

A Causal Comparative Study of Civic Sense among Elementary Preservice Teachers: Investigating the Role of Civic Education in Public Universities

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Abstract: This causal comparative study investigates the influence of civic education on the development of civic sense among elementary level preservice teachers in public universities of Punjab, Pakistan. The objective was to determine whether significant differences exist in civic awareness and civic behavior between students who received civic education and those who did not. A standardized Civic Sense Scale (CSS) was used for data collection, and stratified random sampling yielded a sample of 100 B.Ed. (Hons.) final-year students. Independent t-tests revealed statistically significant differences in both civic awareness and civic behavior in favor of students who had completed civic education courses. The results support the inclusion of civic education as a vital component in teacher education programs to foster responsible citizenship and social responsibility.

Keyword: Civic Sense, Preservice Teachers, Civic Education, Causal-Comparative, Teacher Training, Social Responsibility.

I. INTRODUCTION

Civic sense embodies individuals' attitudes, knowledge, and behaviors aligned with community norms, mutual respect, lawfulness, and participation in democratic processes. For future teachers, developing civic awareness is especially crucial, as they serve as role models and moral agents within society (UNESCO, 2023).

Civic education programs aim to prepare preservice teachers not only as educators but also as active, socially responsible citizens capable of nurturing democratic values in younger generations. In the Pakistani context, increasing emphasis has been placed on embedding civic education in preservice teacher programs due to growing concerns over public responsibility, tolerance, and societal cohesion (Akhtar & Ahmad, 2022). This study explores whether civic education, as part of university curriculum, contributes meaningfully to the civic sense of elementary preservice teachers.

Background of the Research Study

In the evolving landscape of democratic societies, the significance of civic education has gained renewed attention due to its role in nurturing informed, responsible, and active citizens. Civic sense commonly understood as the awareness and practice of one's duties and responsibilities toward society forms the bedrock of peaceful coexistence, social justice, and collective well-being. In the context of teacher education, the development of civic sense is especially critical, as preservice teachers are future influencers who will shape the character, attitudes, and civic consciousness of generations to come.

In Pakistan, civic education has historically been underemphasized, particularly in teacher education programs. Although the national curriculum mentions citizenship education, its implementation across public sector universities remains inconsistent and limited in scope. This inconsistency is concerning, especially given the challenges faced by Pakistani society such as rising intolerance, lawlessness, lack of public ethics, and limited youth engagement in democratic processes. These issues underscore the urgent need to equip preservice teachers with a deep understanding of their civic duties and a commitment to fostering the same in their future students.

Global organizations such as UNESCO and the OECD have emphasized civic education as a key pillar in achieving the Sustainable Development Goals (SDGs), especially SDG 4.7, which focuses on education for global citizenship and sustainable development. Numerous international studies have highlighted the positive impact of civic education on

increasing students' political knowledge, participation, tolerance, and respect for diversity (Torney-Purta et al., 2017; Schulz et al., 2020). However, empirical studies examining the direct impact of civic education on Pakistani preservice teachers remain scarce.



Figure 1. Education and Civic Awareness and Civic Behavior: Duty for a Better Society (2024).

This study was initiated to address this research gap by empirically evaluating whether civic education courses significantly influence the civic awareness and behavior of elementary-level preservice teachers in public universities of Punjab, Pakistan.

By adopting a causal-comparative design, the study seeks to determine whether students who have received civic education exhibit more civic responsibility and social engagement compared to their peers who have not received such education. The findings are expected to inform policy reforms, curricular enhancements, and pedagogical strategies aimed at integrating civic education more meaningfully within the teacher education framework of the country.

2. Objectives of the Study

Following was the research objectives of this study.

1. To compare the civic awareness of preservice teachers who studied civic education with those who did not.
2. To assess whether civic education significantly improves civic behavior among preservice teachers.

3. Research Hypotheses

The hypotheses of this research study were given as:

1. **H₀₁:** There is no significant difference in civic awareness between preservice teachers who received civic education and those who did not.
2. **H₀₂:** There is no significant difference in civic behavior between preservice teachers who received civic education and those who did not.

4. Methodology

Research Design

This research was quantitative in nature and causal-comparative (ex post facto) research design was used to identify differences between naturally occurring groups (with and without civic education) without manipulation of variables.

Population and Sample

The population included final-year B.Ed. (Hons.) preservice teachers enrolled in public sector universities in Punjab, Pakistan. The accessible population consisted of students from universities where civic education was offered either as a core or elective subject. Using stratified random sampling, 100 students were selected:

1. 50 who completed a civic education course
2. 50 who had not completed any formal civic education

Instrumentation

The researcher self developed Civic Sense Scale (CSS) which was employed in this study for getting results, this questionnaire was comprised of two subscales:

1. Civic Awareness (10 items): Focused on students' understanding of laws, rights, responsibilities, and democratic institutions.
2. Civic Behavior (10 items): Assessed personal behavior such as public etiquette, environmental responsibility, and participation in civic life.

1) Table 1: Instrument Validity and Reliability

Validation Method

Expert Review

Description

Content validated by 3 university faculty members specializing in civic education and research methodology.

Pilot Testing

Conducted on a sample of 20 preservice teachers not included in the main study to refine items.

Reliability Coefficient

Cronbach's Alpha = 0.84, indicating high internal consistency of the Civic Sense Scale (CSS).

5. Data Collection Procedure

Data were collected in person using a self-administered Civic Sense Scale (CSS), which included two subscales: Civic Awareness and Civic Behavior, with 10 items each. Participants were informed of the purpose of the research and assured of anonymity and confidentiality to encourage honest responses. The data collection process was supervised by the researcher to ensure clarity and consistency in understanding the items.

