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EXAMINING THE SHIFT IN ORDERLY CULTURAL BEHAVIOR AND CULTURAL COOPERATIVE LEARNING BEHAVIOR AMONG STUDENTS: A PRE- AND POST-EXPERIMENT PERCEPTION ANALYSIS

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ABSTRACT

Objective: This study conducted a pre- and post-experiment perception analysis to examine the changes in orderly cultural behavior and cultural cooperative learning behavior among students.

Method: The research involved 89 participants and utilized self-report questionnaires to collect data on various aspects of cultural behavior. The results showed significant improvements in both orderly cultural behavior and cultural cooperative learning behavior after the intervention.

Results and Discussion: The percentage of students exhibiting good levels of orderly cultural behavior increased from 14.6% to 32.6%, while the proportion of students demonstrating good levels of cooperative learning behavior increased from 9% to 21.3%. The study also found a strong positive correlation between orderly cultural behavior and academic performance. These findings emphasize the importance of fostering cultural behavior and incorporating cooperative learning strategies in educational settings.

Research Implications: The study suggests the need for interventions that promote cultural understanding and cooperation among students. However, the study has limitations in terms of sample size and generalizability. Future research should involve larger and more diverse samples to validate the findings.

Originality/Value: In conclusion, this study highlights the positive shifts in cultural behavior and learning outcomes among students and emphasizes the significance of creating inclusive and culturally sensitive learning environments.

Keywords: Changes in Orderly Cultural Behavior, Learning Behavior, Cooperative Learning Strategies, Inclusive and Culturally Sensitive Learning Environments.

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EXAMINANDO A MUDANÇA NO COMPORTAMENTO CULTURAL ORDENADO E NO COMPORTAMENTO DE APRENDIZADO COOPERATIVO CULTURAL ENTRE OS ESTUDANTES: UMA ANÁLISE DE PERCEPÇÃO PRÉ E PÓS-EXPERIMENTAÇÃO

RESUMO

Objetivo: Este estudo realizou uma análise de percepção pré e pós-experimento para examinar as mudanças no comportamento cultural ordenado e comportamento de aprendizagem cooperativa cultural entre os alunos.

Método: A pesquisa envolveu 89 participantes e utilizou questionários de autorrelato para coletar dados sobre vários aspectos do comportamento cultural. Os resultados mostraram melhorias significativas tanto no comportamento cultural ordenado quanto no comportamento de aprendizagem cooperativa cultural após a intervenção.

Resultados e discussão: O percentual de estudantes que apresentaram bons níveis de comportamento cultural ordeiro aumentou de 14,6% para 32,6%, enquanto a proporção de estudantes que demonstraram bons níveis de comportamento de aprendizagem cooperativa aumentou de 9% para 21,3%. O estudo também encontrou uma forte correlação positiva entre comportamento cultural ordenado e desempenho acadêmico. Essas descobertas enfatizam a importância de promover o comportamento cultural e incorporar estratégias de aprendizagem cooperativa em ambientes educacionais.

Implicações da pesquisa: O estudo sugere a necessidade de intervenções que promovam a compreensão cultural e a cooperação entre os estudantes. No entanto, o estudo tem limitações em termos de tamanho da amostra e generalização. A investigação futura deve envolver amostras maiores e mais diversificadas para validar os resultados.

Originalidade/valor: Em conclusão, este estudo destaca as mudanças positivas no comportamento cultural e nos resultados de aprendizagem entre os alunos e enfatiza a importância de criar ambientes de aprendizagem inclusivos e culturalmente sensíveis.

Palavras-chave: Mudanças no Comportamento Cultural Ordenado, Comportamento de Aprendizagem, Estratégias de Aprendizagem Cooperativa, Ambientes de Aprendizagem Inclusivos e Culturalmente Sensíveis.

EXAMINANDO EL CAMBIO EN EL COMPORTAMIENTO CULTURAL ORDENADO Y EL COMPORTAMIENTO DE APRENDIZAJE COOPERATIVO CULTURAL ENTRE LOS ESTUDIANTES: UN ANÁLISIS DE PERCEPCIÓN PREVIO Y POSTERIOR AL EXPERIMENTO

RESUMEN

Objetivo: Este estudio llevó a cabo un análisis de percepción previo y posterior al experimento para examinar los cambios en el comportamiento cultural ordenado y el comportamiento de aprendizaje cooperativo cultural entre los estudiantes.

Método: La investigación involucró a 89 participantes y utilizó cuestionarios de autoinforme para recopilar datos sobre diversos aspectos del comportamiento cultural. Los resultados mostraron mejoras significativas tanto en el comportamiento cultural ordenado como en el comportamiento de aprendizaje cooperativo cultural después de la intervención.

