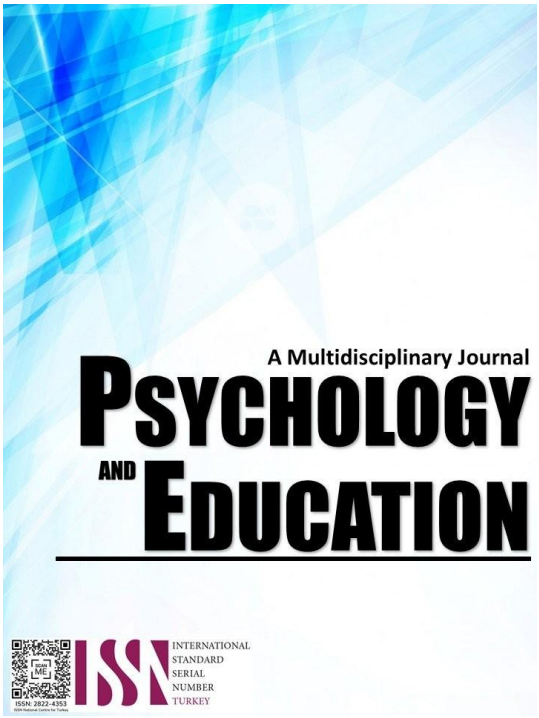
LEARNING STYLE DIFFERENCES AMONG RURAL AND URBAN ELEMENTARY LEARNERS: BASIS FOR AN ACTION PLAN



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Research Article

Learning Style Differences among Rural and Urban Elementary Learners: Basis for an Action Plan

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Abstract

This research explores the learning achievements and learning style preferences of elementary students in both urban and rural environments. Using quantitative analysis, information was collected systematically in order to investigate whether there are differences in the performance outcomes and learning style preferences depending on the geographic location. The objective of this research was to determine whether location have a considerable impact on the way students learn and academically perform, and to what degree these patterns are uniform across varied learning settings. The outcome indicated that no statistically significant difference in dominant learning styles existed between rural and urban students. Yet, clear trends in academic performance were observed. Urban students tend to have achieved higher Grade Point Averages (GPAs), and rural students had more variability in scores and were more likely to cluster in the lower ranges of GPA. These differences could be due to variations in access to study materials, instructional quality, teacher preparation, and school resources overall. Rural learners, although sharing similar learning style profiles, had a greater inclination toward practical, hands-on, and observation-centered learning activities, while urban learners had a tendency towards analytical, structured, and theory-centered learning processes. This indicates that there is a necessity for a more comprehensive educational strategy that acknowledges these tendencies. The research advises the adoption of differentiated instruction practices and the development of a hybrid model of instruction that integrates the best practices of both settings. Encouraging rural and urban teachers to collaborate is identified as an essential step in closing learning gaps. Future studies are invited to continue to explore relationship among learning styles, academic performance, and demographic factors such as age and socio-economic status.

Keywords: *learning styles, academic performance, urban learners, rural learners, differentiated instruction*

Introduction

The educational landscape for elementary students varies significantly between urban and rural settings. While urban learners typically have greater access to resources, structured environments, and modern teaching methods, rural learners often face challenges like limited access to technology, fewer educational resources, and sometimes less specialized teaching. These environmental factors may influence not only their academic performance but also their preferred learning styles. As learning styles play a crucial role in shaping how students engage with content and retain information, it is essential to explore the unique learning preferences of urban and rural learners.

This study is motivated by the need to understand these disparities and their implications for educational strategies. By investigating the learning styles and academic performance of urban and rural learners, this research aims to identify patterns and differences that can help educators develop tailored teaching methods that cater to the specific needs of each group. In particular, understanding how urban and rural students differ in their learning preferences—whether they lean towards more analytical, hands-on, observational, or practical approaches—can provide valuable insights into how to improve learning outcomes in both settings.

