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LEARNING STYLES OF SOCIAL STUDIES STUDENTS IN A STATE UNIVERSITY IN THE PHILIPPINES: A BASIS FOR DESIGNING AN INDIVIDUALIZED INSTRUCTION

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Abstract:

Background: This study investigates the learning style preferences of social studies students at Biliran Province State University, focusing on their demographic profiles, such as age, gender, year level, and academic performance. The research draws on Kolb's Experiential Learning Theory (ELT) to explore how various learning styles—visual, auditory, kinesthetic, tactile, group, and individual—affect students' academic outcomes.

Methods: A descriptive research design was used, with a sample of 90 students selected through stratified sampling from the Bachelor of Secondary Education program majoring in Social Studies. Data were collected using a validated 30-item checklist on learning style preferences, and the analysis was conducted using descriptive statistics to identify patterns and relationships between learning styles and academic performance.

Results: The results reveal that social studies students at the university have a marked preference for visual, auditory, and kinesthetic learning styles. These preferences indicate that students engage better with multi-sensory learning experiences, which could influence their academic success.

Conclusion: The study concludes that understanding and catering to students' learning style preferences can enhance teaching strategies in social studies. The findings emphasize the importance of adopting diverse instructional methods to better align with students' learning preferences, potentially improving both engagement and academic performance.

Keywords: learning styles, social studies, student preferences, academic performance

I. INTRODUCTION

Nature and Importance of the Study

Learning style refers to an individual's preferred method of processing new information for effective learning (Huston & Huston, 1995). Rita Dunn (1993) described learning style as *"a unique way developed by students when they are learning new and challenging knowledge."* Similarly, Hunt (1979) emphasized that learning styles focus on how students learn rather than what they learn. This distinction underscores the variability in learning processes among individuals, even within the same educational environment. Learning does not occur uniformly across all students in terms of level and quality (Ögretme & Yaklasimlar, 2005).

Theories of learning styles are instrumental in helping educators recognize the diverse needs learners bring into the classroom. Wilson (2012) posits that understanding these styles not only allows teachers to employ varied instructional methodologies but also empowers learners to optimize their academic performance. This framework supports learners in discovering their preferred ways of learning, thus fostering higher academic achievement. Moreover, previous studies (Fleming & Baume, 2006; Felder & Brent, 2005) have demonstrated that aligning instructional strategies with learning preferences can improve student engagement and retention of knowledge.

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Recognizing and applying learning styles is vital for both educators and learners. It helps improve not only academic performance but also the speed and quality of learning, particularly for the recipients of this study. Consequently, this study aims to explore the learning style preferences of social studies students to provide baseline data for designing individualized instruction. Characteristics such as age, gender, year level, and academic performance in social studies are examined. Although the researcher hypothesizes that special learning needs may influence the relationship between learning styles and academic achievement, these factors were not considered in this study due to its scope.

Objectives of the Study

The primary objective of this study is to identify the learning styles of social studies students. Specifically, the study seeks to:

1. Determine the demographic profile of the students, including:
1.1 Age;
1.2 Gender;
1.3 Year Level;
1.4 Highest Grade in Social Studies; and
1.5 Lowest Grade in Social Studies.

2. Identify the learning styles of the respondents based on:
2.1 Visual;
2.2 Auditory;
2.3 Kinesthetic;
2.4 Tactile;
2.5 Group; and
2.6 Individual preferences.

Framework of the Study

Theoretical Framework. This study is anchored on Kolb's Experiential Learning Theory (ELT), which integrates the learner's internal cognitive processes with external experiences. Kolb's theory outlines a four-stage learning cycle:

1. Concrete Experience: The learner encounters a new situation or reinterprets an existing experience.
2. Reflective Observation: The learner reflects on the experience, identifying contradictions between current understanding and new insights.
3. Abstract Conceptualization: New ideas or modifications to existing concepts are formed based on reflection.
4. Active Experimentation: The learner applies these concepts to test their validity in real-world scenarios (McLeod, 2017).