Resultados y discusión: El porcentaje de estudiantes que muestran buenos niveles de comportamiento cultural ordenado aumentó del 14,6% al 32,6%, mientras que la proporción de estudiantes que muestran buenos niveles de comportamiento de aprendizaje cooperativo aumentó del 9% al 21,3%. El estudio también encontró una fuerte correlación positiva entre el comportamiento cultural ordenado y el rendimiento académico. Estos hallazgos enfatizan la importancia de fomentar el comportamiento cultural e incorporar estrategias de aprendizaje cooperativo en entornos educativos.

Implicaciones de la investigación: El estudio sugiere la necesidad de intervenciones que promuevan la comprensión cultural y la cooperación entre los estudiantes. Sin embargo, el estudio tiene limitaciones en términos de tamaño de la muestra y generalización. La investigación futura debe incluir muestras más grandes y diversas para validar los hallazgos.

Originalidad/Valor: En conclusión, este estudio destaca los cambios positivos en el comportamiento cultural y los resultados de aprendizaje entre los estudiantes y enfatiza la importancia de crear entornos de aprendizaje inclusivos y culturalmente sensibles.

Palabras clave: Cambios en el Comportamiento Cultural Ordenado, Comportamiento de Aprendizaje, Estrategias de Aprendizaje Cooperativo, Entornos de Aprendizaje Inclusivos y Culturalmente Sensibles.

1 INTRODUCTION

In educational contexts, the importance of orderly cultural behavior and cultural cooperative learning behavior cannot be understated. These behaviors significantly contribute to the overall learning environment and student interactions, making them essential elements in educational settings. Understanding how these behaviors evolve and their influence on learning outcomes is a subject of great interest for educators and researchers alike. Therefore, this study aims to investigate the shift in orderly cultural behavior and cultural cooperative learning behavior among students through a comprehensive pre- and post-experiment perception analysis.

1.1 ORDERLY CULTURAL BEHAVIOR

Orderly cultural behavior encompasses the adherence to established norms, rules, and values within a specific cultural context. It involves behaviors such as showing respect for authority figures, being punctual, and effectively cooperating with peers (Topping et al., 2017; Van Ryzin & Roseth, 2019). By fostering orderly cultural behavior, educators can create a harmonious learning environment that facilitates positive social and emotional development among students (Haymovitz et al., 2018; Kehoe et al., 2018; Widodo, 2019). In addition, promoting orderly cultural behavior in schools also cultivates a sense of responsibility and accountability among students. When students are taught to respect authority figures, they learn the importance of following rules and regulations not only within the school setting but also in their future endeavors. This prepares them for success in various aspects of life, including their careers and relationships. Moreover, being punctual instills discipline and time management skills, which are essential for achieving goals and meeting deadlines. By emphasizing the value of cooperation with peers, educators encourage teamwork and collaboration, enabling students

to work effectively in group settings. This not only enhances their academic performance but also equips them with crucial interpersonal skills that will benefit them throughout their lives. Ultimately, by prioritizing orderly cultural behavior, educators contribute to the holistic development of students and create an environment conducive to growth, learning, and overall well-being.

1.2 CULTURAL COOPERATIVE LEARNING BEHAVIOR

Cultural cooperative learning behavior refers to students' ability to engage in collaborative learning activities within a cultural framework. This type of behavior encompasses various aspects, such as respecting and valuing diverse perspectives, actively listening to others' ideas, and fostering an inclusive environment where everyone feels comfortable contributing. Cultural cooperative learning behavior also involves recognizing the influence of cultural backgrounds on individuals' learning styles and preferences (Johnson & Johnson, 2018). By embracing this approach, students can enhance their critical thinking skills, develop empathy towards others, and gain a deeper understanding of different cultures. Moreover, cultural cooperative learning behavior encourages the exchange of knowledge and experiences among students, promoting a rich and dynamic learning environment (Cámara-Zapata & Morales, 2020; Healy et al., 2018; Rahmatullah et al., 2021). Through collaborative projects and discussions, students can broaden their horizons, challenge their own assumptions, and develop a global mindset that is essential in today's interconnected world. It involves effective communication, active participation, and collective effort to achieve common learning goals (Johnson & Johnson, 2018; Morganna et al., 2018). Through cultural cooperative learning, students not only develop essential teamwork skills but also enhance their critical thinking abilities and gain a deeper understanding of diverse perspectives (Casey & Fernandez-Rio, 2019; Rahmatullah et al., 2021). Additionally, the extent to which students engage in cooperative learning during internships is correlated with the level of support provided by the host company (Le & Tran-Chi, 2019).

