

## Research Article

# Examining Educational Research's Contribution to Civic Engagement in Public Decision Making: A Bibliometric Overview

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**Abstract.**

This research provides a complete bibliometric analysis of scholarly publications on civic engagement in public decision-making between 2014 and 2024. Using the PRISMA methodology, the study reduced a corpus of 208 papers to 136 for further examination. The study examines how educational research enables citizens to participate in public decision-making. The data demonstrate an increasing trend in research that focuses on incorporating civic engagement activities into educational curricula. One major finding emphasizes the positive impact of civic engagements initiatives on instilling civic duty and decision-making in pupils. This increases the chance of future community involvement and informed voting. The study also identifies a gap in research on effective strategies for reaching underserved communities. The findings can be used to create curricula that provides students with the knowledge, skills, and confidence they need to actively shape their communities. Policymakers can use this knowledge to create educational initiatives that promote a culture of informed citizenship. Researchers acquire a platform for future research into bridging the equity gap in civic engagement education. Finally, this research emphasizes the critical importance of education in fostering a dynamic democracy.

**Keywords:** educational research's contribution, civic engagement, public decision making, bibliometric overview

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## 1. INTRODUCTION

Civic engagement, defined as citizens' active participation in creating public policy, is widely acknowledged as a pillar of good democracies [1]. Civic engagement has long been explored and promoted in educational research, with studies looking at the influence of civic learning opportunities, development through civic education, and the function of citizenship education [2, 3]. However, there is a dearth of understanding of how this research transforms into actual public decision-making [4]. Civic engagement in public decision-making is commonly regarded as a foundational component of

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democratic society [5]. Educational research has been essential in understanding and increasing civic engagement[3]. However, the full degree of this research's impact on public decision-making has yet to be determined [6]. The study intends to close this gap by undertaking a thorough bibliometric examination of available literature [7]. The importance of this research is highlighted by the need to get a better understanding of how educational research has influenced civic involvement, which will inform future educational programs and public policy [2].

Numerous prior studies have investigated the correlation between educational research and civic engagement, providing insights into the numerous aspects that lead to effective civic participation [8]. For example, several studies have examined the impact of civic learning opportunities on students' commitment to civic participation, the growth of citizens through civic education, and the function of citizenship education in developing civic engagement [9, 10]. While these studies have produced useful insights, there is an obvious need for a complete evaluation of educational research and its specific contributions to civic involvement in public decision making [11]. The paper's novelty stems from a unique method to doing a bibliometric analysis, which will give a systematic and quantitative study of the trends, patterns, and impact of educational research on civic involvement. This study uses the PRISMA method to identify major themes, influential publications, and interdisciplinary relationships in the literature [12]. This work makes a significant contribution by providing a complete overview of the present state of research on civic involvement in public decision making, which will drive future educational programs and public policy.

The primary objective of this paper is to provide a detailed and systematic examination of current educational research on civic involvement in public decision making. This study aims to provide significant insights for educators, policymakers, and researchers, allowing them to improve the integration of educational efforts that promote civic engagement and participatory citizenship. This study not only give the results of the bibliometric analysis, but also provide implications for the field of education, contributing to the continuing discussion about civic engagement and public decision making. Policymakers can use this knowledge to create educational initiatives that promote informed citizenry. Researchers acquire a foundation for future research on reducing the equity gap in civic engagement education. Finally, this study emphasizes the critical importance of education in fostering a thriving democracy.

## 2. METHOD

The study examined 208 papers on the subject of civic involvement and educational research. The selection of a large number of papers is required to offer a comprehensive and representative review of the available literature, allowing for a clear knowledge of the trends, patterns, and influence of educational research on civic participation. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) technique will be used to select and exclude relevant articles from the bibliometric analysis [13–15]. This method is well-known for its methodical and transparent approach to book selection, which ensures the rigor and replicability of the study process [16]. The inclusion and exclusion criteria will be clearly established to guide the article selection process, thus increasing transparency and trustworthiness. The study used a rigorous selection process based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) technique to achieve a complete and representative review of scholarly papers on civic involvement in public decision-making from 2014 to 2024. PRISMA provides a systematic and transparent framework for literature selection, increasing the replicability of the study’s results.

TABLE 1: Inclusion and exclusion criteria.

No.	Inclusion Criteria	Exclusion Criteria
1.	Peer-reviewed scholarly articles produced between 2014 and 2024.	Book chapters, editorials, conference proceedings, and non-academic works.
2.	Articles that specifically investigate the correlation between educational research and civic engagement in public decision-making.	Title and abstract screening identify articles that are not immediately relevant to the research topic.
3.	Articles are written in English.	Articles written in languages other than English.

