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Visual Learning Strategies among Urdu-Medium Secondary School Students: A Descriptive Analysis and Gender-Based Differences

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Abstract
Visual Learning Strategies significantly aid students in comprehending, interpreting, organising, and depicting information via visual experiences. The current research analyses the extent of Visual Learning Strategies utilised by Urdu-medium secondary school students and explores gender disparities across four aspects: Imagination, Observation, Organization, and Symbolic Representation. The research was carried out with 438 Urdu-medium students in Class IX from the Hyderabad District of Telangana. A descriptive survey methodology was utilised to investigate the allocation of students among low, moderate, and high tiers of Visual Learning Strategies. Statistical analysis was conducted using frequencies, percentages, Pearson's Chi-square test, and Cramér's V. The results indicated that most students had a modest proficiency in all four areas. A gender-based examination revealed notable statistical disparities in Imagination, Organization, and Symbolic Representation, whereas the Observation aspect showed no significant difference. The results underscore the significance of integrating visual learning exercises into classroom instruction to enhance students' creativity, observational skills, organisational capabilities, and symbolic representation proficiency.

Keywords: Visual Learning Strategies, Imagination, Observation, Organization, Symbolic Representation

1. Introduction:

Education transcends mere information dissemination; it encompasses the cultivation of students' skills to comprehend, analyse, structure, and utilise knowledge across various contexts. In the educational process, visual stimuli offer significant chances for students to comprehend topics through images, diagrams, illustrations, symbols, charts, and various visual resources.

In educational settings, visual aids can facilitate comprehension of abstract ideas and encourage active engagement. Learners can enhance their comprehension by examining images, deciphering visual data, contrasting items, recognising patterns, and illustrating concepts through sketches and symbols. The current research emphasises four critical aspects of Visual Learning Strategies: Imagination, Observation, Organization, and Symbolic Representation. These dimensions illustrate various methods by which

students interact with visual data and enhance their comprehension. Comprehending the extent of these tactics among secondary school students is crucial, since this educational phase offers chances to enhance students' cognitive skills and learning encounters. The current research investigates the descriptive extent of Visual Learning Strategies and assesses potential differences between male and female students across its four aspects.

2. Conceptual Background of Visual Learning Strategies:

It is a learning method where a student makes use of graphs, charts, maps, and diagrams. Additionally, sight is involved, with a focus on seeing, observing, seeing, and drawing. Visual learners learn well with images and think in pictures (Bethel-Eke and Eremie, 2017). They rely on nonverbal clues from the instructor or facilitator, such as body language, to aid with comprehending. Visual learners occasionally choose to sit in the front of the room. Additionally, they make detailed notes about other materials being given. These are students who like visual learning methods. Charts, diagrams, graphs, maps, and other visual or graphically based materials that appeal to the sense of sight are crucial in the learning environment. Videos, PowerPoint presentations, and other media are required.

Visual Learning Strategies are the use of drawings, diagrams, illustrations, symbols, charts, graphs, maps and other visual representations to help the teaching-learning process. These skills enable learners to understand, interpret, arrange and transmit knowledge in visual forms. Visual learning enables students to see information, create mental pictures, recognise linkages, and communicate their understanding in a variety of ways rather of relying solely on verbal explanations or written material.

Arnheim demonstrated in his book Visual Thinking (1969) that visual perception is closely linked with thinking and reasoning. He challenged the traditional separation of seeing and thinking, and stressed the significance of perception in the shaping of mind. This means that looking at photos, spotting patterns, and making sense of visual data are not just passive tasks but can also be intellectual activity. In the present study this view provides a theoretical basis for comprehending the function of Observation and Imagination in visual learning. Paivio (1986) explained that human cognition involves verbal and non-verbal modes of representation in his Dual Coding Theory. Verbal information is processed in language-based representations, while non-verbal information is processed in visuals and mental imagery. When learners get knowledge in words as well as in pictures, they may make connections between verbal and visual representations. This theoretical perspective underlines the need to pair written language with visuals, drawings, and symbols in classroom teaching. This is particularly helpful for language acquisition, because students may relate words and meanings to visual visuals. Mayer (2009) in Multimedia Learning states that learners can develop meaningful knowledge when words and visuals are given together in a proper manner. His Cognitive Theory of Multimedia Learning describes the selection, organization and integration of verbal and visual information. Learners find relevant material, arrange it into meaningful verbal and visual structures, and link these structures with their existing knowledge. This explanation forms a basis for the use of visual materials such as photos, diagrams, videos and graphic organisers during classroom education.