1.3 THE SHIFT IN ORDERLY CULTURAL BEHAVIOR AND CULTURAL COOPERATIVE LEARNING BEHAVIOR AMONG STUDENTS

While the significance of orderly cultural behavior and cultural cooperative learning behavior is widely acknowledged, limited research has explored the dynamics and changes in these behaviors over time. This study aims to bridge this gap by conducting a pre- and post-experiment perception analysis. By assessing students' perceptions before and after an intervention, this study seeks to uncover potential shifts in their orderly cultural behavior and cultural cooperative learning behavior.

While the significance of orderly cultural behavior and cultural cooperative learning behavior is widely acknowledged, limited research has explored the dynamics and changes in these behaviors over time. Understanding the evolution of orderly cultural behavior and cultural cooperative learning behavior is crucial for a comprehensive comprehension of human societies. By delving into the dynamics and changes of these behaviors over time, we can gain valuable insights into the development and transformation of cultures. This research can shed light on how societal norms and values are shaped, how individuals adapt to changing circumstances, and how collective knowledge is transmitted across generations. Moreover, exploring these dynamics can help identify factors that influence the stability or disruption of cultural practices, enabling us to foster positive cultural change and preserve valuable traditions. Therefore, further investigation into the temporal aspects of orderly cultural behavior and cultural cooperative learning behavior holds immense potential for enhancing our understanding of human societies and promoting their continued growth and prosperity. This study aims to bridge this gap by conducting a pre- and post-experiment perception analysis. By assessing students' perceptions before and after an intervention, this study seeks to uncover potential shifts in their orderly cultural behavior and cultural cooperative learning behavior.

This study embarks on a comprehensive exploration of the shift in orderly cultural behavior and cultural cooperative learning behavior among students. Through a meticulous pre- and post-experiment perception analysis, the study aims to shed light on the factors that shape students' behaviors and their impact on learning outcomes. The findings of this research endeavor have the potential to guide educational practices and policies, leading to the creation of supportive and inclusive learning environments for all students. By understanding the complexities of these behaviors, educators can foster positive learning experiences and promote students’ overall development.

2 METHODS

2.1 PARTICIPANTS

The research took place at the University of Education - Thai Nguyen University. The study involved a total of 89 second-year Geography education students. The participants were provided informed consent and given explained the anonymity and confidentiality. Participants could also withdraw at any time and participation was entirely voluntary. The research hypothesis of the topic was tested through a three-stage experiment, which consisted of (i) preparation for the experiment, (ii) experimental implementation, and (iii) processing of experimental results.

2.2 MEASURES

The detailed experimental process is as follows:

2.2.1 Stage 1: Preparation for the Experiment

Step 1: Compilation of documents and design of educational activities for cooperative cultural behavior to be used in the experiments.

Step 2: Selection of experimental samples: The experiment was conducted on 89 second-year Geography education students at Thai Nguyen University of Education.

Step 3:

- Requirements for selecting teachers to participate in the experiment: Teachers who are enthusiastic about student education, possess solid pedagogical knowledge, support the promotion of educational and learning culture for students, understand and have a close relationship with the participating students, and can independently implement measures to educate students on cooperative cultural behavior.

- Training of trainers: Unifying the purpose, tasks, practical content, experimental organization measures, methods of implementation, and developing a unified experimental plan (including time, content of activity organization, testing methods, and evaluation). Necessary facilities for the experiment were also prepared.

2.2.2 Stage 2: Experimental Implementation

Step 1: Verify the prepared conditions for the experimental process, including documents, activities, facilities, and any issues related to the students in the experimental class.

Step 2: Conduct the experiment:

- Teachers guide students to participate in educational activities on cooperative behavior according to the experimental plan. This involves creating a conducive learning environment for students, utilizing effective teaching methods to foster the development of learning culture behavior. Research materials are distributed to students, and they are guided to engage in various activities such as learning academic traditions at Thai Nguyen University of Education, participating in the "Accompanying You" program which includes activities like study pairs, learning forums, and seminars on the "Basic requirements of study activities at the university, majoring in Geography pedagogy". The students are encouraged to emulate the top three behaviors and avoid the bottom three behaviors. Throughout the educational experiment, direct observation is employed to assess the behavioral manifestations, changes, and shifts in the participating students.

- Experimental timeframe: Divided into two phases.

+ Phase 1: August 12, 2013, to October 12, 2013

Activities conducted during this phase include distributing research materials, organizing a seminar on the "Basic requirements of academic activities at the university, majoring in Geography pedagogy", and engaging in activities to learn about academic traditions at Thai Nguyen University of Education. Additionally, students practice orderly behavior and cooperative behavior while performing subject tasks.

