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THE CORRELATION BETWEEN LEARNING STYLE PREFERENCES AND MULTIPLE INTELLIGENCES AMONG AFGHAN UNDERGRADUATE EFL LEARNERS AT PAKTIKA INSTITUTE OF HIGHER EDUCATION

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Abstract. *This study aimed to investigate the learning style preferences and multiple intelligence profiles of Afghan EFL learners, focusing on identifying the most and least dominant learning styles and intelligence types. A quantitative, non-experimental correlational design was employed, involving 70 male EFL learners at the Paktika Institute of Higher Education. The Perceptual Learning Style Preference Questionnaire (PLSPQ) and the Multiple Intelligences (MI) Inventory were administered to collect data on learning style preferences and intelligence profiles, respectively. The results revealed a strong preference for visual learning, followed by group learning, among Afghan EFL learners. Tactile learning was found to be the least preferred style. In terms of multiple intelligences, interpersonal intelligence emerged as the most dominant type, followed closely by intrapersonal and linguistic intelligence. While logical-mathematical, Spatial and musical intelligences were the least dominant. The findings of this study had implications for EFL pedagogy in Afghanistan, suggesting that educators should have incorporated visual aids and self-directed learning opportunities into their teaching practices to cater to the dominant learning styles of their students. Additionally, the study highlighted the importance of considering multiple intelligence profiles in language learning, as learners with diverse intelligence strengths may benefit from tailored instruction. The study's results contributed to the existing body of research on learning styles and multiple intelligences, providing new insights into the preferences and strengths of Afghan EFL learners. The study's limitations and potential avenues for future research were also discussed, including the need to investigate the learning preferences of female*

EFL learners and other demographic groups in Afghanistan. The pedagogical implications of this study advocate for a more adaptive, inclusive, and learner focused approach to teaching English as a Foreign Language.

Keywords: *Afghan EFL learners, EFL pedagogy, learning style preferences.*

КОРРЕЛЯЦИЯ МЕЖДУ ПРЕДПОЧТЕНИЯМИ В СТИЛЕ ОБУЧЕНИЯ И МНОЖЕСТВЕННЫМ ИНТЕЛЛЕКТОМ СРЕДИ АФГАНСКИХ СТУДЕНТОВ, ИЗУЧАЮЩИХ EFL, В ИНСТИТУТЕ ВЫСШЕГО ОБРАЗОВАНИЯ ПАКТИКА

Аннотация. *Целью данного исследования было изучение предпочтений в стиле обучения и множественных профилей интеллекта афганских студентов, изучающих EFL, с упором на выявление наиболее и наименее доминирующих стилей обучения и типов интеллекта. Был использован количественный, неэкспериментальный корреляционный дизайн с участием 70 мужчин, изучающих EFL в Институте высшего образования Пактика. Опросник предпочтений в стиле восприятия обучения (PLSPQ) и инвентарь множественного интеллекта (MI) были использованы для сбора данных о предпочтениях в стиле обучения и профилях интеллекта соответственно. Результаты показали сильное предпочтение визуального обучения, за которым следует групповое обучение, среди афганских студентов EFL. Было обнаружено, что тактильное обучение является наименее предпочтительным стилем. С точки зрения множественного интеллекта, межличностный интеллект оказался наиболее доминирующим типом, за которым следуют внутриличностный и лингвистический интеллект. В то время как логико-математический, пространственный и музыкальный интеллекты были наименее доминирующими. Результаты этого исследования имели последствия для педагогики EFL в Афганистане, предполагая, что преподаватели должны были включить наглядные пособия и возможности самостоятельного обучения в свою педагогическую практику, чтобы удовлетворить доминирующие стили обучения своих учеников. Кроме того, исследование подчеркнуло важность рассмотрения множественных профилей интеллекта при изучении языка, поскольку учащиеся с различными сильными сторонами интеллекта могут выиграть от индивидуального обучения. Результаты исследования внесли вклад в существующий корпус исследований стилей обучения и множественного интеллекта, предоставив новое понимание предпочтений и сильных сторон афганских учащихся EFL. Также обсуждались ограничения исследования и потенциальные направления для будущих исследований, включая необходимость изучения предпочтений в*

обучении женщин, изучающих EFL, и других демографических групп в Афганистане. Педагогические выводы этого исследования говорят в пользу более адаптивного, инклюзивного и ориентированного на обучающегося подхода к преподаванию английского языка как иностранного.

