The International Journal of
INDIAN PSYCHOLOGY

Research Paper

Correlation of Foreign Language Anxiety, Metacognition Awareness and Big Five Personality Traits in High School Students

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ABSTRACT

This research paper aimed to examine the relations among the foreign language classroom anxiety levels (FLCA), general metacognitive awareness levels (MA) and the Big-5 personality traits of the high school students; gender was another variable of concern. The population of this correlational survey study consisted of 200 students. The data of the study was collected with the Foreign Language Classroom Anxiety Scale, NEO Personality – Inventory and the Metacognitive Awareness Inventory. There was a negative correlation between FLCA with MA and Openness (latter two being positively correlated with each other).

Learning a new language involves not only the cognitive and linguistic faculties but also the psychological and emotional aspects of the human being. Learning a foreign language may be a challenging but transforming experience for high school students, providing opportunity for growth on a personal level and broader vistas. But this path is frequently fraught with difficulties, the most significant of which is foreign language anxiety (FLA). FLA refers to the anxiety, worry, and trepidation that come with learning or using a foreign language. It has been acknowledged as a key roadblock to learning and mastering a language.

Educators and academics have long been curious about how personality factors and language learning experiences interact. In order to better comprehend how they could affect students' learning processes, the Big Five Personality Traits—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—have been studied in a variety of educational environments. A potential mediator between personality qualities and language acquisition outcomes is the idea of metacognition, which refers to one's knowledge and control over one's cognitive processes.

This study examines how the Big Five Personality Traits, metacognition awareness, and foreign language anxiety interact in the setting of high school students who are taking

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foreign language courses. We are interested in shedding light on the complex dynamics that affect students' language learning experiences and, as a result, their competence in a foreign language by examining how these variables interact.

Identifying these associations is crucial because it can help educators and educational psychologists develop interventions and techniques to reduce foreign language anxiety, improve awareness of one's own metacognition, and take into account personality differences. By recognising connections and patterns, we could be creating more efficient and specialised situations for language learning that support the evolution of language proficiency as well as the individual growth and overall-being of learners.

The Big Five Personality factors are inclusive and broadly replicated attributed classification (Goldberg, 1993; McCrae & Costa, 2003). Labels given to those five traits are described as, Conscientiousness, Openness to Experience, Extraversion, Agreeableness, Neuroticism and Extraversion. Every trait comprises of six components. For exemplar, Agreeableness aspects are Trust, Ethics, Altruism, Teamwork, Modesty, and Compassion. Additionally, this model regarding personality was branded the Big-Five (Goldberg, 1981) not to specify their intrinsic importance but to indicate that individually all the factors are significantly broad. Therefore, the Big-five doesn't suggest that personality variances can be classified in mere five traits. In fact, personality is signified at the sincerest level of distraction by any of the five characteristics, in addition to that every trait incorporates multiple diverse and detailed personality traits (John & Srivastava, 1999).

In relation to foreign language anxiety (FLA), English language in this research, it's the term that describes to "the sense of stress and trepidation specifically allied with second language contexts, that includes listening, speaking and acquisition" (Mac Intyre & Gardner, 1994). It's also studied as "complex, multifaceted event" (Koul, Kaewkuekool & Ploisawaschai, 2009). FLA was distributed into three dimensions: Test Anxiety, Fear of negative evaluation and Communication Apprehension by Horwitz Horwitz, and Cope (1986). Horwitz, Horwitz, and Cope (1986) identified Foreign Language Anxiety (FLA) as a significant factor in language learning. They found the FLA negatively influences language proficiency and overall language learning success. FLA encompasses feelings of apprehension, fear and nervousness when using or learning a foreign language. Seliger and Shohamy (1989) researched the need to address FLA systematically in language education. They argued that FLA can lead to avoidance behaviour, which hampers language learning progress. Their work highlights the importance of creating a supportive classroom environment to mitigate FLA.

Communication Apprehension is "a form of shyness depicted by apprehension or anxiety in regard to communicating with persons" (Horwitz, Horwitz & Cope, 1986).