The researchers, Intan Farahana Kamsin, et.al., (2020), assumed that learning styles' application in the teaching and learning process among Orang Asli students has helped them to have a meaningful learning process. Meaningful learning is crucial in ensuring that such students understand and apply the knowledge and information they gained for their daily life and future. Thus, learning styles are crucial in order to increase the level of meaningful learning among Orang Asli students. The findings also suggested in terms of practical and theoretical. The practical implication is referring to preparing the guideline of the process for future education implementation among the Orang Asli students and preparing findings framework as a guideline and reference for future research on implementing the education which involving Orang Asli students. Meanwhile, the theoretical implication demonstrated meaningful learning and learning styles bring additional value to productive education environment among Orang Asli students were found.

Tejasvi Rawandale, Sangeeta Achuthan, Samuel Sunder Doss, Anuja A V, and Vijayalakshmi B (2020) investigated school children's learning style preferences in urban and rural areas. The research shows that learning styles appear to vary among rural and urban children. Every person has a natural or developed mode of acquiring and processing information in various environments of learning. The common modes or patterns through which a person acquires information are known as their learning styles. Knowledge of the learning styles has implications for teachers and students. To identify the learning preferences of students might allow them to employ suitable learning strategies and hence they might be lifelong self-directed learners and optimize their actual potential. This will allow learners to optimize their own learning and perform better in the subject that previously proved to be challenging.

Given the importance of equitable education and the impact of learning styles on learning outcomes, the study is timely and relevant. The study is expected to inform the development of differentiated pedagogies that can address the disparity between the urban and rural learning experience, and thereby create inclusive and effective learning spaces for everyone.

Research Questions

This study aimed to determine the preferred learning styles of elementary learners in rural and urban settings for the academic year 2024-2025 a basis for intervention plan. Specifically, it sought to answer the following questions:

1. Socio-demographic Profile:
    1.1. age;
    1.2. sex;
    1.3. learner classification; and
    1.4. GPA.
2. What are the learning style preferences of Rural and Urban learners in terms of:
    2.1. serious, analytical learner;
    2.2. active, practical learner;
    2.3. observation- centered learner;
    2.4. concrete, detail, fact-oriented learner;
    2.5. passive, accepting learner; and
    2.6. non-passive struggling learner?
3. Is there a significant difference in the learning style preferences of rural and urban learners?
4. Is there a significant difference in the academic performance of rural and urban learners?

Literature Review

This study is anchored to Kolb's Experiential Learning Theory, which appears particularly applicable to explaining the learners' learning styles. The theory conceptualizes four different modes of learning abilities that students need to succeed: (a) concrete experience abilities, (b) reflective observation abilities, (c) abstract conceptualization abilities, and (d) active experimentation abilities. Similarly, Howard Gardner's theory of multiple intelligences assumes that intelligence is not a single and fixed attribute but is made up of different dimensions or "intelligences." In addition, there are nine (9) multiple intelligences: Linguistic/verbal, Logical-mathematical, Musical, Spatial, Body-Kinesthetic, Interpersonal, Intrapersonal, Naturalist, and Spiritual/Existential. Gardner assumes that the theory of learning styles lacks clear criteria on how one would identify a learning style, where the style comes from, and how one would identify and measure it. He has operationalized the concept of learning styles as "a hypothesis of how an individual approaches a range of materials." Furthermore, he claimed that multiple intelligences are distinct intellectual capabilities, while learning styles, are the way by which one approaches a range of tasks. For elementary education, the theory provides an interesting framework to examine the diverse learning styles of students from rural and urban contexts. Rural students can exhibit strengths in naturalistic and bodily-kinesthetic intelligences because of frequent exposure to nature and hands-on activities, while urban students can exhibit stronger interpersonal and linguistic intelligences because of increased exposure to more socialized and language-dense environments. Identifying these context factors influencing learning styles enables teachers to develop differentiated and culturally responsive instruction for the unique needs and cognitive profiles of students from rural and urban contexts for final equitable academic achievement.