Ключевые слова: *афганские обучающиеся EFL, педагогика EFL, предпочтения в стиле обучения.*

1. INTRODUCTION

The Afghan education system has made significant strides in rebuilding after decades of conflict, with efforts focused on improving infrastructure, access, and the quality of education. English as a Foreign Language (EFL) has become an integral part of the curriculum at various levels, with the Ministry of Higher Education establishing English departments in most universities. Recognizing the importance of English as a global lingua franca, these initiatives aim to prepare Afghan students for academic and professional opportunities on an international scale. However, despite these advancements, Afghan EFL learners, particularly undergraduates, face challenges in achieving fluency, especially in speaking skills. Factors such as limited practice opportunities, fear of mistakes, and cultural communication barriers often hinder their progress.

Two key theories, Learning Styles Theory and Multiple Intelligence (MI) Theory, offer insights into addressing individual differences in learning, which could be instrumental in overcoming these challenges. Learning Styles Theory emphasizes how individuals process and retain information, advocating for adapting teaching methods to match students' preferred styles (Armstrong, 2008). MI Theory, developed by Howard Gardner, proposes that individuals possess multiple distinct intelligences such as linguistic, logical-mathematical, and musical and learning is more effective when aligned with these domains (Gardner, 1983). While both theories focus on personalization, Learning Styles Theory addresses how learning occurs, whereas MI Theory emphasizes what should be taught based on intelligence domains. Together, they underscore the importance of tailoring education to individual needs.

Research supports the integration of these theories into instructional practices. Armstrong (2008) suggests that aligning teaching methods with learners' preferred styles enhances learning outcomes. However, Lazear (1999) argues that while it may not always be feasible to cater to all styles in every lesson, educators can encourage students to leverage their dominant intelligences to address weaker areas. Applying these theories in the Afghan context can help create more

inclusive and effective educational strategies, particularly in addressing speaking deficiencies among EFL learners. By incorporating MI-based tasks and learning styles into language instruction, teachers can foster an engaging environment that bridges linguistic and cultural gaps.

To further improve EFL education in Afghanistan, educators must focus on creating supportive, student-centered classrooms that encourage risk-taking, collaboration, and authentic communication. Targeted interventions such as integrating idioms into teaching materials and providing cultural context for language use can help learners overcome specific challenges, such as understanding and applying idiomatic expressions. By emphasizing interactive tasks and real-world application, teachers can empower students to achieve fluency and global competence. With a commitment to professional development and individualized pedagogy, the Afghan education system can continue to enhance its English language programs, preparing students for success in an interconnected world.

2. Literature Review: In Afghanistan, the education system has faced significant challenges due to years of conflict. Despite improvements since 2001, including the introduction of English as a compulsory subject, Afghan EFL learners still struggle with speaking skills, particularly due to anxiety and limited classroom participation. This is compounded by difficulties in understanding English idioms, as cultural knowledge and linguistic differences create barriers (De Jesus et al., 2007). To address this, instructors need to incorporate idioms into lessons and create supportive learning environments that encourage active participation and risk-taking (Lazear, 1999).

The Learning Styles Theory and the Multiple Intelligence Theory are two key frameworks for explaining individual differences in learning. The Learning Styles Theory focuses on how individuals acquire, process, and remembers academic information, suggesting instructional methods should align with learners' preferred styles. In contrast, The Multiple Intelligence Theory emphasizes that individuals possess different intelligence domains, and all learners can succeed if taught according to their dominant intelligence (Armstrong, 2008). While Learning Styles Theory focuses on how instruction is delivered, Multiple Intelligence Theory highlights what content is taught (Gardner, 1993).

Educational reforms focus on increasing access to English education, but challenges remain. EFL learners need more opportunities for practical language use, particularly in speaking, to improve their overall proficiency (Graf et al., 2009). By using student-centered approaches and

interactive activities, teachers can better support Afghan learners in overcoming these challenge, fostering both language acquisition and cultural understanding (Armstrong, 2008).

