SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2025
ORGANIZATION AND MANAGEMENT SERIES NO. 216

A BIBLIOMETRIC ANALYSIS OF THE THEORY OF PLANNED BEHAVIOR IN THE CIRCULAR ECONOMY

Saleh Md ARMAN

Poznan University of Economics and Business; saleh.arman@phd.ue.poznan.pl, salehmd.arman@gmail.com, ORCID: 0000-0002-8970-7963

Purpose: Despite the increasing relevance of the Theory of Planned Behavior (TPB) in Circular Economy (CE) research, its application and related trends remain insufficiently explored. This study aims to systematically assess the use of TPB within CE literature, focusing on its evolution and identifying key research gaps.
Design/methodology/approach: Conducting a bibliometric review of Scopus data from 2016-2024, it examines metrics such as publication counts and citation trends, while employing science mapping techniques to uncover collaborative networks and thematic clusters
Findings: The findings reveal a growing interest in TPB's applications, especially in areas such as stakeholder relationships, waste management, and recycling practices.
Research limitations/implications: The study also highlights significant research gaps, particularly the need for more empirical investigations and the integration of theoretical, practical, social, and policy implications. Ultimately, this research enhances the understanding of TPB's role in promoting sustainable behaviors, offering a foundational framework for future research at the intersection of TPB and CE.
Practical implications: Organizations should promote environmental commitment, educate stakeholders on barriers to CE adoption, and integrate waste management strategies to advance collaborative efforts and position themselves as sustainable leaders.
Social implications: Policymakers and community initiatives are essential for promoting CE solutions by fostering sustainable practices through targeted incentives, public awareness, and education to drive environmental sustainability and community engagement.
Originality/value: The paper provides researchers with a clear overview and inspire future TPB-based studies in CE. The study used performance analysis to determine contributory journals and researchers and availed bibliometric science mapping tools and gap analysis to identify influential themes and highlighted emerging trends being considered.
Keywords: Bibliometric analysis, circular economy, consumer behavior, gap typology, theory of planned behavior.
Category of the paper: Literature review.

1. Introduction

The circular economy (CE) is an environmental management strategy that aims to minimize waste, conserve natural resources, ensure energy efficiency, benefit businesses and society with enhanced supply chain management systems, safeguard resource stability in the economy, and generate new job opportunities (Singh et al., 2018). CE stresses the cooperative and impactful relationships of human interactions in fostering sustainable business models in replacing traditional take-make-waste systems (Klimas, Ratajczak-Mrozek, 2024).

To understand how CE awareness interacts with sustainable behaviors influenced by external factors, the Theory of Planned Behavior (TPB) is a well-established framework as it helps predict and guide behavior while supporting social, economic, and environmental sustainability (Godinho Filho et al., 2024; Singh et al., 2018).

In this perspective, many studies use the original (Ajzen, 1991) and extended version of TPB, either combining with other theories (Godinho Filho et al., 2024) or considering additional variables (Moreno-Miranda, Dries, 2024), to make the behavioral explanation more meaningful and interactive (Singh et al., 2018).

As CE researchers increasingly utilize the TPB to predict behavior, assessing the evolution and current applications of TPB within CE research is vital for shaping future studies in different fields. However, how to determine the progress of the TPB's application and its current status in CE adoption needs to be clarified. Although interest in TPB and CE has led to a surge in scholarly literature, there is still a lack of academic summaries on their application. Most existing reviews focus separately on either TPB (Fauzi et al., 2024; Si et al., 2019) or CE (Rabbi, Amin, 2024; Razmjooei et al., 2024). No comprehensive review to date provides a state-of-the-art overview of TPB and CE, despite the significance of such retrospectives for understanding emerging research fields (Arman, Ahmed, 2021; Donthu et al., 2021). In this perspective, bibliometric analysis aids in understanding emerging fields by identifying research trends, mapping intellectual networks of topics and authors, and highlighting influential publications, allowing researchers to track the evolution of topics and recognize underexplored areas for initiating further study (Mukherjee et al., 2022). Prior studies on bibliometric analysis have focused on applying TPB to environment-related concepts such as pro-environmental behavior (Yuriev et al., 2020) and environmental science (Si et al., 2019). They found that this combination facilitates advancing theoretical progress and managerial decision making in resolving environmental problems. This finding determines that combining TPB with other environmental issues, such as CE, could unleash new avenues that helps to design environmental strategies in achieving sustainable solutions.