Using these criteria, the initial selection of 208 articles identified by Scopus was narrowed. Following the PRISMA technique, this selection procedure will yield a final list of 136 publications for in-depth bibliometric study. A PRISMA flowchart was used to visually illustrate the article selection process, offering transparency into the number of articles identified, screened, included, and excluded at each stage. This method improves the clarity and reliability of the study’s methodology. After a final selection of 136 articles is made, VOSviewer, a strong bibliometric visualization software, is used to do the analysis [17]. VOSviewer enables the development of maps that depict the associations between keywords and authors in the selected literature [18]. VOSviewer can identify major themes, influential publications, and interdisciplinary links in the fields

of civic engagement and educational research by analyzing keyword co-occurrence and authorship patterns [19].

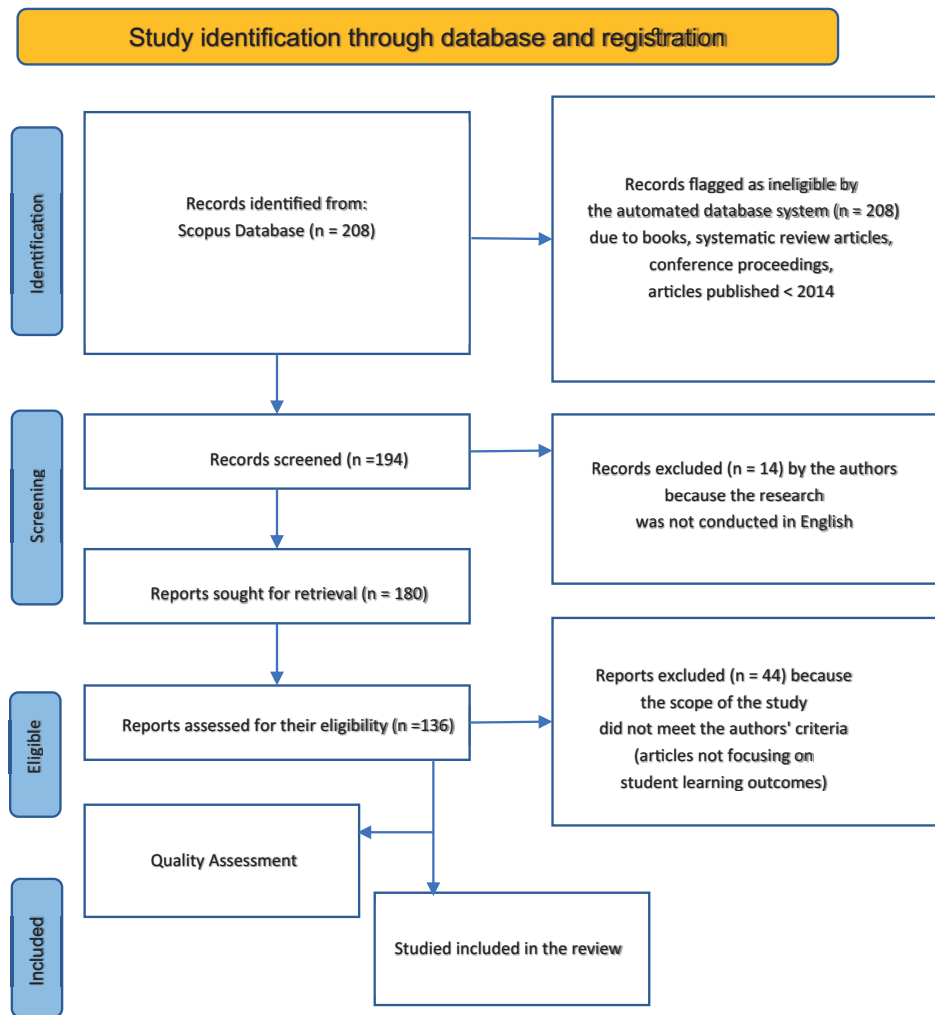
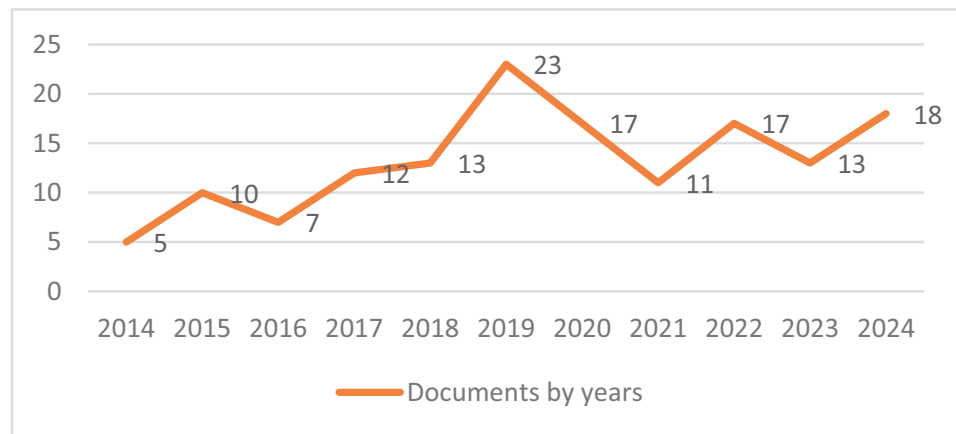