2.1 Concept of Learning Styles and their Relevance to EFL Learning

2.1.1 The Felder-Silverman Learning Style Model: The Felder-Silverman Learning Style Model categorizes learners based on four dimensions: active/reflective, sensing/intuitive, visual/verbal, and sequential/global, acknowledging those individuals may exhibit a mix of these preferences (Felder & Silverman, 1988). Active learners engage through discussions or hands-on activities, while reflective learners prefer introspection. Sensing learners focus on concrete, practical information, contrasting with intuitive learners who prefer abstract and theoretical concepts. Visual learners process information through images, whereas verbal learners favor written and spoken explanations. Sequential learners follow a step-by-step approach, while global learners focus on the overall picture and context. Widely applied in education, including engineering, the model helps educators tailor teaching strategies to accommodate diverse learning styles, creating more inclusive and effective learning environments that enhance outcomes (Felder & Henriques, 1995).

2.1.2 The VARK model: The VARK model, developed by Neil Fleming, categorizes learners into four primary modalities: Visual (V), Aural (A), Read/Write (R), and Kinesthetic (K), based on how they prefer to process information. Visual learners favor charts and diagrams, aural learners excel in discussions and lectures, read/write learners prefer written materials, and kinesthetic learners thrive on hands-on activities (Fleming, 2006). In English as a Foreign Language (EFL) teaching, the VARK model helps instructors tailor their teaching methods by using a variety of instructional strategies, such as visual aids, auditory explanations, written materials, and kinesthetic activities, to meet diverse student needs. By recognizing and accommodating these preferences, EFL teachers can foster a more engaging and inclusive learning environment, improving student motivation and learning outcomes (Fleming, 2006).

2.2 Multiple Intelligences (MI) Theory: Howard Gardner's Multiple Intelligences (MI) theory, proposed in 1983, challenges traditional views of intelligence by recognizing various types of intelligences. Initially, Gardner identified seven intelligences: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal, later adding naturalistic and existential intelligences (Gardner, 1983, 1993, 1999). Each intelligence involves distinct abilities, such as linguistic intelligence's sensitivity to language, logical-mathematical intelligence’s problem-solving, and spatial intelligence’s ability to visualize and manipulate objects. Bodily-

kinesthetic intelligence involves physical expression, while interpersonal intelligence relates to understanding and interacting with others. Intrapersonal intelligence focuses on self-awareness, and naturalistic intelligence is the ability to classify and understand nature, with existential intelligence addressing philosophical questions (Gardner, 1983, 1993, 1999).

Gardner (1993) emphasized that these intelligences work together, influenced by biological, personal, and cultural factors. His theory advocates for an inclusive educational approach that considers the diverse capacities of individuals, encouraging personalized learning experiences. For instance, activities such as reading and writing can enhance linguistic intelligence, puzzles and science programs can foster logical-mathematical skills, and role-playing or physical games can develop bodily-kinesthetic intelligence (Armstrong, 2008). By recognizing and nurturing these different intelligences, educators can create more dynamic and effective learning environments for all students.

2.3 Studies on Multiple Intelligences: Research highlights the significance of addressing diverse learning styles and intelligence profiles in education. Lee (2015) found that learners with tactile or kinesthetic styles exhibited higher expectations, suggesting the value of incorporating varied learning styles to boost engagement and performance. Similarly, David (2005) reported that students excelled in interpersonal, intrapersonal, and verbal-linguistic intelligences but struggled with bodily-kinesthetic and naturalistic ones, emphasizing the need to cater to multiple intelligences (MI) profiles. Wilson (2018) demonstrated that co-creating learning environments based on MI principles transformed classroom dynamics, fostering inclusivity and interactivity.

Further studies explored the integration of MI into specific instructional methods.

Savojbolaghchilar et al. (2020) found that Thematic Vocabulary Instruction (TVI) combined with MI-oriented tasks significantly enhanced vocabulary learning, although intrapersonal learners underperformed in this approach. Shafiee et al. (2020) revealed that logical and musical intelligences influenced various aspects of L2 writing, such as content organization and grammar.