The study's objective is to examine publication trends, key academic contributors, and evolving research themes to gain insights and predict future developments of TPB based studies in CE. To achieve this the study conducted a bibliometric review identifying key themes

and foundational research areas of TPB applications in CE, offering a framework for future research exploration. The research questions, which are crucial for understanding the current state and future research directions of the field, are as follows.

RQ1: What are the most researched topics studied with the most significant frequency and are currently attracting the most attention in TPB framework for CE?

RQ2: What are the research gaps in the current literature?

RQ3: What are the key emerging research trends that could pave the way for unexplored avenues of inquiry in this field, ultimately advancing CE solutions?

The paper's novelty aims to provide researchers with a clear overview and inspire future TPB-based studies in CE. The study used performance analysis to determine contributory academic journals and impactful researchers. The study availed bibliometric science mapping tools to identify influential themes and highlighted emerging trends being considered. Based on the findings, the study located research gaps using Miles (2017) gap typology and suggested future research directions.

The chapters of this manuscript are as follows. Chapter 2 provides a literature overview of TPB and CE. Chapter 3 explains the research methods. Chapter 4 discusses the findings with research gaps, limitations and future research direction. The manuscript ends with a conclusion chapter.

2. An overview of the literature

Research on the CE is essential for promoting sustainable development at all levels by reducing waste, improving resource efficiency, and fostering business innovation (Godinho Filho et al., 2024). D'Amato et al. (2017) and Stegmann et al. (2020) emphasize the significance of public awareness and individual commitment to adopting sustainable practices in determining the CE effectiveness at the individual level. Similarly, Belmonte-Ureña et al. (2021) underscore the role of public engagement in achieving sustainable development goals, while Boesen et al. (2019) highlight how raising environmental awareness leads individuals to avoid behaviors harmful to the environment consciously.

In the TPB, an individual's intention is primarily influenced by three factors: attitude (ATT), subjective norms (SN), and perceived behavioral control (PBC), each of which is rooted in specific belief structures: behavioral beliefs, normative beliefs, and control beliefs (Ajzen, 1991; Witek et al., 2023). ATT refers to an individual's evaluation of a specific behavior, SN reflects the perceived expectations of significant others regarding the behavior, and PBC denotes the perceived ease or difficulty of performing the behavior (Ajzen, 1991; Jia et al., 2024). The Theory of Planned Behavior (TPB) has been extensively validated as a robust

framework for predicting pro-environmental behaviors, such as recycling (Wang et al., 2019), green purchasing (Xu et al., 2020), and waste separation (Hu et al., 2021).

Using TPB in CE, Jia et al. (2024) noted that ATT positively influences on CE (Wang et al., 2019), though some report non-significant effects, such as in plastic return in Pakistan (Khan et al., 2019) and fast-fashion consumption in Italy (Cesarina Mason et al., 2022). Similarly, SN and PBC show mixed results, with SN being a key factor in some contexts, like Hong Kong and Beijing (Wan et al., 2012; Tong et al., 2023) while PBC generally has a positive effect on CE, though some studies found it non-significant (Aboelmaged, 2021). They (Jia et al., 2024) further noted that given the complexity of consumption behaviors in CE adoption, researchers propose that the TPB could provide stronger explanatory power when complemented by additional situational factors.