Figure 1: The PRISMA methods for civic engagement and public decision-making Results.

### 3. RESULTS AND DISCUSSIONS

The publishing pattern by year (Figure 2) demonstrates a persistent interest in the issue, with a peak in 2018 and continued publication in subsequent years. This implies an increasing appreciation for the value of civic engagement and the role of education in creating it. However, a deeper examination of the topics demonstrates a shift in concentration over time. Early articles (pre-2018) frequently investigated the impact of traditional educational techniques, such as civics classes, on civic participation. More recent papers (after 2018) explore novel techniques to encouraging active participation in community decision-making, such as participatory research and civic education.



**Figure 2:** Civic engagement and public decision-making publication years.

The geographical distribution of research (Table 2) showcases a fascinating shift. While the United States historically dominated the field, a rise in publications from Italy and the United Kingdom indicates a growing international focus on civic engagement education. This trend underscores the need for cross-cultural collaboration and the exchange of best practices in fostering active citizens around the world.

TABLE 2: Country total citation and production.

R	Period 1 (2014-2019)	P	Periode 2 (2020-2024)	P
1	United States	35	United States	18
2	United Kingdom	9	Italy	8
3	Australia	5	United Kingdom	8
4	Canada	5	Australia	5
5	Portugal	5	Russian Federation	5
6	Spain	5	Spain	5
7	Netherlands	4	Netherlands	3
8	Germany	3	Kazakhstan	2
9	Italy	3	Kenya	2
10	Belgium	2	South Korea	2

Note: R = Position in the Ranking, P = production of articles

Collaborations among influential authors help to enhance the multidisciplinary aspect of the research. The broad expertise of writers such as Cai, G., Chekmenev, D.S., and Hermans, K., among others, adds to the literature’s richness. The collaborative activities highlighted in the bibliometric study, as shown in Table 3, illustrate a shared commitment to expanding knowledge in civic engagement.

The interdisciplinary nature of the research is further emphasized by the collaborative efforts of influential authors (Table 3). Scholars from diverse backgrounds, including Cai

TABLE 3: Author's total publication.

R	Period 1 (2014-2019)	P	Periode 2 (2019-2024)	P	Total	P
1	Cai, G	3	Chekmenev, D.S.2	2	Cai, G.	3
2	Hermans, K	2	Ikiz Kaya, D.2	2	Hermans, K	2
3	Jylhä, A	2	Kassen, M.2	2	Jylhä, A	2
4	Nijman, H.	2	Pereira Roders, A.2	2	Nijman, H.	2
5	Sun, F.	2	Pintossi, N.2	2	Sun, F.	2
6	Agarwal, R.1	1	Abrams, L.S.1	1	Chekmenev, D.S.2	2
7	Ahern, J.1	1	Aceros, J.C.1	1	Ikiz Kaya, D.2	2
8	Albrecht, J.1	1	Aedo, I.1	1	Kassen, M.2	2
9	Alexander, R.1	1	Alcaraz, M.1	1	Pereira Roders, A.2	2
10	Alizadeh, T.1	1	Alexander, R.1	1	Pintossi, N.2	2

Note: R = Position in the Ranking, P = production of articles

(Education), Chekmenev (Political Science), and Hermans (Psychology), contribute to the richness of the literature. These collaborations highlight the importance of integrating various disciplines to develop a comprehensive understanding of how educational initiatives can cultivate civic engagement. Analyzing publication venues and patterns offers insight into the diffusion of research in civic participation. The importance of the ACM International Conference Proceeding Series and other channels implies that these platforms are important venues for scholarly discussion. This information, as shown in Table 4, assists researchers, educators, and policymakers in identifying influential routes for spreading and accessing the most recent discoveries in the field.