However, Rahayu et al. (2023) observed no significant performance differences when MI principles were applied in EFL classrooms, possibly due to inconsistent implementation by instructors. These findings underscore the potential benefits and challenges of leveraging MI in language instruction. To this end the researcher formulated the following research questions:

1. What are the most and least dominant learning style preferences among Afghan EFL Learners.

2. What types of intelligences are mostly exhibited by Afghan EFL learners?

3. Is there any significant relationship between Afghan EFL learners' multiple Intelligences types and their learning styles?

3. Methodology

3.1 Participants**:** This study involved 70 Afghan male intermediate-level EFL learners aged 22 to 27 from the Paktika Institute of Higher Education. Participants were selected through convenience sampling due to their accessibility and shared cultural and educational backgrounds, ensuring a relatively uniform baseline of language proficiency. This approach, while limiting generalizability, allowed for efficient recruitment and focused exploration of the relationship between multiple intelligences and learning style preferences within this specific context. The selection was influenced by the researchers' access to the institution and the potential for meaningful insights from this homogenous group.

3.2 Instrumentation: The Perceptual Learning Style Preference Questionnaire (PLSPQ), developed by Reid (1996), was used to assess the learning style preferences of participants in this study. Designed for foreign language learners, the PLSPQ includes 30 items that evaluate six learning styles: visual, auditory, tactile, kinesthetic, group, and individual learning. Participants rated each item on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Scores were totaled for each category, with the highest score indicating the dominant learning style. This structured and quantifiable approach enabled detailed analysis of learner preferences and their potential correlation with multiple intelligences.

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3.2 2 Multiple Intelligences (MI) Inventory: The study utilized McKenzie's (1999) 90-item Multiple Intelligence Questionnaire to identify participants' dominant intelligences, based on Gardner's theory of Multiple Intelligences. The questionnaire assesses nine intelligences—linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal, intrapersonal, naturalistic, and existential—through ten items per category. Its reliability and validity have been confirmed in prior studies, with Cronbach's alpha coefficients ranging from 0.85 to 0.90 (Razmjoo, 2008; Razmjoo et al., 2009). This tool provided a comprehensive evaluation of participants' cognitive strengths, enabling the researchers to analyze intelligence profiles in relation to learning style preferences for the study's objectives.

3.3 Data Collection Procedure: This study used a quantitative, non-experimental correlational design to explore the relationship between multiple intelligences and learning style preferences among 70 male Afghan EFL learners at the Paktika Institute of Higher Education. Ethical approvals were obtained, and participants with intermediate English proficiency provided informed consent. Data collection involved two tools: the 30-item PLSPQ, which assessed visual, auditory, tactile, kinesthetic, group, and individual learning styles, and the 90-item MI Inventory, which identified nine dominant intelligences. Scores were calculated for each learning style and intelligence type, and statistical software was used for correlational analyses. The findings were analyzed to determine the associations between intelligence profiles and learning styles, providing insights for EFL pedagogy tailored to Afghan learners while acknowledging study limitations.

3.4 Data Analysis: To analyze the obtained data, different statistical procedures were used.

First of all, the SPSS data files was checked for missing data by taking frequency counts of the responses on all items from both data collection instruments. Secondly, the Cronbach alpha coefficients were computed to estimate the internal consistency reliability of each instrument.

Then, descriptive statistics, including mean, standard deviation, variance, skewness, and kurtosis, was run for all three variables of this study. Then, in order to answer the research questions, Pearson moment correlation analysis and multiple regressions analysis was conducted.

4. Findings

4.1 Results of the First Research Question: The first research question aimed to identify the most and least dominant learning style preferences among Afghan EFL learners. Using the Perceptual Learning Style Preference Questionnaire (PLSPQ), completed by 70 male EFL learners at the Paktika Institute of Higher Education, descriptive statistics were calculated to assess each of

the six learning style preferences. The results, presented in Table 1.1, ranked the learning styles based on mean scores to determine the dominant and least dominant preferences.