The researchers, Esther Mena-Villalon and Ma. Victoria A. Cabigan (2021), thought that the various traits of these two (2) locations had influenced the lives of its people such as learning habits and learning style. In a study conducted by Cox and Sproles (2005), the researchers discovered that rural school students seemed to be more serious and interested in learning compared to urban students. More rural students seemed to be serious analyzing learners and active, practical learners. And that is why the researcher conducted this study. The environment they live in may or may not play a large role in these habits and styles and that, the researcher sought to find out how rural and urban students differ in learning, thinking, and solving problems (a cross-cultural study).Based on the results of the study with respect to the learning styles in terms of Activist and Reflector, results show that the p-value is greater than the significance level, and thus, the researcher cannot reject the null hypothesis. Thus, there is no statistically significant difference in the learning styles of urban and rural students. But in the case of Theorist and Pragmatist, results show that the p-value is less than the significance level, and thus, the researcher can reject the null hypothesis. Thus, it can be said that based on Activist and Reflector, there is no statistically significant difference in the learning styles of urban and rural areas; but, based on Theorist and Pragmatist, we can say that, the learning styles of urban and rural areas do have a statistically significant difference. Based on Theorist and Pragmatist, the learning styles of urban and rural students can have a statistically significant difference in the count of actual students or the intensity of their learning styles. Students like information intake and processing in different ways. Learning styles are a way to make the quality of students' learning better. They learn in different ways of educating them individually, which are believed to make that individual learn best. Teaching methods also vary. They are designed to lead students to self-discovery. Students' learning styles can help the teachers create teaching methods that can maximize the students' learning potential. Science teachers, especially, need more teaching methods and strategies. Numerous studies exist on what students perceive to make science difficult and how the difficulties can be addressed. One of them came to the conclusion that students perceive science to be difficult because they need to cope with different representations such as experiments, formulas and calculations, graphs, and conceptual explanations at the same time. In addition, they need to perform transformations between them. For instance, students need to transfer from graphical representations to mathematical representations.

As per Garcia, A.J., et al (2024), out of the three learning styles, i.e., auditory, tactile, kinesthetic, and visual learning styles, the respondents found the visual learning style red out of the study's three learning styles. And, the study results observed no difference between the respondents' sex and the three learning styles. Moreover, the research found the participants' expressions and the use of different learning styles and strategies in terms of their learning, for instance, night studies, the use of search engines, and extracurricular activities to assist them in improving their learning process. Lastly, learning styles and strategies are key tools for students to become better prepared, applicable, and effective when it comes to their academic performance at school. Thus, students, teachers, and school administrators should have the ability to recognize different learning styles and methods. Also, future researchers should examine the environmental factors influencing students' learning process.

Lajera, M., et al (2016), revealed that there is no correlation between the students' learning styles and academic achievement. Most students at Dagohoy National High School possess unique learning styles, but this variable does not significantly influence their grades, as long as they are interested in studying and pursuing their desired scores. Since no meaningful relationship exists between the students' learning styles and academic performance, the respondents' grades may or may not be affected by factors other than their learning styles. The students' learning styles across the six strands also do not show any major difference; hence the respondents from all strands manifested the three (3) types of learning styles (visual, auditory, and tactile).

Balot and Rabara (2024) learned that Primary learners had a higher percentage of liking visual learning compared to logical learning. There was no significant variation in learning styles in relation to academic performance in each of the variables. Age and learning styles were moderately correlated with each other but had weak negative relationships with sex, civil status, and educational attainment. Knowing and accommodating learning styles may be even more important for students in some divisions and nationalities. Visual learners can really enhance their grades by integrating visual components into classes. Teachers can assist them in understanding difficult concepts, enhancing memory, and enhancing interest in the material. Identifying and accommodating the demands of visual learners is important for constructing effective and motivating learning environments. This report stresses the necessity of meeting diverse learning styles to ensure a more inclusive and effective learning environment for all primary learners. It is also suggested that assist teachers to professional development through workshops, seminars, and conferences, and provide scholarships, grants, or financial aid for advanced degrees or specialized training. Use visual aids and methods such as mind-mapping in education, particularly for subjects in which visual learning works. Emphasize diverse teaching styles in order to develop a more productive and interactive learning environment for every student. The Visual (Spatial) Learning Style is suggested for public school educators to enhance academic accomplishment.

Methodology

Research Design

This study used a quantitative research design to objectively measure learning style differences among rural and urban elementary learners. By collecting numerical data through standardized instruments, the researchers employed statistical tools, including t-tests, to analyze relationships and variations, ensuring precise and evidence-based findings.