The VOSviewer network visualization (Figure 3) provides useful insights into major study issues. One prominent cluster emphasizes the importance of citizen engagement in promoting educational contribution in public decision-making. Another cluster investigates the impact of technology on civic involvement, specifically how online platforms and social media may empower individuals. These visualizations serve as a road map for educators and policymakers, allowing them to discover known study areas while also exploring emergent themes in the field.

The overlay representation (Figure 4) enhances the analysis by include the publication year. Color-coding nodes allows us to track the evolution of study themes. For example, the importance of “community engagement” has grown in recent years, reflecting a greater emphasis on preparing students to examine information and make educated

TABLE 4: The most popular publisher.

R	Publisher	P for Period 1 (2014-2019)	P for Period 2 (2019-2024)	P Total
1	ACM International Conference Proceeding Series	8	2	10
2	Cities	2	1	3
3	Conference On Human Factors In Computing Systems Proceedings	2	1	3
4	Evidence And Policy	2	1	3
5	IEEE International Professional Communication Conference	2	1	3
6	Journal Of Environmental Planning And Management	2	1	3
7	Lecture Notes In Computer Science Including Subseries Lecture Notes In Artificial Intelligence And Lecture Notes In Bioinformatics	2	1	3
8	Lecture Notes In Networks And Systems	2	1	3
9	Public Administration And Information Technology	2	1	3
10	Public Administration Review	2	1	3

Note: R = Position in the Ranking, P = production of articles



Figure 3: Network Visualization.

judgments. This knowledge is critical for educators who may adjust curricula to meet these changing research goals.

Density visualization (Figure 5) identifies areas of concentrated research activity as well as potential gaps. Dense clusters may reflect well-established topics such as







abilities required for effective civic engagement. The overlay display (Figure 3) improves our knowledge by identifying the introduction of new themes throughout time. For example, a recent spike in academic activity related to the integration of technology in civic education indicates a viable option for further inquiry.

## 4. Discussion

Of the 197 articles obtained, the top 3 most cited are from 2007, 2013, and 2017. The first article is by [20] with a total of 235 citations, which reports that issues regarding learning in and from science laboratories and laboratories in the context of chemistry learning are still relevant for research and development and implementation problems. The crucial role of civic engagement in public decision-making cannot be emphasized. In democratic countries, civic engagement is the foundation, assuring citizens' active participation in making policies that influence their lives. The outcomes of this bibliometric analysis highlight the importance of educational research in promoting civic involvement [21]. As markers such as independence and resilience are highlighted as "beginning to develop," there is a clear need for focused interventions in educational endeavors to further enhance these features [9]. Educators who have gained insights from this study must integrate the findings into curriculum creation. Educators can better prepare students for active engagement in public decision-making processes by concentrating on aspects that have the potential for growth, such as independence and resilience [22]. Policymakers, guided by the recognized trends and collaborative patterns, must realize civic engagement's worldwide scope [23]. The changing terrain necessitates policies that not only address local concerns, but also include international considerations [24]. Interdisciplinary partnerships among notable authors highlight the need for a comprehensive strategy to civic participation that crosses disciplinary boundaries [25]. This study serves as a wake-up call for educators and policymakers. The pressing issue is to recognize the changing dynamics of civic involvement, as well as the critical function of educational research. By paying attention to these results, educators and policymakers may collaborate to create informed, responsible, and actively engaged citizens, assuring the viability of democratic societies [26]. This study advances previous research by using a novel method to bibliometric analysis. While earlier study has looked into the link between educational research and civic engagement, the thorough analysis offered here broadens our understanding [27].

The identified themes, prominent publications, and multidisciplinary links add to the current discussion about civic participation in public decision-making. The findings, as

depicted in the tables and figures, have immediate implications for education and public policy. Educators can use the discovered patterns to improve the integration of civic education activities, ensuring they are in line with the changing landscape of research [28]. Policymakers might use this bibliometric data to develop policies that address the shifting dynamics of civic involvement. As a result, this study serves as an important link between research and practice, allowing stakeholders to make educated decisions about promoting civic engagement and participatory citizenship [29]. Finally, the use of VOS Viewer in this bibliometric analysis improves our knowledge of educational research's impact on civic involvement. The network, overlay, and density visualizations together provide a dynamic depiction of the field, highlighting its evolution, collaborative networks, and theme concentrations. By leveraging the power of visualization, stakeholders may navigate the complicated scholarly terrain, contributing to the development of informed educational efforts and public policies that promote citizen engagement [30].