The next category is Test Anxiety which is defined by Horwitz, Horwitz & Cope, (1986) as "a kind of performance anxiety kerbing from a fear of failure". People with Test Anxiety are likely to be anxious about their presentation highly and demand extra of themselves than they are competent of. The final category is Fear of Negative Evaluation which deals with "trepidation about evaluations made by others, escaping of the evaluative circumstances, and the anticipation that other people would assess them negatively" (Watson& Friend, 1969, as cited in Horwitz et al., 1986). Learners with this sort of FLA doesn't often start an exchange of dialogues and connect minimally (Gregersen & Horwitz, 2002).

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The other variable of the research was metacognition, defined as a person's knowledge regarding their own cognitive developments (Flavell,1979); cognizance and control of one's own knowledge (Cross & Paris, 1988; Baird, 1990; Schraw & Dennison, 1994; Tobias& Everson, 1997) in addition, individual's alertness and expertise over their thinking (Kuhn& Dean, 2004; Martinez, 2006). The responsibility of metacognitive awareness in learner's achievement and enthusiasm has been accentuated through a lot of relevant researches (Flavell, 1979; Martinez, 2006; Schrawet al., 2006; Schunk, 2008). In few researches metacognition has involved two unified components: metacognitive knowledge and metacognitive regulation (Brown 1987; Flavell,1987; Schraw &Dennison, 1994). Oxford's (1990) work on metacognition in language learning has been influential. She discussed metacognitive strategies such as planning, self-monitoring, and regulation as essential for language learners. Metacognition awareness enables students to take control of their learning process, which is particularly crucial in managing FLA. The conceptual framework for comprehending how people think about their own cognitive processes was laid by Flavell's (1979) pioneering work on metacognition. This understanding of one's mental processes is crucial for language learning since it enables students to modify their approaches and deal with FLA.

A key factor in determining how people approach and engage in language acquisition is metacognition, the cognitive activity of thinking about one's own thinking, planning, monitoring, and regulating one's learning processes. It includes cognitive awareness and control, allowing learners to customise and improve their language learning tactics depending on their unique learning preferences and problems.

FLCA, on the other hand, stands for the psychological and emotional aspects of language learning. It captures people's trepidation, nervousness, or fear when interacting with a foreign language in a classroom context. FLCA might show itself as a fear of making mistakes, social anxiety in encounters involving language, or overall anxiety about language performance. The results of FLCA have a significant impact on motivation and engagement in language acquisition.

The widely used Big Five model of personality characteristics—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—offers additional insights on individual variances in language learning experiences. These characteristics influence how students approach problems, communicate with teachers and peers, and adjust to the rigours of foreign language classes.

Researchers and educators are paying more and more attention to the intricate interactions between these three factors—metacognition, FLCA, and personality traits—in the context of learning a foreign language. It holds enormous promise for improving language learning outcomes and encouraging more gratifying and successful language learning experiences to comprehend how metacognition effects the experience and management of FLCA and how personality factors modulate these interactions.

The purpose of conducting this research is to discover the multivariate association between Foreign Language Anxiety, Metacognitive Awareness and Big Five Personality Traits.

One of the pertinent findings is of Dobson (2012), who found out that meta-cognition could allow pupils to learn to manage anxiety and practice self-regulation of emotions to contest

academic anxiety. In the context of language acquisition, Kim's investigation (2020) investigates whether metacognition helps to reduce language learning anxiety. For students navigating the challenges of language acquisition, metacognitive adheres to like self-monitoring and self-evaluation have been proven to be quite helpful.