Respondents

This study was conducted in Carcar City, Cebu, involving two public schools: Carcar Central School (urban) and Guadalupe Elementary School (rural). Carcar Central is located near the city hall, while Guadalupe Elementary is about 7.3 kilometers away. Both schools offer essential facilities and provide a safe, supportive learning environment. It encompasses 50 % of the population at each grade level from Carcar City Central School and Guadalupe Elementary School.

Instrument

The research instrument utilized the documentary analysis of the data on the pupil's profile based on the checklist given to the learners. The learners will complete the provided checklist to see the differences in learning styles between rural and urban areas.

Procedure

This study used a quantitative research design to compare the learning styles and academic performance of rural and urban elementary learners. The process included proposal preparation, securing ethical clearance, and selecting 240 purposively chosen participants—120 from rural and 120 from urban schools—ensuring balanced age and sex representation. A validated Likert-scale questionnaire was used to assess learners' preferred learning styles.

Data Analysis

The researcher collaborated with school administrators and teachers to administer the questionnaire, ensuring participants clearly understood the process. Academic performance data (GPA) were collected from school records with consent and confidentiality. The data were analyzed using descriptive statistics for profiling and performance distribution, and the Mann–Whitney U Test was applied to compare learning styles between rural and urban learners. Findings were interpreted based on the research objectives, highlighting key patterns and informing recommendations for context-specific instructional strategies.

Ethical Considerations

This research ethically followed standards in all its conduct to maintain the protection and welfare of all individuals participating. Before data collection, official permission was sought from participating institutions' school authorities. A letter of request stating the purpose, procedure, and scope of the study was submitted for approval.

Parental or guardian informed consent was obtained from all participating elementary students. All participation was voluntary, and the participants were advised that they could refuse or withdraw from the study at any point without any adverse consequences.

In order to maintain confidentiality and anonymity, no personal information was gathered from the participants. All information was kept secure and utilized only for scholarly purposes. Results were presented in the aggregated manner so that nobody could be identified in reporting findings.

The research tools were not invasive, developmentally appropriate, and designed to prevent any kind of psychological or emotional distress. The study did not pose any anticipated risks to participants and was in compliance with principles of beneficence and non-maleficence.

This study was aligned with the Data Privacy Act of 2012 provision and institutional policies on ethical research conduct with children. The study was also pre-evaluated and cleared by the academic research committee to implement ethical research practice.

All results were presented with integrity and honesty, without the fabrication, falsification, or misrepresentation of data. The researcher also ensured objectivity and scholarly rigor in the conduct of research.

Results and Discussion

Profile of the Respondents

Age

Table 1. *Age of Rural and Urban Learners*

Age	*Rural*		*Urban*	
	f	*%*	*f*	*%*
6-8	46.00	38.33	47.00	39.16
9-11	53.00	44.16	41.00	34.16
12-13	21.00	17.5	32.00	26.66
Total	120.00	100.00	120.00	100.00

Table 1 depicts the age structure of rural and urban elementary students in three age groups: 6–8 years, 9–11 years, and 12–13 years. Both groups have the same number of participants (n = 120 in each group).

For the rural group, the 9–11 age group has the largest percentage with 53 students (44.16%), followed by 46 students (38.33%) in the 6–8 age group, and the 12–13 group with the smallest percentage at 21 students (17.5%).

On the other hand, the urban group has a slightly different pattern. The 6–8 age group is the one with the largest proportion at 47 students (39.16%), followed very closely by the 9–11 group at 41 students (34.16%). The 12–13 age group consists of 32 students (26.66%), which is a significantly larger proportion than the rural group.

These results indicate that rural schools can have a higher proportion of students in the 9–11 age group, while urban schools have a more uniform distribution between the different age groups, with a comparatively higher proportion of older students (12–13 years old). This difference can be due to differences in the age at school entry, retention rates, or population characteristics between rural and urban regions.

Sex

Table 2. *Sex of Rural and Urban Learners*

Sex	*Rural*		*Urban*	
	f	*%*	*f*	*%*
Male	63.00s	52.5	51.00	42.5
Female	57.00	47.5	69.00	57.5
Total	120.00	100.00	120.00	100.00

Table 2 shows the distribution of students by sex across rural and urban settings, with each group comprising 120 participants.

