights that students' willingness to engage in foreign language learning is influenced not only by individual traits like motivation and





self-efficacy but also by the broader social context in which they learn. By examining these factors in tandem, this research provides a nuanced view of how both personal and situational elements shape students' language learning behaviors, which is crucial for developing effective teaching strategies.

Moreover, the findings underscore the importance of creating supportive and inclusive learning environments that consider the diverse backgrounds and psychological needs of students. The research suggests that fostering a positive classroom climate, providing encouragement, and designing engaging activities can significantly enhance students' curiosity and motivation to learn foreign languages. This knowledge is particularly valuable for educators and policymakers aiming to promote effective language acquisition in schools with multicultural and multilingual student populations. The study offers practical insights for tailoring foreign language education to meet the needs of diverse learners, ultimately contributing to better educational outcomes and increased language proficiency.



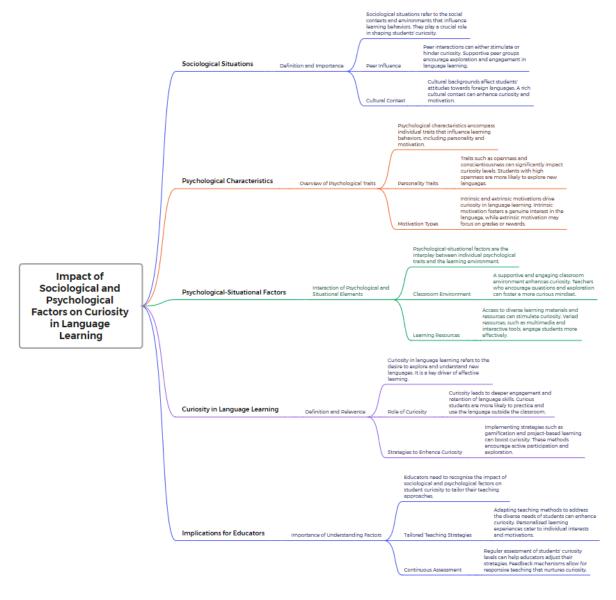


Figure 2 Knowledge Contribution

Recommendation

Recommendations for Teachers

Teachers at the Northern British International School should consider incorporating diverse instructional strategies that account for the varying sociological, psychological, and psychological-situational characteristics of students. Since psychological-situational factors were found to have the strongest influence on language learning behaviors, creating a supportive and engaging classroom environment is crucial. Teachers should foster a non-judgmental atmosphere that encourages risk-taking in language use and provide real-life context tasks that align with students' interests. Additionally, incorporating activities that build self-efficacy and reduce language learning anxiety can further enhance students' curiosity and engagement in foreign language acquisition.

Recommendations for the School

The school should implement policies and programs that support a comprehensive language learning environment. This includes providing professional development for teachers on how to address diverse psychological and sociological factors in the classroom. The school should also consider establishing peer-support programs and language clubs to promote a culture of multilingualism. Given





the significant role of family and community in influencing language learning, the school should actively engage with parents and the local community to create a supportive network for students learning foreign languages.

Recommendations for Future Research

Future research should further explore the complex interplay between psychological and situational factors in various learning contexts. It would be beneficial to conduct longitudinal studies to assess how these factors evolve over time and their long-term impact on language proficiency. Moreover, researchers should consider expanding the sample size and including students from different schools and educational systems to generalize the findings. Investigating additional variables such as cultural identity, language policy, and technology integration in language learning could also provide deeper insights into enhancing language learning behaviors among students.