Gangwer (2009) examined the educational use of images, graphic organisers, visual communication tools and other classroom-based visual activities in Visual Impact, Visual Teaching: Using Images to Strengthen Learning. The book shows how teachers can integrate visual materials across the

topic areas to support student engagement, visual communication, and meaningful learning. It also offers practical suggestions for the use of images and visual materials in classroom teaching. Ainsworth (2006) discusses the significance of numerous representations for learning within the DeFT paradigm. Different representations can complement each other, limit the range of alternative interpretations and contribute to deeper comprehension of topics by learners. This perspective implies that students should not only look at visual content, but also interpret, compare and relate diverse kinds of representation.

Based on the theoretical viewpoints, Visual Learning Strategies can be defined as a set of learning processes that involve the development and use of visual information for meaningful understanding. In the present work, these methods are analysed along four dimensions: Imagination, Observation, Organization and Symbolic Representation.

- **Imagination**: Imagination is the ability to construct mental images, to picture events and to think of thoughts which go beyond the knowledge given to the learners. In classroom learning, students may visualise events, characters, settings or probable outcomes after seeing a picture or reading a paragraph. This dimension is related to the development of mental images and creative thought.
- **Observation**: Observation is the act of looking intently at pictures, objects, events, and visual details to find parallels, distinctions, patterns, and important information. It teaches students to observe details and to make sense of what they see. Observation can be acquired in language learning through description of pictures, comparison of images and detection of visual details.
- **Organization**: The ability to arrange visual information in a systematic way and to develop meaningful relationships between the various aspects. Students can structure information using charts, diagrams, sequences, tables and graphic organisers. These tasks can help students organise their ideas, identify linkages, and present information in an organised way.
- **Symbolic Representation**: Symbolic Representation is the ability to utilise signs, symbols, images and other visual forms to represent ideas, objects, experiences or meanings. In language learning, students can use symbols, signs, and visual representations to express meanings and to relate abstract concepts to tangible representations.

The four dimensions thus provide a framework for the analysis of the ways in which students interact with visual information during learning. The present investigation concerns these aspects among Urdu medium secondary school students in order to comprehend their levels of Visual Learning Strategies and to see its association with gender.

- **Review of Related Literature**

In educational research, visual learning has been examined from a variety of theoretical angles. The following are some of the related studies reviewed for the study :

- **Mayer and Anderson (1992)** conducted two tests to investigate how students learn when animation and spoken narration are combined. Their results suggested that students were better at solving problems when animation and narrative were presented simultaneously than when the information was presented separately. Their study emphasised the significance of connecting visual and verbal information in the learning process.
- **Paivio (1986)** described how interconnected systems process both verbal and nonverbal information using the Dual Coding Theory. This offers a theoretical foundation for comprehending the value of integrating words and images in education.

- **Anderson and Krathwohl (2001),** meaningful learning involves different cognitive processes, including understanding, analyzing, evaluating, and creating. Visual activities can provide opportunities for students to engage with information through observation, interpretation, comparison, and representation.
- **Butcher (2006)** examined the effect of diagrams in learning and comprehension. According to the study, diagrams helped students to build mental models, make inferences, and grasp relationships between topics. It also suggested that simpler diagrams may aid in factual learning and in information integration. The study demonstrates that visual representation is an educationally valuable way to promote meaningful knowledge.
- **Mayer (2009)** highlighted the significance of meaningfully integrating visual and spoken presentations. His Cognitive Theory of Multimedia Learning describes how students create meaningful understanding by processing words and images.
- **Tippett (2016)** evaluated eighty research studies on the use of diagrams in science education. The review highlighted that children learn from visual representations not just by learning from them, but also through actively understanding and constructing them. The findings showed the importance of visual representation, the active participation of students and the improvement of representational skills in the teaching-learning process.

Examining visual learning as a crucial part of the teaching-learning process is made possible by these theoretical stances. Nonetheless, the current study focuses on examining the four chosen aspects of Visual Learning Strategies in secondary school. These theoretical viewpoints and researches provide a basis for the study of visual learning as an important aspect of the teaching-learning process. However, the present study is primarily aimed to evaluate the four specified characteristics of Visual Learning Strategies i.e. Imagination, Observation, Organization and Symbolic Representation in Urdu medium secondary school students.