In rural areas, the majority of students are male, accounting for 63 individuals (52.5%), while female students make up 57 (47.5%) of the population. This indicates a relatively balanced gender distribution, with a slight male predominance. In contrast, in urban settings, the trend is reversed. Female students constitute the majority at 69 individuals (57.5%), whereas male students represent 51 (42.5%).

This data suggests a gender-based variation in enrollment patterns between rural and urban schools. The rural group shows a modest

male predominance, while the urban group reflects a higher female enrollment. These differences may point to socio-cultural factors, parental educational priorities, or regional disparities in access to education that could influence gender representation.

GPA

Based on the gathered data, the majority of urban learners (62.5%) obtained a General Point Average (GPA) within the range of 91–95, followed by 31.66% who scored between 86–90. Only a small percentage of students fell within the 80–85 (2.5%) and 96–100 (3.33%) GPA brackets, with no students recorded in the 75–79 range.

The majority of rural learners (40.33%) achieved GPAs within the 86-90 range, indicating strong academic performance. Additionally, 26.66% of students scored between 80-85, while some fell into the 91-95 (20.00%) and 75-79 (12.5%) brackets, with no students in the 96–100 range.

Academic Performance of Rural and Urban Learners

The information suggests that urban students tended to have higher academic achievement than rural students, with most (62.5%) of urban students having a GPA in the range of 91-95, as opposed to the bulk (40.8%) of rural students who had a lower 86-90 GPA range. Interestingly, no rural students had a GPA between 96-100, as opposed to their urban peers.

Comparison of Academic Performance between Rural and Urban Learners

To determine whether a significant difference exists in the academic performance of rural and urban elementary learners, an independent samples t-test was performed using their GPA distribution as categorical indicators of performance.

The GPA data were coded numerically based on the midpoint of each GPA range as follows:

- 75–79 → 77
- 80–85 → 82.5
- 86–90 → 88
- 91–95 → 93
- 96–100 → 98

The results of the analysis indicated a statistically significant difference in GPA between the two groups, $t(238) = -6.59$, $p < 0.001$. Urban learners had a higher average GPA category compared to rural learners, reflecting generally better academic performance. This suggests that external factors such as access to learning resources, instructional support, or environmental conditions may have contributed to the disparity in academic outcomes.

Interpretation

The large disparity calls for a call to action to curb educational inequalities and extend targeted interventions to rural students. Initiatives like resource deployment, training teachers, and academic support through the community could be able to close up the performance gap in rural versus urban areas.

Table 3. *General Point Average of Rural and Urban Learners*

GPA	*Rural*		*Urban*	
	f	*%*	*f*	*%*
75-79	15.00	1.5	0	0
80-85	32.00	26.66	3.00	2.5
86-90	49.00	40.33	38.00	31.66
91-95	24.00	20.00	75.00	62.5
96-100	15.00	12.50	4.00	3.33
Total	120.00	100.00	120.00	100.00

The statistics in Table 3 indicate an unmistakable difference in academic performance in urban and rural elementary students. A much larger proportion of urban students (62.5%) indicated a score in the 91–95 GPA category, whereas only 20% of rural students did so. To add, not a single urban student was in the lowest GPA range (below 80), while 15 rural students (1.5%) were in the lowest GPA category (75–79). This indicates a system imbalance in educational achievement in both groups.

This performance gap highlights the influence of contextual and structural variables on students' academic performance. As Aziz and Said (2021) note, rural students tend to struggle with scarce access to quality learning materials, under-equipped schools, and fewer trained teachers—all for which reasons academic performance is likely to be lower. Their research highlights the influence of educational equity on student success.

Additionally, the relatively low percentage of rural students in the highest GPA category (96–100) in comparison with urban students in the 91–95 category (75 urban students) indicates that even higher-performing rural students might be capped in their academic development because of environmental constraints.

Learning Styles of Rural and Urban Elementary Learners

By examining their preferences across critical learning style factors — such as analytical thinking, practical engagement, observational learning, and emotional involvement — the study provides valuable insights into the dominant learning characteristics that define these groups.