Table 1: Descriptive Statistics for Learning Style Preferences

Learning Style	Mean Score	Standard Deviation
Visual Learning	4.20	0.95
Group Learning	4.00	0.90
Individual Learning	3.90	1.15
Auditory Learning	3.85	1.10
Kinesthetic Learning	3.70	1.05
Tactile Learning	3.50	1.25

Figure 1: Column Chart for Learning Style Preferences

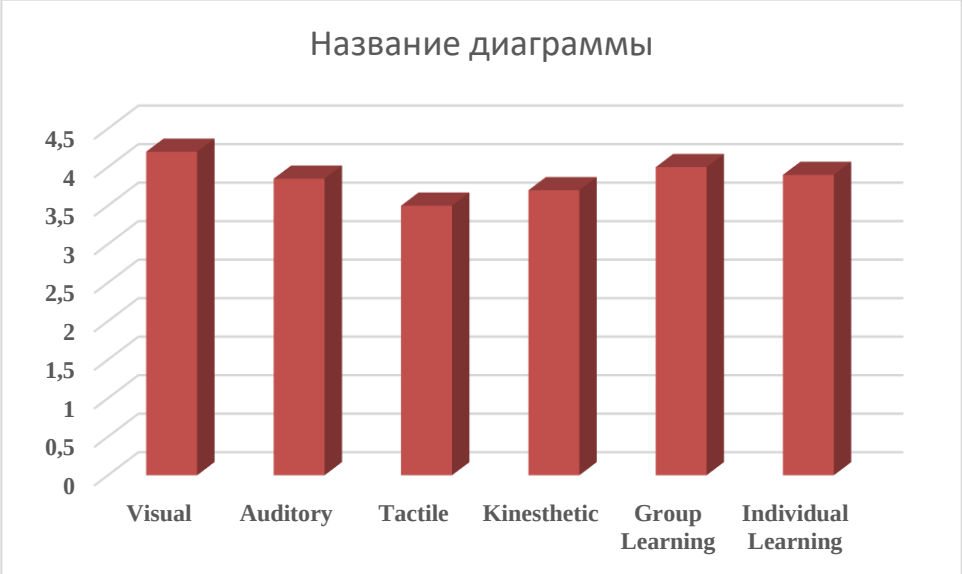

Table 1 and Figure 1 show the ranking of six learning style preferences among Afghan EFL learners. The results from the Perceptual Learning Style Preference Questionnaire (PLSPQ) revealed a strong preference for visual learning (mean score of 4.20), with learners favoring visual stimuli like diagrams and videos. Group Learning ranked second (mean 4.00), indicating a preference for collaborative, interactive environments. Individual learning (3.90) and auditory learning (3.85) were also moderately preferred, suggesting a mix of self-directed study and audio-based learning. Tactile learning had the lowest mean (3.50), indicating a lesser preference for

hands-on activities. These findings highlight the dominant learning styles of Afghan EFL learners, which can inform more effective teaching strategies.

4.2 Results of the Second Research Question

The second research question aimed to investigate the multiple intelligences (MI) profile of intermediate Afghan EFL learners, identifying the most and least dominant types. A 90-item MI questionnaire by McKenzie (1999) assessed nine MI categories: Linguistic, Logical-Mathematical, Spatial, Bodily-Kinesthetic, Musical, Interpersonal, Intrapersonal, Naturalist, and Existential.

Table 2: MI Profile of the Participants

Variables	N	Min	Max	Mean	SD
MIQ	70	1.00	4.80	3.87	0.87
Linguistic Intelligence	70	1.00	4.80	4.11	0.88
Logical-Mathematical Intelligence	70	1.67	5.00	2.72	0.61
Spatial Intelligence	70	1.67	4.87	2.55	0.71
Bodily-Kinesthetic Intelligence	70	1.00	4.80	3.81	0.81
Musical Intelligence	70	1.67	4.87	2.21	0.71
Interpersonal Intelligence	70	1.00	4.80	4.41	0.87
Intrapersonal Intelligence	70	1.67	5.00	4.28	0.61
Naturalist Intelligence	70	1.29	4.90	3.33	0.56
Existential Intelligence	70	1.29	4.90	3.33	0.56