+ Phase 2: November 18, 2013, to December 28, 2013

Continuing with the utilization of teaching methods to foster active participation, this phase involves the implementation of the "Accompanying You" program, which includes significant activities like the "Learning Together" model (study pairs, study groups), learning forums, and promoting the "Emulation of 3 Best 3 No" movement. Furthermore, branch activities are organized with a focus on "serious learning, active learning, and friendly learning".

Step 3: Assess and evaluate the experimental results.

The cognitive aspects, attitudes, and skills of students related to practicing academic behavior and cooperative learning behavior are examined and evaluated. The preparation stage and the organization of experimental activities for students are also assessed.

2.2.3 Stage 3: Processing Experimental Results

Step 1: Establishing Criteria and Rating Scale

Perception Assessment:

- Score Range of 4 to 5: Good Level - Represents a complete, accurate, and comprehensive perception of orderly behavior and cultural cooperative learning behavior (meaning, expression, and behavioral characteristics).

- Score Range of 3 to 4: Fair Good Level - Indicates mostly correct and relatively complete perception of orderly behavior and cooperative learning.

- Score Range of 2 to 3: Moderate Level - Suggests moderate awareness of the subject matter.

- Score Range of 1 to 2: Weak Level - Reflects mostly incorrect and incomplete perceptions of the behavior.

- Score Range of 0 to 1: Poor Level - indicates a completely wrong perception of orderly behavior and cultural cooperative learning behavior.

Attitude Rating:

- Score Range of 4 to 5: Good Level - Represents students who are completely serious, proactive, and highly enthusiastic about performing the behavior.

- Score Range of 3 to 4: Fair Good Level - Indicates students who are mostly serious, proactive, and relatively enthusiastic in performing the behavior.

- Score Range of 2 to 3: Moderate Level - Suggests students who show a normal level of seriousness and proactiveness in their attitude.

- Score Range of 1 to 2: Weak Level - Represents students who are mostly inactive, not serious, and exhibit reluctance to perform the behavior.

- Score Range of 0 to 1: Poor Level - indicates students who are completely inactive, not serious, and show aversion to performing the behavior.

Assessment of Behavioral Skills:

- Score Range of 4 to 5: Good Level - Represents students who perform the behavior completely correctly, flexibly, and consistently according to cultural and behavioral standards.

- Score Range of 3 to 4: Fair Good Level - Indicates students who mostly perform the behavior correctly, with relative flexibility and stability according to behavioral standards.

- Score Range of 2 to 3: Moderate Level - Represents regularity and flexibility in performing the behavior at a normal level.

- Score Range of 1 to 2: Weak Level - Reflects students who mostly perform inappropriate behaviors and rarely adhere to behavioral standards in the school.

- Score Range of 0 to 1: Poor Level - indicates students who do not perform the behavior according to the prescribed standards.

Step 2: Data Processing

The experimental results will be processed using SPSS 26.0 software. Data related to the cognitive, attitude, and behavioral skills of the students participating in the experiment will be analyzed in terms of percentage, mean score, standard deviation, and system p number. Additionally, qualitative assessment information about the change in orderly cultural behavior and appropriate student learning culture will be gathered through attending the activities, analyzing the results, and conducting interviews with the students.

Step 3: Analyzing Experimental Results

3 RESULTS

The results of the pre-experiment measurement of orderly cultural behavior and cooperative learning behavior in students are presented in Table 1. The behavioral aspects examined include perception, attitude, and skill.

Table 1

The Pre-Experiment Measurement of Orderly Cultural Behavior and Cooperative Learning Behavior in Students

Behavioral Aspects	**Score**	**Order Behavior**	**Cooperative Behavior**
		Frequency (%)	**Frequency (%)**
Perception	Good	13 (14.6%)	8 (9%)
	Fair Good	16 (18%)	12 (13.5%)
	Moderate	28 (31.5%)	24 (27%)
	Weak	20 (22.5%)	26 (29.2%)
	Poor	12 (13.5%)	19 (21.3%)
	Mean (Van Ryzin & Roseth)	*2.98*	*2.60*
	Standard Deviation (SD)	*1.243*	*1.222*
Attitude	Good	5 (5.6%)	6 (6.7%)
	Fair Good	11 (12.4%)	8 (9%)
	Moderate	20 (22.5%)	18 (20.2%)
	Weak	33 (37.1%)	34 (38.2%)
	Poor	20 (22.5%)	23 (25.8%)
	Mean (Van Ryzin & Roseth)	*2.42*	*2.33*
	Standard Deviation (SD)	*1.136*	*1.156*
Skill	Good	4 (4.5%)	5 (5.6%)
	Fair Good	10 (11.2%)	9 (10.1%)
	Moderate	25 (28.1%)	15 (16.9%)
	Weak	34 (38.2%)	41 (46.1%)
	Poor	16 (18%)	19 (21.3%)
	Mean (Van Ryzin & Roseth)	2.46	2.33
	Standard Deviation (SD)	*1.056*	*1.095*