3. Research methods

To achieve the aim, a systematic literature review is a suitable method for this study because it systematically analyzes existing research to uncover publication trends, identify key contributors, and highlight evolving themes, thereby providing a comprehensive understanding of the current state and future directions of TPB studies in CE (Mukherjee et al., 2022; Paul et al., 2021). The study opted for bibliometric analysis among the domain-based options because it provides qualitative and quantitative insights into a field's bibliometric and intellectual structure by examining the social and structural relationships between various research components (Donthu et al., 2021). For the bibliometric analysis, the study chose the Scopus database. Scopus is one of the largest and most comprehensive multidisciplinary databases of peer-reviewed literature, widely used by researchers from different fields, and is highly regarded for its credibility and effectiveness in conducting systematic reviews (Bosman et al., 2006; Jacob et al., 2024; Vieira, Gomes, 2009). The study avails PRISMA 2020 protocol for conducting the SLR (Page et al., 2021). The study presents the protocol in Figure 1.

In the identification stage, the study searched on Scopus using the TITLE-ABS-KEY command and found 60 documents ranging from 2016 to 2024 to 20th September 2024. Each selected record contained authors, country/regions, article title, year, source title, citation count, abstract, author keywords, index keywords, and references. In the screening stage, journals on business, economics, and the environment subject area were considered. Moreover, these articles were written in English and were in the final stage. In the eligibility stage, the study read abstracts for checking the relevance on the subject area and included 53 papers for bibliometric analysis.

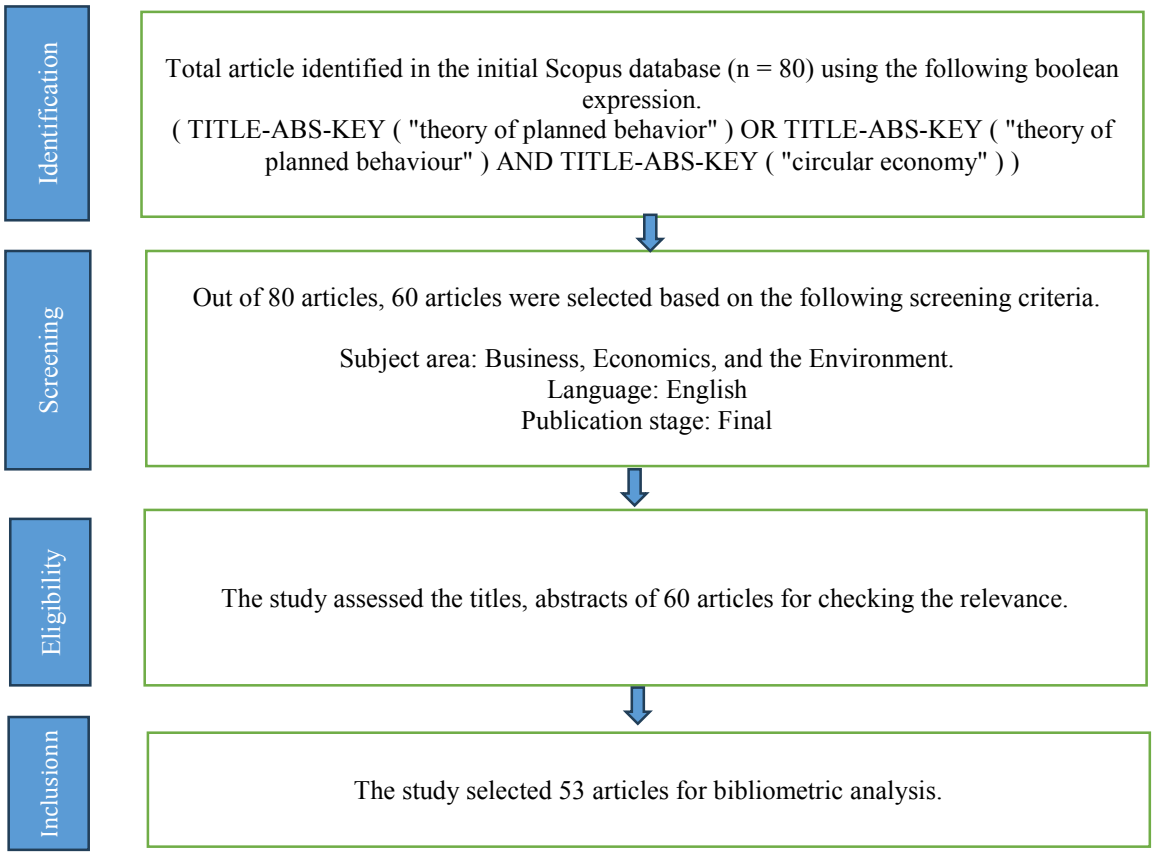

Figure 1. PRISMA 2020 protocol of the study.