Kolb's model emphasizes that effective learning occurs when learners engage with all stages of the cycle. Moreover, Kolb identifies four distinct learning styles—Diverging, Assimilating, Converging, and Accommodating—each corresponding to specific combinations of the learning cycle stages. For instance, the Converger style emphasizes abstract conceptualization and active experimentation, making it suitable for problem-solving and decision-making tasks.

Related studies provide further validation of Kolb's theory. For instance, Healey and Jenkins (2000) highlighted its relevance in higher education, demonstrating that experiential learning enhances critical thinking and practical application skills. Additionally, Loo (2002) found that integrating Kolb's learning styles into classroom practices significantly improves students' self-awareness and adaptability.

Conceptual Framework. The conceptual framework for this study is derived from Kolb's Experiential Learning Theory, which serves as a basis for identifying the learning styles of social studies students at Biliran Province State University. The framework is visually represented in Figure 1, illustrating the connection between experiential learning stages.

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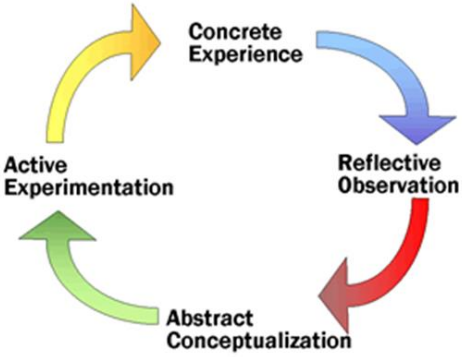

Figure 1. Conceptual Framework of the Study

II. METHODOLOGY

Research Design and Sample

This study employed a descriptive research design, deemed appropriate for its objectives as it allows for the systematic description and analysis of findings. Descriptive research is particularly useful in educational studies for identifying trends, preferences, and relationships among variables (Creswell, 2014). The design was chosen to effectively capture the learning style preferences of the respondents and to present findings in a structured manner.

The respondents of this study were students enrolled in the Bachelor of Secondary Education (BSED), majoring in Social Studies, within the School of Teacher Education. Their participation was crucial for generating the data required to meet the study's objectives. The selection of respondents was guided by Slovin's formula, applied with a 10% margin of error, which yielded a sample size of 90 respondents from a total population of 110 students.

Stratified sampling was employed to ensure proportional representation across year levels. This approach is supported by prior studies emphasizing the importance of stratification for balanced representation in educational research (Fraenkel & Wallen, 2009). Table 1 below illustrates the distribution of respondents:

Table 1
Distribution of Respondents

Year Level	Total Number of Students	No. of Respondents
Second Year	*35*	*29*
Third Year	*21*	*17*
Fourth Year	*54*	*44*
Total	**110**	**90**

Data Gathering Procedures

Permission to conduct the study was sought from the Dean of the School of Teacher Education to ensure ethical compliance and institutional approval. Upon receiving approval, the researcher administered the research instruments to the respondents. Clear instructions were provided to the participants to ensure the accurate and truthful completion of the questionnaire. The researcher personally distributed and retrieved the questionnaires to minimize non-response and ensure data integrity. This approach aligns with recommendations from Creswell (2014) regarding the advantages of direct administration in educational research. After collection, the data were tabulated and subjected to statistical analysis.

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The primary research instrument was adapted from the C.I.T.E. Learning Styles Instrument developed by Joy Reid (1984) at the Murdoch Teacher Center, Wichita, Kansas. The instrument has been widely validated in studies examining learning preferences (Reid, 1987; Peacock, 2001). It comprised two parts:

1. Part I: Respondent demographics, including age, gender, year level, highest grade, and lowest grade in Social Studies.

2. Part II: A 30-item checklist on learning style preferences, with response options ranging from "Strongly Agree" to "Strongly Disagree."

The adaptation of a well-established instrument strengthens the reliability and validity of the data collection process. However, future studies may consider incorporating qualitative methods, such as focus groups, to gain deeper insights into student preferences.