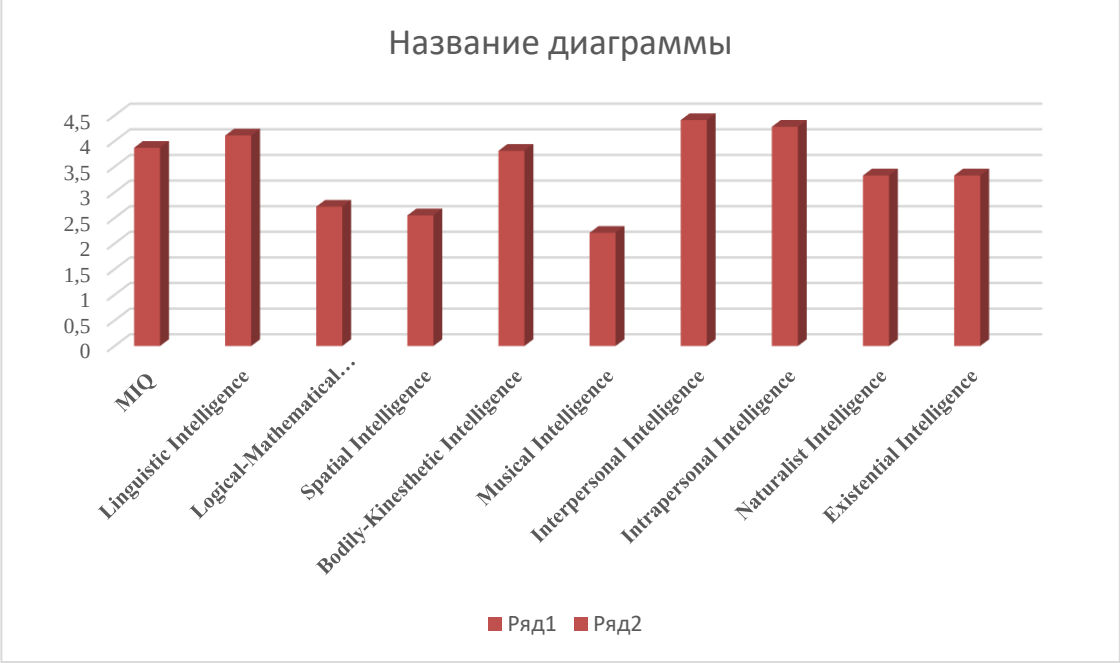

Figure 2: Column Charts of the Dominant MI Types

Table 2 and Figure 2 show that interpersonal intelligence (M=4.41) was the most dominant, followed by intrapersonal (M=4.28), linguistic (M=4.11), and bodily-kinesthetic (M=3.81) intelligences. Naturalist and existential intelligences were moderately common (M=3.33), while logical-mathematical (M=2.72), spatial (M=2.55), and musical (M=2.21) intelligences were the least prevalent. The higher standard deviations for interpersonal, intrapersonal, and linguistic intelligences indicate greater variation among students in these areas. These findings highlight a diverse range of strengths, emphasizing the value of recognizing multiple forms of intelligence.

Results of the Third Research Question

This research question explores the relationship between Afghan EFL learners' multiple intelligences and their learning style preferences, aiming to understand how intelligence profiles may influence their preferred ways of engaging with information. The study used the Perceptual Learning Style Preference Questionnaire (PLSPQ) and Multiple Intelligences (MI) Inventory, completed by 70 male EFL learners at the Paktika Institute of Higher Education. Pearson correlation analysis was performed to examine the associations between the nine types of intelligence and the six learning style preferences, with statistical significance set at $p < .05$.

Table 3: Correlation Matrix between Multiple Intelligences and Learning Styles

	Visual	**Auditory**	**Tactile**	**Kinesthetic**	**Group**	**Individual**
Linguistic	0.25	0.30	0.15	0.10	0.20	0.35
Logical-Mathematical	0.18	0.22	0.12	0.08	0.15	0.28
Spatial	0.38	0.20	0.10	0.15	0.25	0.22
Musical	0.10	0.40	0.20	0.18	0.30	0.15
Bodily-Kinesthetic	0.05	0.12	0.25	0.35	0.20	0.10
Interpersonal	0.20	0.28	0.15	0.12	0.45	0.18
Intrapersonal	0.30	0.15	0.08	0.10	0.12	0.40
Naturalistic	0.12	0.10	0.22	0.20	0.15	0.18
Existential	0.15	0.20	0.10	0.05	0.18	.25