## 5. CONCLUSION

Since 2014, there has been a steady increase in scientific interest in civic engagement and public decision making towards educational contribution. This bibliometric analysis, using VOSviewer for deep exploration, explores the role of educational research in fostering civic engagement, which is crucial for healthy democracies. The findings provide valuable insights for educators, policymakers, and researchers, including a shift from traditional methods to active learning. Research is increasingly looking into the role of participatory research and civic education in supporting community decision-making. This trend emphasizes the need of educators incorporating these tactics into curriculum development, thereby providing students with the skills and confidence they need to be active citizens. Network visualization highlights a key theme: the importance of community engagement. Educational initiatives that teach students how to assess information objectively and make educated decisions might help them negotiate the intricacies of public decision-making. This emphasis corresponds to the underdeveloped component of "independence" found in the research, advising instructors to integrate activities that help students to assess arguments from several perspectives. The geographical distribution of research highlights the global aspect of civic involvement. The rise of publications from outside the United States indicates an increasing international focus. Given this tendency, policymakers must acknowledge the value of cross-cultural

collaboration and implementing international best practices into educational efforts. Collaborations among scientists from other disciplines, such as education, political science, and psychology, help to expand the landscape. This multidisciplinary approach is critical for gaining a thorough knowledge of how educational programs might promote civic engagement. The overlay visualization emphasizes the formation of new collaboration patterns, such as research teams that combine educational experience with psychological insights to investigate the development of social-emotional abilities required for effective civic involvement. Finally, this study emphasizes the importance of educational research in promoting civic engagement, which is a foundational component of healthy democracies. Using the insights gained from this analysis, educators, policymakers, and researchers may collaborate to produce a generation of knowledgeable, responsible, and actively engaged citizens capable of shaping the future of their communities.

## References

- [1] Dekker P. From Pillarized Active Membership to Populist Active Citizenship: The Dutch Do Democracy. *Voluntas*. 2019;30(1):74–85.
- [2] Campagna D, Caperna G, Montalto V. Does Culture Make a Better Citizen? Exploring the Relationship Between Cultural and Civic Participation in Italy. *Soc Indic Res*. 2020;149(2):657–86.
- [3] Saud M. Civic engagement, youth socialisation and participation in public spheres in Indonesia. *Child Youth Serv Rev*. 2020;119:105669.
- [4] Geekiyanage D, Fernando T, Keraminiyage K. Assessing the state of the art in community engagement for participatory decision-making in disaster risk-sensitive urban development. *Int J Disaster Risk Reduct*. 2020 Dec;51:101847.
- [5] C. Fitzgerald, S. McCarthy, F. Carton, Y.O. Connor, L. Lynch, and F. Adam, “Citizen participation in decision-making: can one make a difference?,” *Journal of Decision Systems*. vol. 25, no. sup1, pp. 248–260, 2016. <https://doi.org/10.1080/12460125.2016.1187395>.
- [6] Macaulay B, Reinap M, Wilson MG, Kuchenmüller T. Integrating citizen engagement into evidence-informed health policy-making in eastern Europe and central Asia: scoping study and future research priorities. *Health Res Policy Syst*. 2022 Jan;20(1):11.
- [7] Linnenluecke MK, Marrone M, Singh AK. Conducting systematic literature reviews and bibliometric analyses. *Aust J Manag*. 2020;45(2):175–94.
- [8] Torney-Purta J, Cabrera JC, Roohr KC, Liu OL, Rios JA. Assessing Civic Competency and Engagement in Higher Education: Research Background, Frameworks, and