Source: Created by the author and adapted from Page et al. (2021).

Bibliometric analysis relies on two essential methods: performance analysis and science mapping. Performance analysis assesses the productivity and impact of research using metrics such as publication counts, citation rates, and top journals (Aria, Cuccurullo, 2017; Donthu et al., 2021). Science mapping, on the other hand, examines the intellectual relationships within a field through analyses like co-authorship, bibliographic coupling, and keyword co-occurrence (Donthu et al., 2021). In the co-occurrence analysis, the study used the following formula for assessing average publication year (APY).

$$APY = \frac{\Sigma(ti_i * n_i)}{\Sigma t_i} \quad (1)$$

According to the formula, if a topic t appears in two articles (n = 2) in 2020, three articles in 2021, and five articles in 2022, then its APY value is 2021.3

$$[(2X2020) + (3X2021) + (5X2022)/10\ ].$$

The study utilized VOSviewer for science mapping to better understand research trends, collaboration networks, and thematic clusters. After that, Miles's (2017) gap typology was used to locate gaps in the prior literature, e.g., Arman & Mark-Herbert (2024). The gap typology contains the following gaps: (a) Evidence Gap; (b) Knowledge Gap; (c) Practical-Knowledge Conflict Gap; (d) Methodological Gap; (e) Empirical Gap; (f) Theoretical Gap and (g) Population Gap.

4. Results of the research

4.1. Performance analysis

The performance analysis offers insights into the development and distribution of using TPB in CE research by examining publication counts, citation numbers, leading publication sources, and the most highly cited works. In Figure 2, the upward publication trend suggests that using TPB in CE will attract growing interest from researchers, especially in determining the challenge of balancing financial, environmental, and social goals in business activities to maximize value.

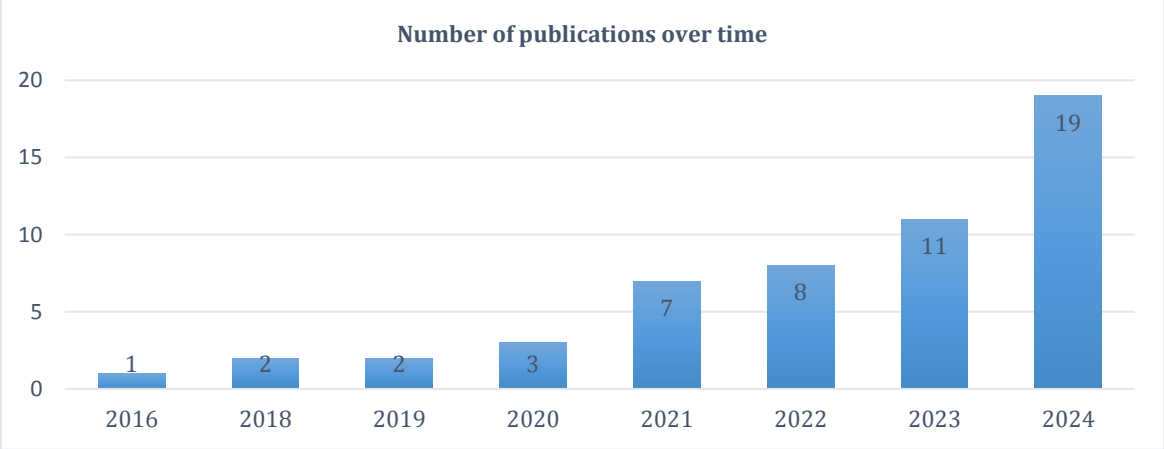

Figure 2. Number of publications on TPB based CE research.

Source: Author's creation based on Scopus data.