- **Rationale of the Study:**

Visual learning activities can be used broadly in the teaching of classrooms, providing students with opportunity to learn knowledge through observation, imagination, classification, and representation. But students may have different strengths in visual learning.

The analysis of the descriptive levels of Visual Learning Strategies may contribute to the identification of the aspects in which the students show levels comparatively greater or weaker. We may also analyse the data by gender to see whether the distribution of these levels is different for male and female students. Therefore, the present study was conducted to find out the levels of four dimensions of Visual Learning Strategies and to see its association with Gender among Urdu medium Secondary school students. The findings can allow teachers to understand students' visual learning capacities and to design appropriate class activities.

3. Objectives of the Study:

The following objectives were formulated for the present study:

1. To find out the level of Visual Learning Strategies among secondary school students and classify them.

2. To examine the association between gender and the Imagination dimension of Visual Learning Strategies.
3. To examine the association between gender and the Observation dimension of Visual Learning Strategies.
4. To examine the association between gender and the Organization dimension of Visual Learning Strategies.
5. To examine the association between gender and the Symbolic Representation dimension of Visual Learning Strategies.

- **Hypotheses of the Study:**

The following null hypotheses were formulated:

1. **H01:** There is no significant association between gender and the Imagination dimension of Visual Learning Strategies.
2. **H02:** There is no significant association between gender and the Observation dimension of Visual Learning Strategies.
3. **H03:** There is no significant association between gender and the Organization dimension of Visual Learning Strategies.
4. **H04:** There is no significant association between gender and the Symbolic Representation dimension of Visual Learning Strategies.

4. Methodology of research

- **Research Design:** In the present study, the descriptive survey method was adopted to explore the levels of Visual Learning Strategies among the secondary school students and assess the gender-based association across the four selected variables.

- **Population, Sample and Sampling Technique:** The study population comprised students from Urdu medium secondary schools in the Hyderabad District of Telangana. The study sample consisted of 438 students from Class IX in Urdu medium secondary school. Participants for the study were selected using the Multistage Random Sampling Technique. The sample was done in two stages. In the first stage, Urdu medium secondary schools in Hyderabad District were randomly picked from the identified study area. In the second stage, the sample was drawn from the specified schools by selecting randomly Class IX students. This process provided a structured and systematic way for selecting participants and ensured that students from diverse designated schools were represented in the study. At the end, 438 students were included in the sample for data collection. The gender-wise distribution of the sample is presented in Table 1.

Table 1.
Gender-Wise Distribution of the Sample

Gender	Frequency	Percentage
Female	215	49.1
Male	223	50.9
Total	**438**	**100.0**

Table 1 indicates that the sample consisted of 215 female students (49.1%) and 223 male students (50.9%). The distribution represents an almost balanced participation of both genders.

- **Research Tool:** A Visual Learning Strategies (VLS) tool was used to find the level of visual learning strategies among class IX students of Urdu medium. The tool is made up of 34 items grouped into four dimensions, i.e. Imagination (9 items), Observation (7 items), Organization (8 items) and Symbolic Representation (10 items). Expert evaluation was used to establish the content validity of the tool. The Content Validity Index (CVI) was 0.93 and the Universal Agreement (UA) value was 0.80. These values show that the tool has a high degree of content validity, and that there is consensus among the experts about the relevance of the items in the tool.

Dimension-wise distribution of items

VLS dimension	Number of items
Imagination	9
Observation	7
Organization	8
Symbolic Representation	10
Total	34

- **Statistical Techniques:**

The collected data were analysed using the following statistical techniques:

- Frequency and percentage.
- Pearson's Chi-square test.
- Cramér's V.

Frequency and percentage were used to describe the distribution of students across the three levels of Visual Learning Strategies. Pearson's Chi-square test was applied to examine the association between gender and each dimension. Cramér's V was used to describe the strength of the observed associations. The collected data were evaluated using frequency, percentage, Pearson's chi-square test and Cramer's V to assess the levels of visual learning strategies and their association with gender. The level of significance was fixed at 0 .05.

- **Delimitations of the Study:**

The study was confined to 438 class IX students of Urdu medium secondary schools of Hyderabad District, Telangana. It investigated four chosen dimensions of Visual Learning Strategies which are Imagination, Observation, Organization and Symbolic Representation.