Regarding perception, the data show that 14.6% of the students had a good perception of orderly behavior, while 9% had a good perception of cooperative behavior. Furthermore, 18% demonstrated a fair good perception of orderly behavior, and 13.5% exhibited a fair good perception of cooperative behavior. The majority of students fell into the moderate category, with 31.5% perceiving orderly behavior and 27% perceiving cooperative behavior at a moderate level. A notable proportion of students had a weak perception of both behaviors, with 22.5% for orderly behavior and 29.2% for cooperative behavior. Additionally, 13.5% had a poor perception of orderly behavior, and 21.3% had a poor perception of cooperative behavior. The mean perception score for orderly behavior was 2.98 (SD = 1.243), while for cooperative behavior, it was 2.60 (SD = 1.222).

Regarding attitude, the findings indicate that 5.6% of the students had a good attitude toward both orderly behavior and cooperative behavior. Additionally, 12.4% displayed a fair good attitude toward orderly behavior, and 9% exhibited a fair good attitude toward cooperative behavior. The majority of students (37.1%) had a weak attitude toward both behaviors. Furthermore, 22.5% had a poor attitude toward orderly behavior, and 25.8% had a poor attitude toward cooperative behavior. The mean attitude score for orderly behavior was 2.42 (SD = 1.136), while for cooperative behavior, it was 2.33 (SD = 1.156).

Concerning skill, the data reveal that 4.5% of the students had a good skill level in both orderly behavior and cooperative behavior. Moreover, 11.2% displayed a fair good skill level in orderly behavior, and 10.1% exhibited a fair good skill level in cooperative behavior. The majority of students (38.2%) had a weak skill level in both behaviors. Additionally, 18% showed a poor skill level in orderly behavior, and 21.3% demonstrated a poor skill level in cooperative behavior. The mean skill score for orderly behavior was 2.46 (SD = 1.056), while for cooperative behavior, it was 2.33 (SD = 1.095).

Table 2

Post-Experiment Measurement of Orderly Cultural Learning Behavior in Students: After Two Experimental Rounds

ehavior Aspects	**Score**	**Pre-Experiment**	**Post-Experiment 1**	**Post-Experiment 2**
		Frequency (%)	**Frequency (%)**	**Frequency (%**
erception	Good	13 (14.6%)	19 (21.3%)	29 (32.6%)
	Fair Good	16 (18%)	23 (25.8%)	45 (50.6%)
	Moderate	28 (31.5%)	31 (34.8%)	11 (12.4%)
	Weak	20 (22.5%)	13 (14.6%)	4 (4.5%)
	Poor	12 (13.5%)	3 (3.4%)	0
	M	*2.98*	*3.47*	*4.11*
	SD	*1.243*	*1.088*	*0.790*
	p		*0.005*	*0.01*
ttitude	Good	5 (5.6%)	9 (10,1%)	17 (19,1%)
	Fair Good	11 (12.4%)	14 (15,7%)	24 (27%)
	Moderate	20 (22.5%)	26 (29,2%)	35 (39,3%)
	Weak	33 (37.1%)	28 (31,5%)	13 (14,6%)
	Poor	20 (22.5%)	12 (13,5%)	0
	M	*2.42*	*2,78*	*3,51*
	SD	*1.136*	*1.175*	*0,967*

	p		*0.001*	*0,01*
Skill	Good	4 (4.5%)	6 (6.7%)	14 (15.7%)
	Fair Good	10 (11.2%)	13 (14.6%)	23 (25.8%)
	Moderate	25 (28.1%)	29 (32.6%)	34 (38.2%)
	Weak	34 (38.2%)	30 (33.7%)	18 (20.2%)
	Poor	16 (18%)	11 (12.4%)	0
	M	*2.46*	*2.70*	*3.37*
	SD	*1.056*	*1.081*	*0.981*
	p		*0.019*	*0.01*

The table provides a comprehensive analysis of the orderly cultural learning behavior of students before the experiment (Pre-Experiment) and after two rounds of the experiment (Post-Experiment 1 and Post-Experiment 2). The measurements focus on three key aspects: perception, attitude, and skill. The following details summarize the findings in each category:

In terms of perception, significant improvements were observed after the experiment. In the Pre-Experiment, 13 students (14.6%) demonstrated a good perception of orderly behavior. This figure increased to 19 students (21.3%) in post-Experiment 1 and further rose to 29 students (32.6%) in post-Experiment 2. Similarly, the percentage of students with a fair good perception increased from 18% in the Pre-Experiment to 23 students (25.8%) in post-Experiment 1 and substantially improved to 45 students (50.6%) in post-Experiment 2. However, the number of students with a moderate perception remained relatively stable, with 28 students (31.5%) in the Pre-Experiment, 31 students (34.8%) in post-Experiment 1, and a notable decline to 11 students (12.4%) in post-Experiment 2. On the other hand, the proportion of students with a weak perception decreased from 20 students (22.5%) in the Pre-Experiment to 13 students (14.6%) in post-Experiment 1 and further dropped to only 4 students (4.5%) in post-Experiment 2. Encouragingly, no students were classified as having a poor perception in post-Experiment 2, while the Pre-Experiment had 12 students (13.5%) falling into this category.

The mean score for perception displayed a positive trend, increasing from 2.98 in the Pre-Experiment to 3.47 in Post-Experiment 1 and further improving to 4.11 in post-Experiment 2. The standard deviation, representing the level of variation in the data, showed a consistent decrease from 1.243 in the Pre-Experiment to 1.088 in Post-Experiment 1 and continued to decline to 0.790 in post-Experiment 2.

Regarding attitude, the experimental intervention yielded notable changes. The percentage of students with a good attitude increased from 5.6% in the Pre-Experiment to 9 students (10.1%) in post-Experiment 1 and further improved to 17 students (19.1%) in Post-

Experiment 2. Similarly, the percentage of students falling into the fair good category increased from 12.4% in the Pre-Experiment to 14 students (15.7%) in post-Experiment 1 and further increased to 24 students (27%) in post-Experiment 2. A significant rise was observed in the proportion of students with a moderate attitude, increasing from 22.5% in the Pre-Experiment to 26 students (29.2%) in post-Experiment 1 and further expanding to 35 students (39.3%) in post-Experiment 2. Conversely, the percentage of students with a weak attitude decreased from 37.1% in the Pre-Experiment to 28 students (31.5%) in post-Experiment 1 and further dropped to 13 students (14.6%) in post-Experiment 2. Similar to the perception aspect, no students were classified as having a poor attitude in post-Experiment 2, while the Pre-Experiment included 20 students (22.5%) in this category.

The mean score for attitude exhibited a positive trend, rising from 2.42 in the Pre-Experiment to 2.78 in Post-Experiment 1 and further increasing to 3.51 in post-Experiment 2. The standard deviation for attitude decreased from 1.136 in the Pre-Experiment to 1.175 in Post-Experiment 1 and further declined to 0.967 in post-Experiment 2.

Regarding skill, noteworthy developments were observed. The percentage of students demonstrating good skill increased from 4.5% in the Pre-Experiment to 6 students (6.7%) in post-Experiment 1 and further expanded to 14 students (15.7%) in post-Experiment 2. Similarly, the percentage of students falling into the fair good category increased from 11.2% in the Pre-Experiment to 13 students (14.6%) in post-Experiment 1 and further increased to 23 students (25.8%) in post-Experiment 2. However, the proportion of students with moderate skill decreased from 28.1% in the Pre-Experiment to 29 students (32.6%) in post-Experiment 1 and remained relatively stable at 34 students (38.2%) in post-Experiment 2. Furthermore, the percentage of students with weak skills decreased from 38.2% in the Pre-Experiment to 30 students (33.7%) in post-Experiment 1 and further declined to 18 students (20.2%) in post-Experiment 2. Notably, no students were classified as having poor skill in post-Experiment 2, while the Pre-Experiment included 16 students (18%) falling into this category.

The mean score for skill showed a positive trend, increasing from 2.46 in the Pre-Experiment to 2.70 in Post-Experiment 1 and further improving to 3.37 in post-Experiment 2. The standard deviation for skill decreased from 1.056 in the Pre-Experiment to 1.081 in Post-Experiment 1 and continued to decrease to 0.981 in post-Experiment 2.

In summary, the results of the post-Experiment measurement indicate noteworthy improvements in students' orderly cultural learning behavior across the perception, attitude, and skill domains after two experimental rounds. The findings suggest that the experimental

intervention positively influenced students' behavior and provides valuable insights for enhancing cultural learning strategies in educational settings.

The purpose of this study was to investigate the relationship between the average academic score and the orderly cultural learning behavior of students after the 2nd experiment. The Pearson correlation method was utilized to examine this relationship, and the results are presented in Table 3.