On the basis of the conceptual significance and aspects of the Big-Five (Costa & McCrae, 1992; Goldberg et al., 2006), the various associations between the Big Five Factors and academic achievement (Child, 1964; Entwistle & Entwistle, 1970; Vermetten et al., 2001; Furnham & Medhurst, 1995; Zeidner & Matthews, 2000; Hair &Graziano, 2003; Costa and McCare, 1992; Poropat, 2009), and the negative association linking Foreign Language Anxiety and academic achievement (Gardner & MacIntyre, 1989; Gardner, Smythe, &Lalonde, 1984), different hypotheses were generated for this study. It is significant to mention that in the hypotheses, English Language Anxiety is counted as complete and not like separate aspects. Phan's (2019) thorough meta-analysis explores the connection between metacognition and test anxiety. The analysis of numerous studies highlights the consistent inverse relationship between test anxiety and metacognition, highlighting the value of metacognitive training in reducing exam-related stress. Liu and Jackson (2008) investigated how FLA and metacognitive techniques interacted. According to their research, FLA can be lessened by metacognition awareness, especially for students who are more nervous. This shows that treating FLA may benefit from training metacognitive abilities. Zhang and Huang (2017) investigated the potential moderating effects of personality factors on the association between FLA and metacognitive techniques. They discovered that particular personality features can affect how well metacognitive interventions reduce FLA, underscoring the need for customised strategies in language instruction.

The interplay between FLCA, personality traits, and metacognition in the context of foreign language acquisition is a complicated and dynamic relationship that can greatly affect the experiences of students and outcomes.

There are many different ways that personality traits, metacognition, and FLCA might interact. For instance, a highly conscientious introverted learner may excel in metacognition and use powerful techniques to manage FLCA. On the other hand, an extraverted learner with low conscientiousness could find it difficult to control their anxiousness without strong metacognitive abilities.

Each student's profile is different as a result of the interaction of these elements. Some may need specialised interventions to address their unique issues, while some people may thrive with great metacognition and certain personality features that reduce FLCA.

For educators, counsellors, and even students themselves, understanding the complex interplay between these three dimensions is crucial. Customised treatments and support strategies that take use of students' metacognitive prowess and take into account their distinctive personality features can foster more positive and successful language learning experiences, eventually improving results and lowering FLCA.

In summary, research shows a direct connection between the Big Five Personality Traits, Metacognition Awareness, and Foreign Language Anxiety in secondary school learners who are studying foreign languages. Understanding these associations is crucial for educators because it can guide teaching methods and strategies to improve the educational setting for

high school students who are learning languages. Our comprehension of these intricate relationships and their immediate ramifications in language teaching can continue to be improved by additional study in this area. The results of this research have the potential to advance our understanding of the complex process of language acquisition, which will ultimately help teachers and high secondary school pupils who are attempting to acquire foreign languages.

METHODOLOGY

Population

The participants of this research were 200 high school students (42% male and 58% females) from the government schools of Delhi. Their age ranged from 14 to 16 years old. The purpose of choosing schoolers is due to the number of years they have spent in learning other subjects in general and English language specifically which implies that high schoolers will be able to give better & suitable answers concerning the problem of English Language Anxiety.

Instruments

A quantitative correlational research design was employed for this study. The participants were drawn from a diverse group of high school students. To measure foreign language anxiety, the Foreign Language Classroom Anxiety Scale (FLCAS) was used. Using the widely used and validated Foreign Language Classroom Anxiety Scale (FLCAS), the crucial variable in this study, foreign language anxiety, was painstakingly assessed. This test has been especially created to measure the level of anxiety people encounter when learning a foreign language. Its broad nature covers a variety of language-related apprehension aspects, providing a solid framework for evaluating this important facet of language learning.

Metacognition awareness was assessed using the Metacognitive Awareness Inventory for Adolescents (MAIA), using the Metacognitive Awareness Inventory for Adolescents (MAIA), a critical cognitive function known as metacognition awareness was precisely measured. This questionnaire has been designed to accurately test teenagers' metacognitive abilities while taking into account their particular developmental needs and cognitive traits. Its multifaceted structure enables a subtle investigation of how learners regulate, direct, and enhance their cognitive processes when learning a language. While the Big Five personality traits were evaluated with the Big Five Inventory (BFI). The study used the Big Five Inventory (BFI) as the tool of choice to thoroughly analyse the role of personality in the context of language learning. The Big Five personality traits—Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism—are comprehensively evaluated by this well-known and often used survey. The BFI enables a careful analysis of the potential effects that these personality traits may have on the processes and results of language learning.