Note: $p < .05$, $p < .01$

The analysis revealed significant correlations between multiple intelligences and learning style preferences among Afghan EFL learners. Key findings include:

- Linguistic Intelligence: Moderate positive correlations with individual learning (r = .35), visual (r = .25), and auditory learning (r = .30), indicating a preference for independent study and learning through visual aids and listening.
- Logical-Mathematical Intelligence: Moderate positive correlations with individual learning (r = .28) and auditory learning (r = .22), suggesting a preference for independent study and audio-based materials.
- Spatial Intelligence: Strong correlation with visual learning (r = .38), and moderate positive correlations with group (r = .25) and individual learning (r = .22), highlighting a preference for visual materials and mixed learning environments.
- Musical Intelligence: Strong correlation with auditory learning (r = .40), and moderate correlation with group learning (r = .30), showing an affinity for sound-based learning.
- Bodily-Kinesthetic Intelligence: Strong correlation with kinesthetic learning (r = .35) and tactile learning (r = .25), underscoring a preference for hands-on, movement-based learning.
- Interpersonal Intelligence: Strong correlation with group learning (r = .45), with moderate correlations with auditory (r = .28) and visual learning (r = .20), indicating a preference for collaborative environments and social interaction.
- Intrapersonal Intelligence: Strong correlation with individual learning (r = .40), with a moderate correlation with visual learning (r = .30), suggesting a preference for self-directed and introspective learning.
- Naturalistic and Existential Intelligences: Weaker correlations overall, with naturalistic intelligence correlating with tactile learning (r = .22) and existential intelligence with individual learning (r = .25).

5. DISCUSSION

5.1 Discussion of the First Research Question:

Q1. *What are the most and the least dominant learning style preferences among Afghan EFL learners?*

The study of learning style preferences among Afghan EFL learners revealed a strong preference for visual learning (mean = 4.20), followed by group learning (4.00) and individual learning (3.90). Tactile learning (3.50) was the least favored, indicating a lower preference for hands-on activities. These findings suggest that Afghan EFL learners primarily engage with visual aids like diagrams and videos, while also valuing collaborative group study. Visual learning aligns with cognitive theories that emphasize retention through images, and group learning promotes

social interaction and peer feedback, which enhance language acquisition. Additionally, individual learning preferences reflect the value of self-regulation and independent study, especially in contexts with limited educational resources.

The study also highlighted moderate preferences for auditory learning (3.85), suggesting a recognition of the value of verbal interactions in language learning. In contrast, tactile learning was less preferred, reflecting possible cultural differences in educational practices. These results are significant for developing effective pedagogical strategies in Afghanistan's evolving education system, where visual aids and collaborative learning could be emphasized. Educators can incorporate technology and self-directed learning opportunities to cater to these preferences, thus enhancing student engagement and outcomes. Future research could explore learning preferences across different demographic groups to further refine teaching practices.

5.2 Discussion of the second Research Question

Q2. What types of intelligences are mostly exhibited by Afghan EFL learners?

The investigation into the multiple intelligence (MI) profiles of intermediate Afghan EFL learners revealed a diverse distribution of intelligence types, with interpersonal intelligence (mean = 4.41) being the most dominant, followed by intrapersonal intelligence (4.28) and linguistic intelligence (4.11). Bodily-kinesthetic intelligence (3.81) also showed a significant presence, while naturalist and existential intelligences scored moderately (3.33). The least prevalent intelligences were logical-mathematical (2.72), spatial (2.55), and musical intelligence (2.21), indicating challenges in tasks requiring abstract reasoning, spatial awareness, or musical skills. The wide variation in interpersonal, intrapersonal, and linguistic intelligences suggests the importance of personalized, differentiated instruction to address diverse learner profiles.

The prominence of interpersonal intelligence suggests that Afghan EFL learners benefit from collaborative activities such as group discussions and peer learning, which enhance engagement and achievement. The strong presence of intrapersonal intelligence points to the effectiveness of self-reflection activities like journaling and goal-setting. Meanwhile, linguistic intelligence highlights the value of verbal expression through debates and peer feedback. However, the lower scores in logical-mathematical, spatial, and musical intelligences suggest a need for targeted support in these areas. The moderate representation of existential and naturalist intelligences offers opportunities to integrate critical thinking, philosophical discussions, and nature-based themes into the curriculum, further diversifying learning experiences.