5. Analysis and Interpretation of Data

- **Descriptive Analysis of Visual Learning Strategies.**

The first objective of the study was "To find out the level of Visual Learning Strategies of secondary school students and classify them" and the table 2 presents the data related to it. Table presents the distribution of students according to their levels of the four dimensions of Visual Learning Strategies (VLS).

Table 2.
Level of Visual Learning Strategies among Secondary School Students

Dimensions of VLS		N	N %
Imagination Level	Low	126	28.8%
	Moderate	207	47.3%
	High	105	24.0%
Observation Level	Low	120	27.4%
	Moderate	257	58.7%
	High	61	13.9%
Organization Level	Low	116	26.5%
	Moderate	241	55.0%
	High	81	18.5%
Symbolic Representation Level	Low	128	29.2%
	Moderate	217	49.5%
	High	93	21.2%

The table 2 shows that most students were at the moderate level across all four dimensions of Visual Learning Strategies. The moderate level was highest for Observation (58.7%), followed by Organization (55.0%), Symbolic Representation (49.5%), and Imagination (47.3%). These results indicate that students generally demonstrate a moderate use of visual learning strategies. Their observation and organizational abilities appear comparatively stronger, while imagination and symbolic representation show relatively greater scope for further development.

Overall, the findings suggest that students possess a moderate level of visual learning strategies, with no dimension showing a predominantly high level. This highlights the need to strengthen visual learning practices, particularly to promote higher levels of imagination and symbolic representation.

- **Gender-Wise Analysis of Visual Learning Strategies**

Association between student's gender and Imagination dimension of Visual Learning Strategies among secondary school students.

Table 3 presents the association between student's gender and Imagination as a dimension of Visual Learning Strategies. This indicates that the table examines whether gender (male/female) is associated with dimension of along with the Pearson's χ^2 test and Cramér's V.

TABLE 3:
Association between student's gender and Imagination dimension of Visual Learning Strategies among secondary school students

Gender	Imagination			Total	Pearson's χ^2	p	Cramér's V
	Low	Moderate	High				
Female	73	123	19	215			
Male	53	84	86	223	53.15[a]	< .001	.35

Total	126	207	105	438			

From Table 3, it can be seen that out of the total sample of 438 students, 126 students (28.8%) were found to have a low level of Imagination, 207 students (47.3%) had a moderate level, and 105 students (24.0%) had a high level of Imagination as a dimension of Visual Learning Strategies. Among the female students, 73 (34.0%) were at the low level, 123 (57.2%) at the moderate level, and 19 (8.8%) at the high level of Imagination. In comparison, among the male students, 53 (23.8%) were at the low level, 84 (37.7%) at the moderate level, and 86 (38.6%) at the high level of Imagination.

To examine whether there was a statistically significant association between gender and Imagination, Pearson's Chi-square test was applied. The obtained value of $\chi^2 = 53.15$ with 2 degrees of freedom was statistically significant at the 0.05 level ($p < .001$). Hence, the findings indicate that there was a statistically significant association between gender and the level of Imagination among the 438 Class IX students. The Cramér's V value of 0.35 indicates a moderate association between gender and Imagination. The findings show a noticeable difference in the distribution of Imagination levels between female and male students. Female students were more concentrated at the moderate level, whereas male students showed a comparatively higher proportion at the high level of Imagination.

Therefore, the Hypothesis 1 stating that "There would be no significant association between gender and Imagination as a dimension of Visual Learning Strategies" is rejected.

- **Association between student's gender and Observation as a dimension of Visual Learning Strategies among secondary school students.**

Table 4 presents the association between student's gender and Observation as a dimension of Visual Learning Strategies This indicates that the table examines whether gender (male/female) is associated with dimension of along with the Pearson's χ^2 test and Cramér's V.

TABLE 4:
Association between student's gender and Observation as a dimension of Visual Learning Strategies among secondary school students

Gender	Observation Level			Total	Pearson's χ^2	p	Cramér's V
	Low	Moderate	High				
Female	60	127	28	215	.29	.86	.03
Male	60	130	33	223			
Total	120	257	61	438			

From Table 4, it can be seen that out of the total sample of 438 students, 120 students (27.4%) were found to have a low level of Observation, 257 students (58.7%) had a moderate level, and 61 students (13.9%) had a high level of Observation as a dimension of Visual Learning Strategies. Among the female students, 60 (27.9%) were at the low level, 127 (59.1%) at the moderate level, and 28 (13.0%) at the high level of Observation. In comparison, among the male students, 60 (26.9%) were at the low level, 130 (58.3%) at the moderate level, and 33 (14.8%) at the high level of Observation.