- Directions for Next-Generation Assessment. *ETS Res Rep Ser.* 2015;2015(2):1–48.
- [9] Voight A, Torney-Purta J. A Typology of Youth Civic Engagement in Urban Middle Schools. *Appl Dev Sci.* 2013;17(4):198–212.
- [10] Pang H, Qin K, Ji M. Can social network sites facilitate civic engagement? Assessing dynamic relationship between social media and civic activities among young people. *Online Inf Rev.* 2022;46(1):79–94.
- [11] Neundorf A, Niemi RG, Smets K. The Compensation Effect of Civic Education on Political Engagement: How Civics Classes Make Up for Missing Parental Socialization. *Polit Behav.* 2016;38(4):921–49.
- [12] Li J, Krishnamurthy S, Pereira Roders A, Van Wesemael P. Community participation in cultural heritage management: A systematic literature review comparing Chinese and international practices. *Cities.* 2020;96:102476.
- [13] Page MJ, Moher D. Evaluations of the uptake and impact of the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) Statement and extensions: a scoping review. *Syst Rev.* 2017 Dec;6(1):263.
- [14] Huang Z, Chen H, Liu Z. The 100 top-cited systematic reviews/meta-analyses in central venous catheter research: A PRISMA-compliant systematic literature review and bibliometric analysis. *Intensive Crit Care Nurs.* 2020 Apr;57:102803.
- [15] Banerjee S, Khatri N, Kaur A, Elhence A. Bibliometric Analysis of Top 100 Systematic Reviews and Meta-analyses in Orthopaedic Literature. *Indian J Orthop.* 2022 Feb;56(5):762–70.
- [16] Panic N, Leoncini E, de Belvis G, Ricciardi W, Boccia S. Evaluation of the endorsement of the preferred reporting items for systematic reviews and meta-analysis (PRISMA) statement on the quality of published systematic review and meta-analyses. *PLoS One.* 2013 Dec;8(12):e83138.
- [17] Sood SK, Kumar N, Saini M. Scientometric analysis of literature on distributed vehicular networks: VOSViewer visualization techniques. *Artif Intell Rev.* 2021;54(8):6309–41.
- [18] Ding X, Yang Z. Knowledge mapping of platform research: a visual analysis using VOSviewer and CiteSpace. *Electron Commerce Res.* 2022;22(3):787–809.
- [19] Huang T, Zhong W, Lu C, Zhang C, Deng Z, Zhou R, et al. Visualized Analysis of Global Studies on Cervical Spondylosis Surgery: A Bibliometric Study Based on Web of Science Database and VOSviewer. *Indian J Orthop.* 2022 Feb;56(6):996–1010.
- [20] Hofstein A, Mamlok-Naaman R. The laboratory in science education: the state of the art. *Chem Educ Res Pract.* 2007;8(2):105–7.

- [21] Ponce BA. "Dataset for Citizen Science as a Relevant Approach to the Challenges of Complex Thinking Development in Higher Education," <https://zenodo.org/doi/10.5281/zenodo.10091107>, (2023).
- [22] Cegarra-Navarro JG, Vătămănescu EM, Dabija DC, Nicolescu L. The role of knowledge and interpersonal competences in the development of civic and public engagement and entrepreneurial intention. *Int Entrep Manage J*. 2024;20(1):189–213.
- [23] Torney-Purta J, Amadeo JA. The Contributions of International Large-Scale Studies in Civic Education and Engagement. In: Von Davier M, Gonzalez E, Kirsch I, Yamamoto K, editors. *The Role of International Large-Scale Assessments: Perspectives from Technology, Economy, and Educational Research*. Dordrecht: Springer Netherlands; 2013. pp. 87–114.
- [24] Lenzi M, Vieno A, Sharkey J, Mayworm A, Scacchi L, Pastore M, et al. How school can teach civic engagement besides civic education: the role of democratic school climate. *Am J Community Psychol*. 2014 Dec;54(3-4):251–61.
- [25] Alscher P, Ludewig U, McElvany N. Civic Education, Teaching Quality and Students' Willingness to Participate in Political and Civic Life: Political Interest and Knowledge as Mediators. *J Youth Adolesc*. 2022 Oct;51(10):1886–900.
- [26] Boland JA. Strategies for Enhancing Sustainability of Civic Engagement: Opportunities, Risks, and Untapped Potential. In: McIlrath L, Lyons A, Munck R, editors. *Higher Education and Civic Engagement*. New York: Palgrave Macmillan US; 2012. pp. 41–59.
- [27] Deimel D, Hahn-Laudenberg K, Ziemes JF, Abs HJ. Civic education and social interactions at school as drivers of intended electoral participation: similarities and differences in four European school systems. *Educ Citizsh Soc Justice*. 2024;19(1):37–57.
- [28] Weinberg J. Civic education as an antidote to inequalities in political participation? New evidence from English secondary education. *Br Polit*. 2022;17(2):185–209.
- [29] Chankseliani M, Qoraboyev I, Gimranova D. Higher education contributing to local, national, and global development: new empirical and conceptual insights. *High Educ*. 2021;81(1):109–27.
- [30] Algharabat RS, Rana NP. Social Commerce in Emerging Markets and its Impact on Online Community Engagement. *Inf Syst Front*. 2021;23(6):1499–520.