The data were analyzed using item and factor means, and interpreted using a standard 5-point Likert scale with the following verbal equivalents: 5 – Strongly Agree, 4 – Agree, 3 – Neutral, 2 – Disagree, 1 – Strongly Disagree.

Table 4. *Factor 1: Serious Analytical Learner*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.3	Strongly Agree
Urban	4.3	Strongly Agree

Table 4 indicates rural and urban students very much wanted structured and rational thinking processes. The equal factor implies that analytical thinking is greatly admired in both groups, which reflects a common preference for reflective and logical learning processes.

Researchers, Shuvankar Madhu1, Prof. Dibyendu Bhattachryya (2023) both from the Department of Education in India opined in this article that learning styles are established based on the way people learn, comprehend, and remember information. It seems like students learn in varying styles. Understanding and acknowledging these varying learning styles can assist teachers in understanding their pedagogy better to suit specific students, leading to a more inclusive and effective learning atmosphere.

Table 5. *Factor 2: Active Practical Learner*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.0	Agree
Urban	4.2	Agree

Both groups in Table 5 concurred that they learn better by doing and practical application. Urban learners, however, showed a marginally higher factor mean, showing a slightly higher preference for action-based and experiential learning activities.

Hayes et al. (2011) conducted a study that discovered that teachers, principals, and school supervisors displayed only a tentative understanding of active learning some months following initial training, which impaired their adoption of such practices in the classroom.

The researchers, however, found that a short retraining session, assisted by collaborative discussion, peer learning, and dedicated school leadership, greatly enhanced participants' confidence and propensity to use active learning practices. This implies that professional growth and institutional support should endure in order to bring pedagogical transformation, especially in primary schooling where active learning has the potential to improve participation and respond to varied learning styles.

Table 6. *Factor 3: Observation-Centered Learner*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.1	Agree
Urban	4.1	Agree

Table 6 findings indicate that learners in both environments gain as much from learning by watching. This is an endorsement for using visual and demonstrative pedagogy in teaching both rural and urban students.

Danwitz and von Helversen (2025) tested how people perform observational learning when involved in exploration-exploitation tasks through the use of nine-armed bandit problems. Observers witnessed exploratory or exploitative agents and oriented their behavior accordingly. Although most unconditional copies of agents' choices, some utilized a copy-when-uncertain approach. Even though participants oriented their exploration behaviors toward observed agents, they demonstrated no preference for copying based on agent's strategy type or matching exploration tendencies.

Table 7. *Factor 4: Concrete, Detail, Fact-Oriented Learner*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.2	Strongly Agree
Urban	4.2	Strongly Agree

Table 7 indicated that rural and urban learners both had a strong predisposition to learn based on facts, details, and concrete information. What this implies is that learners in both environments are predisposed to accepting organized and content-focused instructional practices.

Meyerowitz, Gabrielle (2014) thought that urban students would favor Concrete and Imaginal learning styles, whereas rural students had no considerable differentiation in learning styles, suggesting potential errors in rural measurement. The research implies black children in schools in an urban setup may operate according to the Learning Style of rural children. This has implications for teachers' teaching styles in urban schools. For example, teachers would be helped by the application of concrete examples to elucidate ideas to

students. This definition of student Learning Style behavior could indeed be used to describe Urban Learning Styles in South Africa, in that most students attending Urban schools in South Africa may have initially spent their early years in a Rural environment. The migratory labor system, as required, left the young children in the hands of grandparents in a rural area, while the parents gained a living in an urban setting. The parents, however, may find education to be more qualified in the cities, and thus may make arrangements for the children to go to schools in the cities when their children are approaching school-going age.

Teachers who are confronted by children with weak early school-going preparation, or by a form of mediation that is alien to Urban culture, will more likely read the children's experience as "lacking" or label the children as exceptionally "CONCRETE". This, in particular, was the highest mean rating score of the urban children.

Table 8. *Factor 5: Passive- Accepting Learner*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.0	Agree
Urban	3.9	Agree

As indicated in Table 8, both groups concurred with statements that indicate a more passive learning style, including accepting information without questioning and quiet listening over active participation. The rural group had a slightly higher mean, indicating a more compliant learning attitude than their urban equivalents.