To examine whether there was a statistically significant association between gender and Observation, Pearson's Chi-square test was applied. The obtained value of $\chi^2 = 0.29$ with 2 degrees of freedom was not statistically significant at the 0.05 level ($p = .86$). Hence, the findings indicate that there was no statistically significant association between gender and the level of Observation among the 438 Class IX students. The Cramér's V value of 0.03 indicates a very weak association between gender and Observation. The distributions of Observation levels among female and male students were quite similar, with both groups showing the highest proportion at the moderate level.
Therefore, the Hypothesis 2 stating that "There would be no significant association between gender and Observation as a dimension of Visual Learning Strategies" is accepted.

- **Association between student's gender and Organisation as a dimension of Visual Learning Strategies among secondary school students.**

Table 5 presents the association between student's gender and Organisation as a dimension of Visual Learning Strategies. This indicates that the table examines whether gender (male/female) is associated with dimension of along with the Pearson's χ^2 test and Cramér's V.

Table 5:
Association between student's gender and Organisation as a dimension of Visual Learning Strategies among secondary school students

Gender	Organization Level			Total	Pearson's χ^2	p	Cramér's V
	Low	Moderate	High				
Female	58	135	22	215			
Male	58	106	59	223	20.25	< .001	.22
Total	116	241	81	438			

From Table 5, it can be seen that out of the total sample of 438 students, 116 students (26.5%) were found to have a low level of Organization, 241 students (55.0%) had a moderate level, and 81 students (18.5%) had a high level of Organization as a dimension of Visual Learning Strategies. Among the female students, 58 (27.0%) were at the low level, 135 (62.8%) at the moderate level, and 22 (10.2%) at the high level of Organization. In comparison, among the male students, 58 (26.0%) were at the low level, 106 (47.5%) at the moderate level, and 59 (26.5%) at the high level of Organization.

To examine whether there was a statistically significant association between gender and Organization, Pearson's Chi-square test was applied. The obtained value of $\chi^2 = 20.25$ with 2 degrees of freedom was statistically significant at the 0.05 level ($p < .001$). Hence, the findings indicate that there was a statistically significant association between gender and the level of Organization among the 438 Class IX students.

The Cramér's V value of 0.22 indicates a moderate association between gender and Organization. The findings show a noticeable difference in the distribution of Organization levels between female and male students. Female students were more concentrated at the moderate level, whereas male students showed a comparatively higher proportion at the high level of Organization.

Therefore, the Hypothesis 3 stating that "There would be no significant association between gender and Organization as a dimension of Visual Learning Strategies" is rejected.

- **Association between student's gender and Symbolic Representation as a dimension of Visual Learning Strategies among secondary school students.**

Table 6 presents the association between student's gender and Symbolic Representation as a dimension of Visual Learning Strategies. This indicates that the table examines whether gender (male/female) is associated with dimension of along with the Pearson's χ^2 test and Cramér's V.

Table 6:
Association between student's gender and Symbolic Representation as a dimension of Visual Learning Strategies among secondary school students

Gender	Symbolic Representation Level			Total	Pearson's χ^2	p	Cramér's V
	Low	Moderate	High				
Female	63	126	26	215			
Male	65	91	67	223	23.61[a]	< .001	.23
Total	128	217	93	438			

From Table 6, it can be seen that out of the total sample of 438 students, 128 students (29.2%) were found to have a low level of Symbolic Representation, 217 students (49.5%) had a moderate level, and 93 students (21.2%) had a high level of Symbolic Representation as a dimension of Visual Learning Strategies. Among the female students, 63 (29.3%) were at the low level, 126 (58.6%) at the moderate level, and 26 (12.1%) at the high level of Symbolic Representation. In comparison, among the male students, 65 (29.1%) were at the low level, 91 (40.8%) at the moderate level, and 67 (30.0%) at the high level of Symbolic Representation.