Statistical Treatment of Data

Data were analyzed using descriptive statistical methods, including frequency counts, percentages, and cross-tabulations. Measures of central tendency, such as the mean, were also calculated to summarize the learning style preferences of respondents. This approach aligns with the practices of Wilson (2012) and Reid (1987), who demonstrated that descriptive statistics effectively capture trends in learning style preferences.

III. RESULTS AND DISCUSSION

Profile of Respondents

The respondents of this study were 90 students from the Bachelor of Secondary Education Program major in Social Studies under the School of Teacher Education of Biliran Province State University.

Table 2

Profile of Students in the Secondary Education Program major in Social Studies

Age	**f**	**%**
17	8	8.89
18	25	27.78
19	29	32.2
20	17	18.89
21	5	5.55
22	4	4.44
24	1	1.11
25	1	1.11
Sex		
Male	24	26.67
Female	66	73.33
Year Level		
2	29	32.22
3	17	18.89
4	44	48.89
Highest Grade		
1	1	1.11
1.1	5	5.55
1.2	7	7.77
1.3	12	13.33
1.4	9	10
1.5	21	23.33
1.6	11	12.22
1.7	9	10

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1.8	6	6.66
1.9	2	2.22
2.0	6	6.66
2.4	1	1.11
Lowest Grade		
1.0	1	1.11
1.4	2	2.22
1.5	3	3.33
1.6	2	2.22
1.8	7	7.77
1.9	6	6.66
2.0	12	13.33
2.1	5	5.55
2.2	4	4.44
2.3	12	13.33
2.4	7	7.77
2.5	5	5.55
2.6	4	4.44
2.7	9	10
2.8	3	3.33
2.9	5	5.55
3.0	3	3.33

Age. As shown in Table 2, 29 or 32.22% of the respondents are 19 years old, followed by 25 or 27.78% who are 18 years old. A total of 17 or 18.89% are 20 years old, while 8 or 8.89% are 17 years old. Additionally, 5 or 5.55% are 21 years old, 4 or 4.44% are 22 years old, and only 1 or 1.11% fall within the age brackets of 24 to 25 years old. These data suggest that the respondents are within the typical age range for college students and are mature enough to handle the responsibilities of college life. The relatively young age of the respondents implies that most students are still in the initial stages of their academic careers but are mature enough to engage with the responsibilities of higher education. This aligns with the findings of Devi et al. (2019), which stated that students in their late teens and early twenties are more adaptable to diverse learning methods, often showing a higher degree of receptiveness to educational innovations.

Sex. The data show that out of 90 respondents, 66 or 73.33% are female, while 24 or 26.67% are male. This indicates that more females are pursuing a degree in Teacher Education, suggesting that the majority of future teachers in the program are women. A study by McKenna (2014) indicated that female students are more likely to enroll in teaching programs, as teaching is often perceived as a traditionally "female" profession. The gender disparity highlights the importance of addressing gender-related learning styles and expectations, ensuring that both male and female students are supported in their development.

Year Level. Among the respondents, 29 or 32.22% are second-year students, 17 or 18.89% are third-year students, and 44 or 48.89% are fourth-year students. This distribution shows that a significant portion of the respondents are in their senior year. This suggests that the data might reflect a more matured and experienced set of students, which can affect their learning preferences. According to Freeman et al. (2014), senior students tend to prefer more hands-on, practical learning experiences compared to their younger counterparts, as they are closer to entering the workforce.

Grades. The highest and lowest grade distributions provide insight into the academic performance of students in the Social Studies program. Most students reported their highest grades as 1.5, with a majority also reporting a lowest grade of 2.0 or 2.3. This distribution reflects a relatively healthy academic performance, with a moderate level of variability. As Moore et al. (2018) found, such variability can be attributed to individual differences in learning styles, study habits, and academic motivation, which often fluctuate over time in undergraduate programs.

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Learning Style Preferences of Social Studies Students

The findings from descriptive statistics on average scores of the students with different learning styles are shown in Table 3.