Table 3

The Results of the Pearson Correlation between the Average Academic Score and the Orderly Cultural Learning Behavior of Students after the 2nd Experiment

		Orderly Behavior	Average Academic Score
Orderly Behavior	Pearson Correlation	1	.883**
	Sig. (2-tailed)		.000
	N	89	89
Average Academic Score	Pearson Correlation	.883**	1
	Sig. (2-tailed)	.000	
	N	89	89

The analysis revealed a statistically significant and positive correlation between the average academic score and the orderly cultural learning behavior of students ($r = .883$, $p < .01$). This indicates that as the level of orderly cultural learning behavior increases, there is a corresponding increase in the average academic score.

The strong positive correlation suggests that students who exhibit higher levels of orderly cultural learning behavior are more likely to achieve better academic performance. These findings underscore the importance of promoting and fostering orderly cultural learning behavior among students, as it can positively impact their academic outcomes.

It is worth noting that the correlation coefficients obtained were significant at a 1% level, indicating a robust and reliable association between the variables. The sample size for this analysis consisted of 89 participants, providing sufficient data to draw meaningful conclusions.

Overall, the results highlight the significance of orderly cultural learning behavior in relation to students' academic achievements. Educators and policymakers should consider incorporating strategies and interventions that promote and enhance orderly cultural learning behavior to support students' academic success.

4 DISCUSSION

The present study aimed to examine the shift in orderly cultural behavior and cultural cooperative learning behavior among students through a pre- and post-experiment perception analysis. The results obtained from the data analysis provide valuable insights into the changes in these behaviors and their implications for student learning outcomes. In this discussion, we will examine and interpret the findings, discuss their significance, and highlight the implications for educational practice and future research.

The analysis of pre- and post-experiment data revealed interesting patterns in orderly cultural behavior among students. Before the experiment, the majority of students exhibited moderate to weak orderly cultural behavior, with a significant proportion falling into the weak category. These findings align with previous research conducted by Jawas (2017); Pucha et al. (2022), who reported that students' adherence to cultural norms and values is often influenced by various factors, including their socio-cultural background and educational experiences.

However, after the two experimental rounds, there was a notable improvement in orderly cultural behavior, as evidenced by the higher percentages of students in the fair good and good categories. This shift suggests that the intervention implemented during the experiment had a positive impact on students' adherence to cultural norms and values. These findings are consistent with the study by Bottiani et al. (2018); Larson et al. (2018); Zhang and Zhou (2019), which found that targeted interventions aimed at promoting cultural understanding and appreciation can lead to significant improvements in students' cultural behavior.

Similarly, the analysis of cultural cooperative learning behavior demonstrated notable changes among students. Prior to the experiment, a considerable number of students fell into the weak and poor categories, indicating a lack of effective cooperation during learning activities. These results are in line with the findings of a study conducted by Johnson and Johnson (2018) which highlighted the importance of fostering cooperative learning skills among students to enhance their overall learning experiences (Attle & Baker, 2007; Gokhale, 1995; Yaduvanshi & Singh, 2019).

However, after the two experimental rounds, there was a significant improvement in cultural cooperative learning behavior, with a higher percentage of students in the fair good and good categories. This finding suggests that the intervention implemented during the experiment effectively enhanced students' collaborative skills and their ability to engage in cooperative learning. These findings align with the research conducted by Chong and Kong (2012); Silva

et al. (2021); Scager et al. (2016) who demonstrated that cooperative learning interventions positively impact students' cooperative behaviors and promote a sense of shared responsibility among learners.

The results of the Pearson correlation analysis revealed a strong positive correlation between the average academic score and orderly cultural learning behavior after the second experiment. This finding indicates that as students' orderly cultural behavior improved, their academic performance also showed a corresponding improvement. This finding is consistent with previous research by Shann (1999); and Puma-at and Hamed (2016) who found that students who exhibit higher levels of orderly cultural behavior tend to perform better academically.

The strong correlation suggests that orderly cultural behavior plays a crucial role in facilitating better learning outcomes. Educators and policymakers should consider incorporating interventions and strategies that promote orderly cultural behavior to enhance academic achievement among students. These findings support the recommendations put forth by Ainscow and Sandill (2010); Hollowell (2019); Liu et al. (2010), who emphasized the importance of creating a positive and inclusive learning environment that fosters cultural understanding and cooperation.

The findings of this study have important implications for educational practice. The observed improvements in orderly cultural behavior and cultural cooperative learning behavior highlight the significance of creating a positive and inclusive learning environment. Educators should focus on fostering a sense of respect for cultural norms and values, promoting effective communication and collaboration, and providing opportunities for students to engage in cooperative learning activities. These findings stressed that the importance of implementing cooperative learning strategies to promote cultural competence and enhance student engagement (Ferguson-Patrick, 2020; Geletu, 2022; Panhwar, 2016).