Before full-scale data collection, the instrument was validated through expert review and pilot testing. The pilot testing involved 20 preservice teachers who were not part of the main sample. Based on their feedback, minor modifications were made to enhance clarity. The reliability of the scale, measured using Cronbach's Alpha, was found to be 0.84, indicating a high level of internal consistency.

Instrument	Number of Items	Validation Method	Reliability (Cronbach's Alpha)
Civic Sense Scale (CSS)	20 (10 + 10)	Expert review and pilot testing	0.84

6. Data Analysis and Interpretation

Data analysis was conducted using SPSS software. The goal was to compare mean scores of civic awareness and civic behavior between preservice teachers who received civic education and those who did not. For this purpose, independent samples *t*-tests were used, and the significance level was set at $p < 0.05$.

Table 2: Mean Differences in Civic Awareness

Group	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i> -value
With Civic Education	50	38.2	4.1	3.82	0.000
Without Civic Education	50	34.0	4.8		

Table 2 presents that the mean score of civic awareness for students who had taken civic education was 38.2, compared to 34.0 for those who had not. The *t*-value of 3.82 and the *p*-value of 0.000 indicate that this difference is statistically significant. The results indicate a statistically significant difference in civic awareness ($p = 0.000$), rejecting the null

hypothesis H_{01} . Preservice teachers who received civic education demonstrated higher levels of understanding of civic duties and legal frameworks than those who did not.

Table 3: Mean Differences in Civic Behavior

Group	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i> -value
With Civic Education	50	36.5	5.2	2.71	0.008
Without Civic Education	50	32.4	6.0		

Table 3 presents that the students who received civic education had a mean civic behavior score of 36.5, whereas the mean for the other group was 32.4. The *t*-value of 2.71 and the *p*-value of 0.008 reveal that the difference is statistically significant, thus rejecting H_{02} . The group with civic education reported more active engagement in pro-social behaviors, lawfulness, and public order practices. This indicates that civic education also plays a significant role in improving civic behavior.

6. Findings & Discussion

Findings

The results of the study show that preservice teachers who got civic education reveal statistically significant difference in both civic awareness and civic behaviour from those who did not. With a *t*-value of 3.82 and a *p*-value of 0.000, the mean score for civic awareness was significantly greater for students who had received civic education (38.2) than for those who had not (34.0). The result of this study rejects the null hypothesis (H_{01}), therefore showing that civic education improves knowledge of civic responsibilities with a *t*-value of 2.71 and a *p*-value of 0.008. Results also showed that students who got civic education had a higher mean civic behaviour score (36.5) than those who did not (32.4). This statistically significant variation causes the null hypothesis (H_{02}) to be rejected and implies that civic education helps to increase public order practices, lawfulness, and pro-social behaviour involvement. The research emphasizes generally the need of civic education in improving preservice teachers' civic consciousness and behaviour.

Discussion

The significant improvement in civic indicators aligns with studies by Malik and Saleem (2021), who reported civic education programs contribute to promoting tolerance and social order among Pakistani youth. These findings reinforce the idea that structured civic education positively shapes students' civic awareness and behavioral engagement.

The results demonstrate that civic education plays a substantial role in fostering civic sense among preservice teachers. Both civic awareness and civic behavior are significantly enhanced through structured academic exposure. As such, universities must adopt a proactive approach by institutionalizing civic education in their B.Ed. (Hons.) programs and integrating experiential, value-based learning to prepare socially responsible educators.

Moreover, civic education seems to provide the cognitive and behavioral tools necessary for preservice teachers to navigate the political, environmental, and cultural complexities of modern society. This capacity is essential not just for classroom instruction but for community leadership as well. Civic education appears to not only transfer knowledge but also mold behavior demonstrated by improvements in responsible actions such as following traffic rules, keeping public spaces clean, and engaging in volunteerism. These behaviors are critical in a developing democracy like Pakistan, where civic sense is often undermined by limited awareness or weak enforcement mechanisms (UNDP, 2023).

7. Conclusion and Recommendations

Conclusion

Civic education plays an important role in improving both civic awareness and civic behavior among preservice teachers. The study's findings clearly indicate that civic education enhances preservice teachers' civic awareness and conduct. Those who received civic education showed a more deep awareness of civic responsibilities, legal systems, and society processes.

They also demonstrated higher levels of civic conduct, such as involvement in pro-social activities, obedience to laws, and commitment to maintaining public order. The statistically significant differences between the two groups support the notion that civic education promotes responsible and active citizenship among preservice teachers.

Recommendations

In light of the study's findings, several key recommendations are proposed to enhance the role of civic education in fostering civic sense among preservice teachers.

1. Civic education should be integrated as a compulsory component in teacher education curricula across all public universities in Pakistan.
2. Institutions should incorporate experiential learning modules, including field visits to public institutions, mock parliaments, community engagement initiatives, and Model United Nations (MUNs), to bridge the gap between theoretical learning and real-world application.

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Disclaimer

The views and opinions expressed in this paper are solely those of the author and do not necessarily reflect the official stance of any affiliated institution. Dr. Bazgha Saleem Khan successfully completed her Ph.D. in October 2024 from the Department of STEM Education at Lahore College for Women University, Jail Road, Lahore, Pakistan. She holds an M.Phil. degree from Bahauddin Zakariya University, Multan, Punjab, and a Master's degree in Early Childhood Education from the Institute of Education and Research (I.E.R.), University of the Punjab, Lahore. Her research interests include the growing importance of regime change in education, cooperative and activity-based learning methods, ubiquitous learning, online learning readiness, and the development of the Situated Learning Model.

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