Table 3
Learning Style Preferences of Social Studies Students

INDICATORS	WM	DESCRIPTION
Visual Learning Style		
I learn better by reading what the teacher writes on the chalkboard.	4.07	Agree
When I read instructions, I remember them better.	4.04	Agree
I understand better when I read instructions.	4.35	Agree
I learn better by reading than by listening to someone.	3.97	Agree
I learn more by reading textbooks than by listening to lectures.	4.07	Agree
GWM	4.01	Agree
Auditory Learning Style		
When the teacher tells me the instructions, I understand better.	4.44	Agree
When someone tells me how to do something in class, I learn it better.	4.03	Agree
I remember things I have heard in class better than things I have read.	3.95	Agree
I learn better in class when the teacher gives a lecture.	4.17	Agree
I learn better in class when I listen to someone.	3.99	Agree
GWM	4.116	Agree
Kinesthetic Learning Style		
I prefer to learn by doing something in class.	4.3	Agree
When I do things in class, I learn better.	4.25	Agree
I enjoy learning in class by doing experiments.	4.0	Agree
I understand things better in class when I participate in role-playing.	4.06	Strongly agree
I learn best in class when I can participate in related activities.	4.25	Agree
GWM	4.172	Agree

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Tactile Learning Style		
I learn more when I can make a model of something.	4.1	Agree
I learn more when I make something for a class project.	4.15	Agree
I learn better when I make drawings as I study.	3.65	Undecided
When I build something, I remember what I have learned better.	4.03	Agree
I enjoy making something for a class project.	4.02	Agree
GWM	3.972	Agree
Group Learning Style		
I get more work done when I work with others.	3.94	Agree
I learn more when I study with a group.	4.02	Agree
In class, I learn best when I work with others.	3.98	Agree
I enjoy working on an assignment with two or three classmates.	4.05	Strongly Agree
I prefer to study with others	3.72	Agree
GWM	3.948	Agree
Individual Learning Style		
When I study alone, I remember things better.	4.25	Agree
When I work alone, I learn better.	4.1	Agree
In class, I work better when I work alone.	3.97	Agree
I prefer working on projects by myself.	4.1	Agree
I prefer to work by myself.	4.01	Agree
GWM	4.086	Agree

Visual Learning Style. The respondents agreed that they are visual learners, as indicated by a weighted mean of 4.01. This suggests that they learn effectively through reading, observing words on the chalkboard, and using visual aids. This aligns with the understanding that visual learners retain information more effectively through seeing rather than hearing. Miller (2012) notes that visual learners benefit from using diagrams, charts, and written materials, which help them process information visually. According to Mayer's (2005) Cognitive Theory of Multimedia Learning, learners understand and retain material better when visual and auditory modalities are combined effectively. In practical terms, instructors can leverage multimedia tools such as videos, slides, and charts to enhance comprehension among visual learners. The preference for visual learning suggests that learners may struggle with purely auditory instruction, and thus, diverse teaching methods are crucial.

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Auditory Learning Style. The respondents also agreed that they are auditory learners, with a weighted mean of 4.12. This indicates that they learn best through listening to spoken words and oral explanations. This is in line with Gardner's (2011) theory of multiple intelligences, where auditory learners excel in environments that rely heavily on verbal communication. Research by Pashler et al. (2009) on the "dual-channel hypothesis" further supports the idea that auditory learners benefit from verbal instruction and lecture-based formats. The preference for auditory learning is essential in environments that heavily rely on lectures and spoken instructions. Integrating discussions, debates, or podcasts into the classroom could further enhance the learning experiences of auditory learners.

Kinesthetic Learning Style. Kinesthetic learning style ranked the highest, with a weighted mean of 4.17. This implies that students remember information better when they actively participate in hands-on activities, field trips, and role-playing. Felder and Brent (2005) support this by noting that kinesthetic learners thrive in experiential learning environments, where they can interact physically with materials. Similarly, Kolb's (1984) Experiential Learning Theory emphasizes that students learn most effectively when they can experiment with, experience, and reflect on their learning, which is directly applicable to the students in this study. Given the importance of hands-on learning in improving engagement and retention, integrating project-based learning (PBL) into the curriculum could prove beneficial for these learners. Research by Thomas (2000) shows that PBL encourages deeper understanding by allowing students to apply theoretical knowledge in real-world contexts.