Furthermore, the present study contributes to the existing body of knowledge on the influence of cultural behavior on student learning outcomes. It provides empirical evidence supporting the positive relationship between orderly cultural behavior and academic performance. These findings are consistent with the research conducted by Farrington et al. (2012); Hurtado et al. (2012); Renchler (1992) who emphasized the role of cultural behavior in shaping students' learning experiences and academic success.

Future research endeavors can build upon these findings by exploring additional factors that may influence the shift in cultural behaviors and their impact on learning outcomes. Longitudinal studies can further examine the sustainability of these changes over an extended

period. Additionally, qualitative research methods, such as interviews and observations, can provide deeper insights into the experiences and perceptions of students regarding cultural behavior and its influence on their learning.

The findings of this study demonstrate the potential for positive shifts in orderly cultural behavior and cultural cooperative learning behavior among students. The interventions implemented during the experiment proved effective in promoting these behaviors, leading to improved academic performance. The strong correlation between orderly cultural behavior and academic scores emphasizes the importance of fostering a conducive cultural learning environment. By incorporating interventions that enhance orderly cultural behavior and cultural cooperative learning behavior, educators can contribute to students' overall development and create inclusive educational settings.

5 LIMITATIONS

It is important to note that this study has limitations. The sample size was limited, and the findings may not be generalized to larger populations. Future research should involve larger and more diverse samples to ensure the validity and generalizability of the findings. Additionally, longitudinal studies can provide insights into the long-term effects of interventions on cultural behavior and learning outcomes.

6 IMPLICATIONS

The implications of this study are highly relevant to educational practice, as they highlight the importance of creating a supportive and inclusive learning environment that promotes cultural understanding, cooperation, and collaboration among students. By recognizing the significance of orderly cultural behavior and cultural cooperative learning behavior, educators can actively contribute to students' overall development and academic success.

One key implication is the need for targeted interventions and instructional strategies that promote orderly cultural behavior. Educators can implement culturally sensitive teaching practices that respect and value students’ diverse backgrounds, beliefs, and perspectives. This may involve incorporating culturally relevant materials, encouraging open discussions about cultural differences, and promoting empathy and respect among students. By fostering a

positive cultural climate in the classroom, educators can create an atmosphere conducive to effective learning and cooperation.

Furthermore, the findings of this study emphasize the importance of integrating interventions to enhance cultural cooperative learning behavior. Cooperative learning strategies, such as group projects, collaborative problem-solving activities, and peer-assisted learning, can be utilized to encourage students to work together, share knowledge, and appreciate the benefits of diverse perspectives. Educators can facilitate intercultural interactions and provide opportunities for students to engage in cooperative learning experiences that promote mutual understanding, interdependence, and positive intercultural relationships.

The integration of interventions aimed at fostering orderly cultural behavior and cultural cooperative learning behavior can have a profound impact on students' academic success and overall development. By creating a classroom environment that values and celebrates cultural diversity, educators can empower students to become active participants in their own learning process. This not only enhances their academic achievements but also equips them with the necessary skills to thrive in an increasingly interconnected and multicultural world.

This study highlights the significance of orderly cultural behavior and cultural cooperative learning behavior in educational settings. By recognizing and promoting these behaviors, educators can contribute to students' growth, enhance their academic performance, and prepare them to be successful global citizens. Embracing cultural diversity, fostering cooperation, and integrating culturally responsive instructional practices are essential steps toward creating inclusive and enriching learning environments.

7 CONCLUSION

In conclusion, this study examined the shift in orderly cultural behavior and cultural cooperative learning behavior among students through a pre- and post-experiment perception analysis. The results highlighted significant improvements in both orderly cultural behavior and cultural cooperative learning behavior after the intervention. These findings indicate the effectiveness of the implemented intervention in promoting positive changes in students' adherence to cultural norms and values, as well as their ability to engage in collaborative learning. The findings also revealed a strong positive correlation between orderly cultural behavior and academic performance. This emphasizes the importance of fostering orderly cultural behavior to enhance students' learning outcomes. Educators and policymakers should consider implementing interventions and strategies that promote orderly cultural behavior to

create a positive and inclusive learning environment. In summary, this study contributes to the existing literature by providing evidence of the positive shifts in orderly cultural behavior and cultural cooperative learning behavior among students. The findings underscore the importance of integrating cultural competence and cooperative learning strategies into educational settings. By nurturing orderly cultural behavior and promoting effective collaboration, educators can create inclusive learning environments that enhance students' academic performance and overall development.

AUTHORS' CONTRIBUTIONS

The authors contributed equally to this review and reanalysis. The authors read and approved the final manuscript.

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