Table 1 and 2 presents an overview of the top 5 source titles and highly cited papers on applying TPB in CE research. Two of the highly cited papers belong to the Journal of Cleaner Production, which also has the highest number of documents and citations.

Table 1.
Overview of source title

Source title based on number of published articles			
Title	**Documents**	**Total citation**	**Average citation per document**
Journal of Cleaner Production	10	557	55.7
Sustainability Switzerland	6	53	8.83
Resources Conservation and Recycling	5	396	79.2
Technological Forecasting and Social Change	2	53	26.5
Waste Management	2	31	15.5

Source: Author's creation based on Scopus data.

Table 2.
Highly cited papers

Title	Authors	Source	Citation	Average citation per year
From the table to waste: an exploratory study on behaviour towards food waste of Spanish and Italian youths.	Mondéjar-Jiménez, J.-A., Ferrari, G., Secondi, L., Principato, L. (2016)	Journal of Cleaner Production	209	26.12
Green product attributes and green purchase behavior: a theory of planned behavior perspective with implications for circular economy	Sharma, A., Foropon, C. (2019)	Management Decision	151	30.2
Developing an extended theory of planned behavior model to explore circular economy readiness in manufacturing MSMES.	Singh, M.P., Chakraborty, A., Roy, M. (2018)	Resources, Conservation and Recycling	150	25
Construction and demolition waste recycling: investigating the role of theory of planned behavior, institutional pressures and environmental consciousness.	Jain, S., Singhal, S., Jain, N.K., Bhaskar, K. (2020)	Journal of Cleaner Production	115	28.75
Assessing the determinants of intentions and behaviors of organizations towards a circular economy for plastics.	Khan, O., Daddi, T., Slabbinck, H., Kleinhans, K., Vazquez-Brust, D., De Meester, S. (2020)	Resources, Conservation and Recycling	95	23.75

Source: Author's creation based on Scopus data.

4.2. Science mapping

The science mapping analysis begins with a co-authorship analysis to explore the collaboration between researchers, measured by the number of jointly authored publications applying TPB to CE research (Bota-Avram, 2023). Table 3 lists the top authors from 53 documents, ranked by the total link strength of their co-authorship among the 201 authors.

Table 3.
Top 5 most collaborative authors

Author name	Document	Citations	Total link strengths
Khan, Owais	3	114	8
Daddi, Tiberio	2	111	8
Tan	1	38	8
Li, Fan	1	38	8
Long, Weitong	1	38	8

Source: Author's creation based on Scopus data.

From the co-authorship analysis, significant contributions have emerged. Firstly, the decision makers take CE solutions irrespective of all types of organizations, as evidenced by the work of Khan et al. (2020). Secondly, their contributions have shown that CE solutions can enhance stakeholder relationships (Khan et al., 2023). Third, the collaborative efforts of the next three authors have examined the acceptance of manure management as a CE solution in

agro-economic systems, considering user intention alongside TPB constructs, as well as education, experience, and identity (Tan et al., 2021).

Bibliographic coupling encapsulates the thematic cluster based on seminal, niche, and recent knowledge in TPB applications in CE research. The study derived three research clusters.

Table 4.
Research themes based on bibliographic coupling

Theme	Authors	Title	Total citations
CE intention	Mondéjar-Jiménez et al. (2016)	From the table to waste: An exploratory study on behaviour towards food waste of Spanish and Italian youths.	209
	Sharma, A., Foropon, C. (2019)	Green product attributes and green purchase behavior: A theory of planned behavior perspective with implications for circular economy.	151
	Jain et al. (2020)	Construction and demolition waste recycling: Investigating the role of theory of planned behavior, institutional pressures and environmental consciousness.	115
Acceptance of Ce solutions	Singh et al. (2018)	Developing an extended theory of planned behavior model to explore circular economy readiness in manufacturing MSMEs, India.	150
	Khan et al. (2020)	Assessing the determinants of intentions and behaviors of organizations towards a circular economy for plastics.	95
	Ignacio et al. (2019)	A Perception Study of an Integrated Water System Project in a Water Scarce Community in the Philippines.	18
Recycling	Tong et al. (2018)	Behaviour change in post-consumer recycling: Applying agent-based modelling in social experiment.	63
	Koshta et al. (2022)	Sharing economic responsibility: Assessing end user's willingness to support E-waste reverse logistics for circular economy.	49
	Ding et al. (2023)	Determinants of contractor's construction and demolition waste recycling intention in China: Integrating theory of planned behavior and norm activation model.	26

Source: Author's creation based on Scopus data.