Ruso's (2023) research investigates the application of motivational strategies by teachers to activate passive learners and emphasizes the importance of students' social skills. The use of conventional methods, though still practiced by teachers, does not diminish the application of motivational strategies, though they are effective with variation in accordance with classroom dynamics. The study stresses that teachers need to implement contemporary, cooperative strategies, i.e., group work, in favor of promoting passive learners' academic and social growth. It also notes that while teachers' educational attainment does not directly affect motivation strategies, further training could enhance classroom engagement.

Table 9. *Factor 6: Non-Passive, Struggling Learner*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.0	Agree
Urban	3.8	Agree

However, Table 9 illustrates that rural learners reported slightly higher levels of uncertainty or struggle in learning situations. This may indicate a need for additional support systems or instructional strategies tailored to boost confidence and engagement in rural settings.

Research conducted by Carmona (2019) examined how troubled elementary school students can become academically successful with the guidance of tutors and teachers. Drawing from a literature review, interviews, and questionnaires from educators and students in Monterey County, the research revealed that individualized instruction and further tutoring greatly assist students in leveling up with other students and enhancing their academic scores.

Table 10. *Overall Analysis (Grand Mean)*

Learner Classification	*Mean*	*Verbal Interpretation*
Rural	4.1	Agree
Urban	3.1	Agree

As noted in Table 10, the grand means show that learners from rural and urban areas generally validate the learning styles as depicted in the instrument. Even though the responses were very much alike, the slight differences between factors point to the necessity for instruction that provides differentiation according to the unique tendencies of each group.

The results indicate that rural and urban students both registered a Grand Mean of 4.1, which should be read as "Agree," meaning students from both environments tend to agree with the measured learning styles of the instrument. This implies an awareness and appreciation of individual learning styles irrespective of location. The results indicate that learning styles—visual, auditory, or kinesthetic—exist and apply across various learning environments.

While there was similarity in grand means, small differences in certain learning style preference dimensions were noted. These minor differences justify the appeal for differentiated instruction, as teaching techniques would be adjusted to meet the unique learning strengths of learners. Cuevas (2015) adds that although learners may associate with some learning styles, instruction should be flexible and accommodating to more than one sensory modality to provide the best learning outcome.

Othman, Shah, and Abdullah (2013) dispute that although numerous students may prefer one prevailing style, most do best with instruction that brings together visual, auditory, and kinesthetic components. This holds especially true in diverse classrooms where students' preferences overlap without necessarily intersecting fully. Educators who use multiple strategies enhance students' levels of engagement and cater to more cognitive demands.

Consistency in reply patterns between rural and urban students might be due to increased exposure to diverse teaching modalities in

both settings, perhaps a result of curriculum standardization and training programs for teachers.

Yet, Aziz and Said (2021) alert us that availability of resources necessary to facilitate multiple learning patterns continues to differ substantially between rural and urban schools. Urban schools tend to have better chances of providing multimedia teaching or doing activities, whereas rural schools are limited by insufficient teaching materials or infrastructure. The results also echo Mayer's (2011) theory of multimedia learning, which focuses on the idea that instruction needs to cater to both visual and verbal learning channels. This is not only in line with student preferences but also with how students most easily process and retain information, whether in their learning environment or not.

The authors Nithya Dewi Subramaniam Chetty (et al., 2019) were of the view that teaching and learning styles play an important part in this scholarly life. Various teaching and learning styles are experienced as a result of the response among students with regards to the teaching styles that are exhibited by the lecturers. This chain-reaction impacts the students' preference towards learning styles [1]. Moreover, the variation in teaching and learning styles preferences would lead to mismatches and matches between students' learning styles and the lecturers' teaching styles.