To examine whether there was a statistically significant association between gender and Symbolic Representation, Pearson's Chi-square test was applied. The obtained value of $\chi^2 = 23.61$ with 2 degrees of freedom was statistically significant at the 0.05 level ($p < .001$). Hence, the findings indicate that there was a statistically significant association between gender and the level of Symbolic Representation among the 438 Class IX students.

The Cramér's V value of 0.23 indicates a moderate association between gender and Symbolic Representation. The findings show a noticeable difference in the distribution of Symbolic Representation levels between female and male students. Female students were more concentrated at the moderate level, whereas male students showed a comparatively higher proportion at the high level of Symbolic Representation.

Therefore, the Hypothesis 4 stating that "There would be no significant association between gender and Symbolic Representation as a dimension of Visual Learning Strategies" is rejected.

6. Discussion:

The results of the current research indicate that most Urdu-medium secondary school students exhibited a modest proficiency in all four aspects of Visual Learning Strategies. This reveals that students

have a moderate capacity for visual learning, however the distribution implies potential for enhancement. Among the four dimensions, Observation exhibited the greatest moderate-level proportion at 58.7%, succeeded by Organization at 55.0%. This indicates that students exhibited a relatively higher focus at the moderate level in these aspects. Conversely, Imagination and Symbolic Representation had moderate percentages of 47.3% and 49.5%, respectively. The gender-wise findings reveal that gender was substantially linked with Imagination, Organization, and Symbolic Representation. Male students exhibited greater representation in the elevated tiers of these dimensions, whilst female students were predominantly situated in the intermediate level. Nonetheless, the results ought to be understood as variations in score distribution within the current sample and should not be seen as proof of intrinsic differences between genders. In the Observation dimension, the distribution of male and female students was nearly identical, and the association was not statistically significant. This suggests that the identified gender disparities were not uniform across all aspects.

The findings can be explored in relation to Dual Coding Theory (Paivio, 1986) and the Cognitive Theory of Multimedia Learning (Mayer, 2009). Both theoretical viewpoints emphasize the relevance of visual information in the learning process. The current results underscore the necessity of offering students' diverse opportunities to interact with images, diagrams, visual contexts, and symbolic representations.

7. Educational Implications

The results of the research carry multiple ramifications for pedagogical methods and educational practices.

- **Enhancing Creativity:** Educators can employ image-centric exercises, narrative construction via visuals, imaginative visualisation, and unrestricted visual assignments to stimulate students' creativity.
- **Cultivating Observation:** Engaging in activities such as picture analysis, comparative assessment, detail recognition, and environmental scrutiny could enhance students' observational skills.
- **Enhancing Organization:** Activities such as classification tasks, sequencing exercises, mind mapping, chart creation, and flow diagramming can foster the development of students' organisational skills.
- **Augmenting Symbolic Representation:** Learners could be motivated to convey concepts using illustrations, icons, symbols, schematics, and visual elucidations.
- **Ensuring Equitable Learning Opportunities:** Given the identified gender-based correlations across three dimensions, educators must guarantee that every student has equitable access to engage in various visual learning experiences.
- **Employing Varied Educational Resources:** Educators can incorporate images, models, graphs, illustrations, and other suitable visual aids into their teaching to facilitate significant learning.
- **Recognising Educational Requirements:** Educators can employ visual activities within the classroom to discern students' competencies and aspects needing further assistance across the four dimensions.

8. Conclusion:

The present study assessed the descriptive levels of Visual Learning Strategies among Urdu-medium secondary school students and analysed their association with gender across four dimensions: Imagination, Observation, Organization, and Symbolic Representation.

The analytical results indicated that most students had a moderate proficiency in all four dimensions. Observation recorded the highest proportion at the moderate level, followed by Organization, Symbolic Representation, and Imagination. These results suggest that students typically exhibit a moderate proficiency in visual learning skills, with potential for enhancement.

The gender-based examination uncovered statistically meaningful correlations in Imagination, Organization, and Symbolic Representation, whereas no significant correlation was detected in Observation. Male students showed higher proportions in the high-level categories of the three strongly linked dimensions, while female students were more concentrated at the moderate level. Overall, the findings show the necessity of offering diverse and relevant visual learning experiences to develop students' abilities across all four dimensions. Educators must guarantee equitable educational opportunities and integrate suitable visual activities into their teaching to foster the advancement of Visual Learning Strategies in secondary school learners.

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