The first thematic cluster (24 articles) explores how intentions are formed for adopting CE solutions. Mondéjar-Jiménez et al. (2016) found that marketing and sales strategies negatively impact behavior towards waste management by shaping habits, attitudes, and food waste intentions, with moral attitudes and PBC being key drivers. Sharma and Foropon (2019) examined how product attributes, environmental knowledge, and perceived consumer effectiveness shape green purchase intentions for CE solutions. Jain et al. (2020) highlighted institutional pressures and environmental awareness as critical factors in building waste recycling intentions and stressing the need for government-industry collaboration.

The second cluster (18 articles) highlights critical CE solutions tied to behavioral intentions. Singh et al. (2018) found that environmental commitment and green incentives enhance CE readiness in Indian MSMEs. Khan et al. (2020) identified barriers (e.g., lack of recycling and transport facilities, lack of fund, lack of skilled human resources and so on) that prevent Belgian organizations from fully implementing plastic recycling practices despite positive intentions. Ignacio et al. (2019) showed that positive attitudes on CE solutions can significantly boost consumer intentions to adopt integrated water systems in the Philippines.

The third cluster (11 articles) focuses on recycling as a key CE solution. Tong et al. (2018) used an Agent-Based Model based on TPB, finding that social norms initiate recycling while perceived behavioural control sustains it. Koshta et al. (2022) highlighted the significance of perceived behavioral control, awareness, and intentions in developing willingness to pay for e-waste recycling. Ding et al. (2023) combined TPB and the Norm Activation Model, identifying intention and perceived behavioral control as the main drivers of contractors' recycling behavior.

To explore the thematic trends in the TPB applications in CE research, the study conducts the co-occurrence of author keywords, highlighting the evolution of topics found in at least two articles (Goodell et al., 2021). In addition, the study triangulates the findings with bibliography coupling to represent common themes on TPB based CE research (Mukherjee et al., 2022). This thorough analysis ensures the reliability and comprehensiveness of research. The thematic evolution is presented in Figure 3.