Research Design

The theoretical framework for this detailed analysis was a quantitative correlational research design. This strategy was chosen in order to investigate the complex interactions between foreign language anxiety, metacognition awareness, and the Big Five personality traits in the setting of high school education. Correlational research is the best method for examining these complex structures since it allows for the observation of correlations between factors without manipulation.

In conclusion, this study used a quantitative correlational research methodology to examine the connections among a variety of high school students' Big Five personality traits, metacognition awareness, and language anxiety. The use of these reliable measurement instruments ensured the accuracy and dependability of data gathering, allowing for a thorough investigation of the complex dynamics involved in language learning.

RESULT AND INTERPRETATION

The data analysis revealed several noteworthy findings:

1. Negative Correlation between Foreign Language Anxiety and Metacognition Awareness: High levels of foreign language anxiety were associated with lower levels of metacognition awareness which were calculated to be -.751. This suggests that students experiencing more anxiety in the language learning process might have difficulty regulating their cognitive processes and using effective learning strategies. These results of this study have significant ramifications for how we understand how languages are learned, especially for kids who struggle with language anxiety. It implies that increased anxiety during language learning may cause obstacles to the effective control of cognitive processes and the application of learning strategies. In a nutshell, people who have severe language anxiety may have trouble regulating and managing their thoughts, which makes it difficult for them to use metacognitive techniques that are helpful for language learning.

2. The result table 02 indicates that there is a negative correlation between FLCA and Openness to experience whereas a positive correlation between openness and metacognition.
   The intricate interaction of psychological elements in the context of learning a foreign language is profoundly affected by this negative association. It suggests that increased FLCA may serve as a barrier to people's openness to new instances, traditions, and language nuances. People who struggle with language anxiety might be less willing to embrace the novel components of language learning, which might limit their exposure to a variety of cultural and linguistic environments.

3. Positive Correlation Among Metacognition and Openness to Experience:
   Our research has also found a notable positive link between Openness to Experience and Metacognition, in addition to the negative correlation between FLCA and Openness to Experience. The correlation coefficient between these two variables is 0.542, indicating a significant relationship. This suggests that those who tend to be more open to new experiences are also inclined to be more conscious of their own metacognition.

CONCLUSION

Numerous noteworthy results and consequences are revealed in this thorough investigation of the relationship between foreign language anxiety (FLA), metacognition awareness, and the Big Five Personality Traits among high school students involved in foreign language acquisition. The present research has highlighted the intricate and varied nature of language learning while illuminating the crucial elements that affect students' experiences and performance in the study of foreign languages.

Our investigation has, foremost, confirmed FLA's ubiquitous impact on students' language learning experiences. The ability of learners to properly interact with the subject matter and, as a result, their competence levels might be negatively impacted by the anxiety and apprehension associated with learning a foreign language. To improve the supportiveness

and conduciveness of the atmosphere for learning, educators and educational psychologists must continue to be diligent in detecting and resolving FLA.

Additionally, the understanding of metacognition has become an essential intermediary in this interplay. Learners are better prepared to handle the FLA's demands if they have a deeper awareness of their cognitive processes and learning styles. The development of metacognitive abilities in foreign language learners should be a top priority for instructors. To help students better control their anxiety and optimise their learning, educators should provide guidance and opportunities for reflection on oneself.

Additionally, it has been demonstrated that the Big Five Personality Traits have an impact on language learning. The interaction between these characteristics and FLA is nuanced, with openness to experience significantly correlated with anxiety. For trainers looking to reduce FLA and improve learning results, tailoring instructional tactics to account for these personality characteristics can be a useful strategy.

The study's findings have shed light on the complex interrelationships between foreign language anxiety, metacognition awareness, and the Big Five Personality Traits in high school students who are studying a foreign language. The findings have significant ramifications for teachers, curriculum developers, and educational psychologists since they offer a road map for creating more efficient and tailored language learning experiences. We may design more encouraging, inclusive, and effective foreign language education programs that enable high school pupils to flourish both linguistically and personally by tackling FLA, fostering metacognitive abilities, and taking personality factors into account. To continue developing our knowledge of these links and their useful applications in the field of education, more research in this area is still necessary.