References

- Bajpai, V., & Saha, A. (2020). Personal, Psychological Situational and Communicational Profile of the Gram Cultivators in Hamirpur District of UttarPradesh, India. International Journal of Current Microbiology and Applied Sciences 9(3):2265-2277
- Bampenthan, T & Peungposop, N. (2016). Sociological Situations and Psychological Characteristics related to curious in Music Learning Behaviors of High School students. Journal of Behavioral Science for Development, 8(1), 187-201.
- Bluemke, M., Engel, L., Grüning, D. J., & Lechner, C. M. (2024). Measuring intellectual curiosity across cultures: validity and comparability of a new scale in six languages. Journal of Personality Assessment, 106(2), 156-173.
- Boualar, K. (2018). Psychological and situational factors associated with academic engagement among first-generation undergraduate students. Journal of Behavioral Science for Development, 10(2), 56-82.
- Brevik, L. M., & Rindal, U. (2020). Language use in the classroom: Balancing target language exposure with the need for other languages. Tesol Quarterly, 54(4), 925-953.
- Chatterjee, S., & Simonoff, J. S. (2013). Handbook of regression analysis. John Wiley & Sons.
- Cummings, K., Watkins, A., Jones, C., Dias, R., & Welham, A. (2022). Behavioural and psychological features of PTEN mutations: a systematic review of the literature and meta-analysis of the prevalence of autism spectrum disorder characteristics. Journal of Neurodevelopmental *Disorders*, 14(1), 1.
- Demirci, C., & Akcalan, M. (2022). The adaptation of language learning curiosity scale into Turkish language. *International Journal of Educational Research Review*, 7(1), 48-55.
- Gould, D., Dieffenbach, K., & Moffett, A. (2002). Psychological characteristics and their development in Olympic champions. Journal of applied sport psychology, 14(3), 172-204.
- Gumartifa, A., Agustiani, I. W. D., & Elfarissyah, A. (2022). Curiosity Factors and English Language Achievements: Non-English Students Department. English Education Journal, 12(1), 47-54.
- Haupt, M. R., Weiss, S. M., Chiu, M., Cuomo, R., Chein, J. M., & Mackey, T. (2020). Profiles of social distance compliance: Psychological and situational predictors of risky behavior during COVID-19. medRxiv, 2020-06.
- Hitlin, S., & Kirkpatrick Johnson, M. (2015). Reconceptualizing agency within the life course: The power of looking ahead. American Journal of Sociology, 120(5), 1429-1472.
- Hitlin, S., & Long, C. (2009). Agency as a sociological variable: A preliminary model of individuals, situations, and the life course. Sociology Compass, 3(1), 137-160.
- Hynninen, K. M. J., Breitve, M. H., Wiborg, A. B., Pallesen, S., & Nordhus, I. H. (2005). Psychological characteristics of patients with chronic obstructive pulmonary disease: a review. Journal of psychosomatic research, 59(6), 429-443.
- Kamkankaew, P., & Thanitbenjasith, P. (2023). Synergizing Thai Higher Education with Macromarketing and Circular Economy Principles: A Paradigm Shift in Marketing Education for Sustainable Societal Progress. International Journal of Sociologies and Anthropologies Science Reviews, 3(5), 309-322.





- Kelly, A. L., Williams, C. A., Jackson, D. T., Turnnidge, J., Reeves, M. J., Dugdale, J. H., & Wilson, M. R. (2024). Exploring the role of socioeconomic status and psychological characteristics on talent development in an English soccer academy. *Science and Medicine in Football*, 8(3), 251-259
- Kongsamai T., Intarakanhaeng A., & Tantiwiwat S. (2020). The effect of a cultural competency enhancement program with experiential learning on cultural caring behavior of professional nurses in an international private hospital. *Journal of Behavioral Science for Development*, 12(1), 1–17.
- Kuecuekbalaban, P., Rostalski, T., Schmidt, S., & Muehlan, H. (2017). Psychological, situational and application-related determinants of the intention to self-test: a factorial survey among students. *BMC health services research*, 17, 1-12.
- Mekhajorn W., & Panthumnawin D. (2020). Psychosocial factors related to self-directed learning decision-making behavior of undergraduate students. *Journal of Behavioral Science for Development*, 12(1), 74–91.
- Montgomery, D. C., Peck, E. A., & Vining, G. G. (2021). *Introduction to linear regression analysis*. John Wiley & Sons.
- Murphy, J., Vallières, F., Bentall, R. P., Shevlin, M., McBride, O., Hartman, T. K., & Hyland, P. (2021). Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom. *Nature communications*, 12(1), 29.
- Onishchuk, I., Ikonnikova, M., Antonenko, T., Kharchenko, I., Shestakova, S., Kuzmenko, N., & Maksymchuk, B. (2020). Characteristics of foreign language education in foreign countries and ways of applying foreign experience in pedagogical universities of Ukraine. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(3), 44-65.
- Park, H. Y., Jang, Y. E., Oh, S., & Lee, P. B. (2020). Psychological characteristics in patients with chronic complex regional pain syndrome: comparisons with patients with major depressive disorder and other types of chronic pain. *Journal of Pain Research*, 389-398.
- Sakdapat, N., & Bhanthumnavin, D. (2020). Integration of Psychosocial Factors as Correlates to Critical Thinking Ability in Graduate Students. Dusit Thani College Journal, 14(1), 389–403.
- Shrestha, N. (2020). Detecting multicollinearity in regression analysis. *American Journal of Applied Mathematics and Statistics*, 8(2), 39-42.
- Stenalt, M. H. (2021). Digital Student Agency: Approaching Agency in Digital Contexts from a Critical Perspective. *Frontline Learning Research*, 9(3), 52-68.
- Stenalt, M. H., & Lassesen, B. (2022). Does student agency benefit student learning? A systematic review of higher education research. Assessment & Evaluation in Higher Education, 47(5), 653-669
- The Northern British International School. (2022). *Self-assessment report (SAR) for the academic year 2022*. Lampang Province.
- Tulgar, A. T. (2018). The effects of curiosity on second language learning in terms of linguistic, social-cultural and pragmatic development. Adnan Menderes *Üniversitesi Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 9(2), 59-72.
- Wichianwan W., Mukda W., Cheunkhwan W., & Kanchanawong D. (2018). Psychological and Situational Characteristics Correlating to Health Domestic Tourism Behavior of the Elderly. *Journal of Educational Review Faculty of Education in MCU*, 3(2), 13–28.







Citation: © (1)(S)(E)