These findings emphasize the need for inclusive and adaptable teaching strategies that consider the broad spectrum of student strengths and preferences in Afghan EFL classrooms.

5.3 Discussion of the Third Research Question

Q3. Is there any significant relationship between Afghan EFL learners' multiple intelligences types and their learning styles?

The analysis of the relationship between Afghan EFL learners' multiple intelligences (MI) and learning style preferences revealed significant correlations that illustrate how various cognitive strengths influence preferred learning modalities. Linguistic intelligence was positively correlated with individual, visual, and auditory learning styles, while logical-mathematical intelligence showed a strong connection with individual and auditory learning. Spatial intelligence was strongly linked to visual learning, and musical intelligence had a notable relationship with auditory learning. Bodily-kinesthetic intelligence showed preferences for kinesthetic and tactile learning. Additionally, interpersonal intelligence was correlated with group learning, and intrapersonal intelligence with individual learning. These findings suggest that understanding the interplay between MI and learning styles can help educators design more personalized and effective teaching strategies.

The implications of these correlations are significant for enhancing language instruction in Afghanistan. For instance, learners with strong linguistic intelligence may benefit from independent study environments, such as research projects or reflective writing. The strong correlation between spatial intelligence and visual learning highlights the importance of incorporating visual aids, like diagrams and multimedia presentations, to aid comprehension. Similarly, the relationship between interpersonal intelligence and group learning underscores the need for collaborative learning environments, which can enhance student engagement and achievement. Conversely, the weaker correlations of naturalistic and existential intelligences with learning styles suggest a need to explore these areas further, potentially incorporating themes related to the natural world or philosophical discussions in the curriculum. Overall, these findings emphasize the importance of aligning instructional strategies with students' cognitive strengths to foster deeper engagement and improve learning outcomes in EFL contexts.

6. CONCLUSION

This study aimed to explore the relationship between learning preferences and multiple intelligences among Afghan EFL learners, providing insights into how cognitive and perceptual

factors influence English language learning. The investigation revealed key findings that contribute to the broader field of language education, specifically for diverse learner populations.

The study examined dominant and least dominant learning styles, identified prevalent multiple intelligences, and analyzed their interplay, with the ultimate goal of informing effective, individualized teaching strategies in English language education.

The participants showed a strong preference for visual and group learning styles, indicating that visual aids, such as diagrams, videos, and charts, should be integrated into the curriculum.

Additionally, the emphasis on group learning suggests that collaborative activities like team projects and peer feedback sessions can enhance engagement and comprehension among learners. These preferences highlight the need for teachers to incorporate a variety of instructional strategies that cater to these learning styles, fostering an environment where students are more likely to succeed.

The study also revealed a prominent presence of interpersonal**,** intrapersonal, and linguistic intelligences among the participants, suggesting that learners possess a diverse range of cognitive strengths. This finding underscores the importance of avoiding a one-size-fits-all teaching approach. Instead, instructional methods should be adapted to nurture these intelligences through strategies that foster social interaction, self-reflection, and verbal communication, thus enabling learners to leverage their strengths in the language acquisition process.

Furthermore, the correlations between multiple intelligences and learning preferences provided empirical evidence that learners' cognitive predispositions are linked to their preferred modes of engaging with learning materials. For instance, spatial intelligence correlated with a preference for visual learning, suggesting that learners with stronger spatial reasoning may benefit more from visual representations in the curriculum. These insights emphasize the need for personalized teaching strategies that align with individual learner profiles, enhancing the effectiveness of instruction.

Overall, this study highlights the heterogeneous nature of Afghan EFL learners, advocating for instructional approaches that recognize and accommodate their diverse learning styles and cognitive profiles. By doing so, educators can foster a more inclusive and motivating learning environment, leading to better outcomes in language acquisition. The study contributes to the growing body of research on language education, calling for pedagogical approaches that are responsive**,** flexible, and adaptive to the varied needs of learners.

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