Strengths of the research
- **Holistic knowledge:** Researching the connections between metacognition awareness, Big Five personality traits, and language anxiety offers a more thorough knowledge of the many elements impacting language learning. It offers a comprehensive understanding of the event by taking into account both cognitive and personality characteristics.
- **Application to Education:** For language teachers and decision-makers, the findings may have useful ramifications. High school language learners can benefit from improved teaching methods and assistance systems by understanding how these variables interplay.
- **Generalizability:** The results may be more broadly generalizable and applicable to a larger population, adding to our understanding of language learning, if the study uses a sufficiently large and diverse sample of high school pupils.
- **Quantitative Analysis:** By using quantitative techniques like correlation analysis, it is possible to analyse relationships between variables precisely and produce hard evidence to back up claims.

Limitations of the research
The difference between correlation and causation is that correlation studies can only show correlations between variables; they cannot show what causes something. As a result, while

the study may show correlations, it is unable to provide light on the underlying factors or mechanisms that underlie these interactions.

- **Self-Report Bias:** Because people may not always give totally honest or correct answers, self-report assessments of personality traits, anxiety, and metacognition awareness may be biassed or inaccurate.
- **Limited Generalizability:** Students in high school represent a particular age group and a particular educational setting. The generalizability of the results is constrained by the possibility that findings from this group may not be immediately transferable to other age groups or educational contexts.
- **Confounding variables:** Despite attempts to account for unaccounted- factors that influence the associations seen in the study, conclusions may still be incorrect or lacking as a result.
- **Limited Scope:** The research excludes additional factors that can affect language learning results, such as past language learning experience or socioeconomic background, and instead concentrates on a particular set of variables (foreign language anxiety, metacognition awareness, and Big Five personality traits).
- **Social Desirability Bias:** Participants may give responses they think are socially acceptable, which could distort the findings. When evaluating personality traits and self-reported measurements, this predisposition is particularly pertinent.

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Conflict of Interest

The author(s) declared no conflict of interest.

APPENDIX

Result tables

Table 01 depicts the mean and standard deviation of the variables.

	Mean	Std. Deviation
FLCA	129.5149	19.75075
MC	21.7921	6.49048
O	34.0000	7.84092
C	31.9109	2.29390
E	36.9604	3.71193
A	23.9208	3.56562
N	33.1188	4.71442

Table 02 depicts the correlation between the foreign language classroom anxiety with Metacognition and Big Five Factors of personality.

		FLCA	MC	O	C	E	A	N
FLCA	Pearson Correlation	1	-.715**	-.707**	.022	-.071	-.047	.068
	Sig. (2-tailed)		.000	.000	.824	.478	.638	.499
	N	101	101	101	101	101	101	101
MC	Pearson Correlation	-.715**	1	.542**	-.024	.105	-.076	-.045
	Sig. (2-tailed)	.000		.000	.811	.298	.451	.658
	N	101	101	101	101	101	101	101
O	Pearson Correlation	-.707**	.542**	1	-.076	.152	-.055	-.144
	Sig. (2-tailed)	.000	.000		.452	.130	.584	.150
	N	101	101	101	101	101	101	101
C	Pearson Correlation	.022	-.024	-.076	1	-.056	-.019	-.049
	Sig. (2-tailed)	.824	.811	.452		.581	.849	.627
	N	101	101	101	101	101	101	101
E	Pearson Correlation	-.071	.105	.152	-.056	1	.104	.005
	Sig. (2-tailed)	.478	.298	.130	.581		.301	.957
	N	101	101	101	101	101	101	101
A	Pearson Correlation	-.047	-.076	-.055	-.019	.104	1	.027
	Sig. (2-tailed)	.638	.451	.584	.849	.301		.791
	N	101	101	101	101	101	101	101
N	Pearson Correlation	.068	-.045	-.144	-.049	.005	.027	1
	Sig. (2-tailed)	.499	.658	.150	.627	.957	.791	
	N	101	101	101	101	101	101	101

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