Table 11. *Learning Style Variation of Rural and Urban Elementary Learners*

Factor 1- Serious Analytical Learner	*Rural*			*Urban*		
	Item Mean	*Factor Mean*	*Verbal Interpretation*	*Item Mean*	*Factor Mean*	*Verbal Interpretation*
1.1 I like to think things out rationally and carefully.	4.4			4.3		
1.2. In learning, I value careful and logical thinking.	4.3			4.3		
1.3 I enjoy thinking through difficult things and making wise decisions.	4.1	4.3	Strongly Agree	3.9	4.3	Strongly Agree
1.4 I think seriously and think back on what I learned.	4.5			4.3		
1.5 I enjoy putting together new ideas and thoughts.	4.3			4.4		
1.6 I like hearing about new ideas and facts.	4.2			4.6		
Factor 2- Active Practical Learner						
2.1 Actual doing things in my preferred way of learning.	4.1			4.4		
2.2 I learn more through actual experience and practice with a subject.	4.4			4.2		
2.3 I prefer learning actual practices, not theories.	3.6	4.0	Agree	4.1	4.2	Agree
2.4 I enjoy doing experiments to see how things work.	3.9			4.3		
2.5 I learn well from practical and useful activities.	3.9			4.1		
2.6 I learn things well when I'm emotionally involved and excited.	3.9			3.9		
Factor 3 Observation- Centered Learner						
3.1 I learn well by watching what others do.	3.9			3.8		
3.2 Observing is a good way for me to learn.	4.2	4.1	Agree	4.4	4.1	Agree
Factor 4 Concrete, Detail, Fact-Oriented Learner						
4.1 I enjoy putting together new ideas and thoughts.	4.2			4.2		
4.2 I like hearing about new ideas and facts.	4.1	4.2	Strongly Agree	4.1	4.2	Strongly Agree
Factor 5 Passive, Accepting Learner						
5.1 I usually accept things I learn without questioning them.	3.9	4.0		3.6	3.9	
5.2 I learn best when I listen quietly rather than speaking up in class.	4.1		Agree	4.2		Agree
5.3 I think mainly about today, not tomorrow.	4.0			3.8		
Factor 6 Non-Passive, Struggling Learner						
6.1 In many learning situations, I feel unsure and uncertain.	4.0			3.6		
6.2 I quickly understand things I learn, almost by intuition.	3.9	4.0	Agree	3.9	3.8	Agree
Grand Mean		4.1	Agree		4.1	Agree

These results not only present the impact of environmental and contextual factors on learning behavior but also highlight the need to make instructional strategies responsive to the needs of diverse learners.

This discussion provides a basis for teachers and policy makers to create more comprehensive and effective instructional strategies that close the gap between urban and rural learning environments, thus enhancing equity as well as the learning process as a whole.

An independent samples t-test was conducted to assess if there is a significant difference among the general learning style preference among rural and urban primary learners.

Grand mean scores between groups were compared to evaluate overall tendencies in learning style orientations.

The analysis results indicated a t-value of 1.32, with 238 degrees of freedom, and a p-value of 0.189. Because the p-value is greater than the typical alpha level of 0.05, the finding is not statistically significant. This shows that there is not enough evidence to determine

a large difference in the overall general learning style preferences of rural and urban elementary students. The two groups showed similar learning style inclinations, as evidenced by their identical grand mean score of 4.1, meaning "Agree" on the Likert scale. These results indicate that although individual learning style variables are somewhat different, the general learning style profiles of urban and rural learners are very similar.

The primary objective of this research is to investigate the relationship between academic performance and variations in learning styles among rural and urban elementary learners. This study aims to determine how differing learning preferences may impact academic outcomes within these two distinct settings. Employing a quantitative research approach, the study seeks to establish whether significant correlations exist between learning style variations and academic achievement, ultimately providing evidence to support the development of tailored instructional strategies that address the unique needs of both rural and urban elementary learners

Conclusions

The research identified that rural and urban elementary students performed no differently in academics or differing learning styles. Although urban students tended to have higher GPAs, rural students exhibited more variability, particularly in lower performance levels—presumably due to differences in resources and support systems.

Both groups favored serious, analytical, and experiential learning styles with only slight differences. These results indicate that geographic location does not significantly influence learning style. Thus, instruction should emphasize individual learning needs through diverse and inclusive teaching methods. Additional investigations are recommended to investigate other factors such as socioeconomic status and resource availability.

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