Tactile Learning Style. The tactile learning style was also preferred, as indicated by a weighted mean of 3.97. This suggests that students learn well through hands-on experiences such as creating models or engaging in projects. Research by Gagné (1985) also highlights the importance of kinesthetic and tactile activities in promoting meaningful learning. These activities support tactile learners in internalizing information by physically engaging with learning materials. Given that tactile learners require more interaction with physical objects, incorporating activities such as model-building, drawing, or crafting into lessons would be beneficial for this learner group.

Group Learning Style. The group learning style had a weighted mean of 3.95, showing that students agree they learn better when studying or working with others. Students who prefer group learning often excel in collaborative environments where they can engage in discussions and peer interactions. Johnson and Johnson (1999) support this by asserting that cooperative learning enhances critical thinking, problem-solving, and knowledge retention through social interaction. Vygotsky's (1978) sociocultural theory also supports the idea that learning is fundamentally a social process, and interaction with others can promote cognitive development. For students who prefer group learning, incorporating group projects, team-based assignments, and peer discussions would provide a productive learning experience. Studies by Slavin (1995) have demonstrated that students working in collaborative settings often outperform their peers who learn individually, particularly in problem-solving tasks.

Individual Learning Style. Individual learning style was also highly regarded, with a weighted mean of 4.09. This indicates that students find studying alone to be effective for understanding and retaining information. Many students reported learning best when studying alone, which reflects a need for solitary reflection and independent processing. Gibbons (2002) discusses the value of solitary environments for certain students, where they can engage deeply with the material without external distractions. Additionally, research on self-regulated learning (Zimmerman, 2002) suggests that independent learners often exhibit strong metacognitive skills, as they can monitor and adjust their learning strategies to optimize their own educational experiences. Therefore, individual learning activities such as independent research projects, self-paced study sessions, and solitary reading assignments may be valuable strategies for this group.

IV. CONCLUSIONS

This study aimed to identify the learning style preferences of Social Studies students at Biliran Province State University and determine how these preferences relate to demographic variables such as age, gender, year level, and academic performance. The findings revealed that the majority of students exhibited preferences for visual and auditory learning styles, with kinesthetic learning also being highly favored. These preferences indicate that students at the university benefit from diverse instructional strategies that cater to

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different modes of learning. Moreover, a significant gender disparity was observed, with more female respondents, reflecting broader trends in teacher education.

The following recommendations are offered to enhance the learning experience and academic success of Social Studies students based on the findings of this study.

1. Based on the findings, educators should incorporate a mix of visual, auditory, and kinesthetic activities into their lessons. For example, integrating multimedia resources, group discussions, hands-on activities, and lectures can accommodate the varying learning preferences of students, thereby improving engagement and comprehension.
2. Given the strong preference for visual and auditory learning styles, educators can incorporate digital tools such as videos, online tutorials, and interactive platforms to supplement traditional teaching methods. These tools not only support visual and auditory learners but also engage students in dynamic, tech-driven learning experiences.
3. Since a higher proportion of female students were included in the study, future research and teaching strategies should explore whether there are distinct learning style preferences across genders and how gender-related factors influence learning processes. This understanding could lead to more gender-responsive teaching methods.
4. Since students' learning preferences may evolve over time, educators should conduct periodic assessments to monitor these changes and adapt instructional strategies accordingly. This will help maintain an effective learning environment tailored to students' evolving needs.
5. Although this study did not account for special learning needs, future research should investigate how learning styles interact with such factors. Understanding how students with learning disabilities or special needs prefer to learn can provide insights for more inclusive teaching practices.
6. It is recommended that educational institutions offer workshops or seminars for students to understand their learning styles. This can help students develop strategies to enhance their learning and academic performance by adopting study methods that align with their preferences.
7. Further studies could explore the impact of learning style preferences on long-term academic performance and career success. Additionally, qualitative research such as interviews or focus groups could provide deeper insights into how students experience different learning styles and how these preferences influence their motivation and engagement in learning.

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