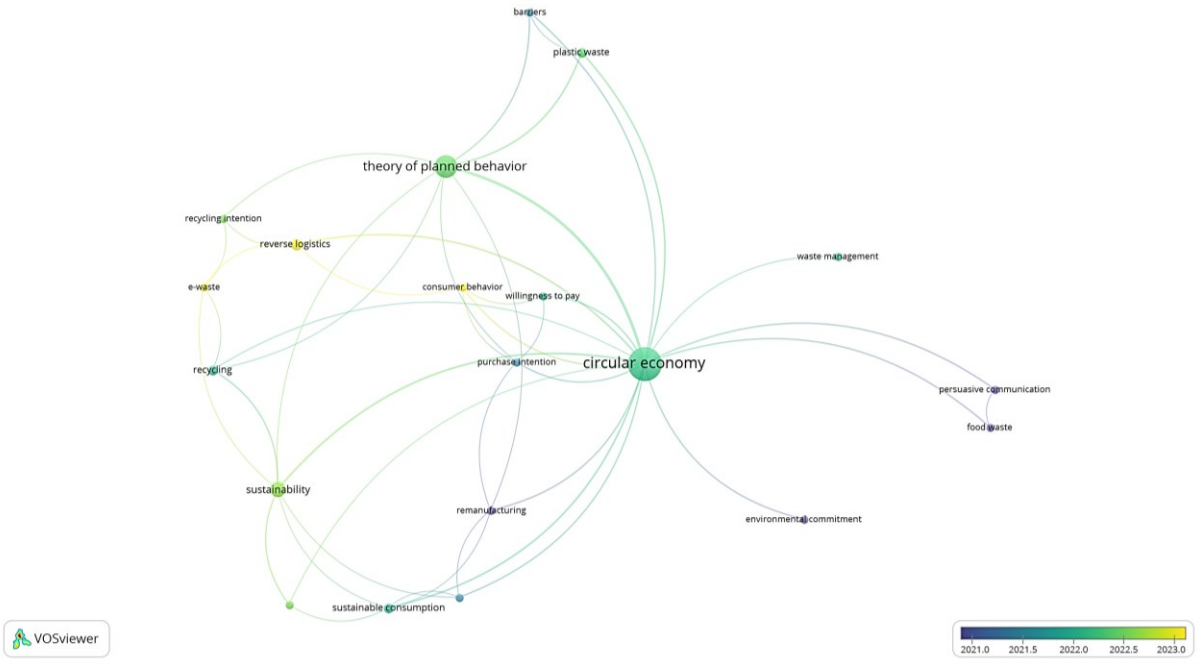

Figure 3. Author keyword co-occurrence.

Source: Author's creation based on Scopus data.

In this figure, the themes (topics) are shown together with the average publication year (APY), which acts as an indicator of year-wise trends in the TPB-based CE research (Pattnaik et al., 2021).

The co-occurrence graph demonstrates that research on TPB-based CE is growing over time, aligning with performance analysis and highlighting a similar growth pattern. Initially, topics such as food waste, persuasive communication, and environmental commitment were prominent. For example, Mondéjar-Jiménez et al., (2016) mentioned about provocative marketing leading to food waste at the consumer level. However, there has been a shift towards more critical points of view, such as barriers to CE solutions and in-depth sustainability issues.

Khan et al. (2020) suggested about social pressure and enablers (e.g., government initiative and industry competitors) can reduce the barriers. Recently, specific topics in CE, such as reusing electronic products to address e-waste (Walzberg et al., 2022) for promoting second-hand product usage (Arman & Mark-Herbert, 2022), have gained attention. Additionally, changes in business supply chains, particularly through consumer engagement to ensure circularity with a focus on reverse logistics (Fiori et al., 2023), have emerged as promising areas, as indicated in the yellow zone of the graph.

5. Discussion

According to Mukherjee et al. (2022), bibliometric analysis facilitates gap analysis in the literature and make suggestions for future research. Based on the analysis, the following research gaps are identified per Miles' (2017) gap typology. The population gap highlights a lack of studies focusing on diverse populations adopting CE solutions, particularly in developing regions (e.g., Bangladesh (Arman, Mark-Herbert, 2021; Islam et al., 2023), India (Baral et al., 2023)) where socio-economic factors significantly influence behavioral intentions. The evidence gap indicates that empirical research surrounding the impact of environmental commitment on stakeholder relationships in various organizational contexts, for example, manufacturing industry in India (Singh et al., 2018), remains underexplored, necessitating further investigation into how these relationships are fostered in practice. The knowledge gap points to the insufficient understanding of how user intentions, influenced by TPB constructs, vary across different demographic groups in the context of CE practices. The practical knowledge gap emphasizes the need for effective educational initiatives to overcome barriers to CE adoption, especially in small and medium-sized enterprises (SMEs). The methodology gap reveals that many existing studies primarily employ quantitative methods, e.g., structural equation modelling, suggesting an opportunity to deploy mixed-method systematic approaches to measure CE solutions' effectiveness. The empirical gap underscores the limited research on the role of social norms and perceived behavioral control in promoting recycling practices, particularly concerning specific waste streams like e-waste (Koshta et al., 2022) and plastics (Khan et al., 2020). Finally, the theoretical gap suggests that the interplay between TPB and other theoretical frameworks, such as the Norm Activation Model (Ding et al., 2023), is not adequately addressed, highlighting the need for integrated theoretical models to enhance understanding.

Based on the gap analysis from the bibliometric analysis, the study recommends several future research directions along with their managerial, policy, and social implications. The findings explore the interplay between population dynamics and the TPB within CE contexts, particularly how varying demographic factors influence behavioral intentions

toward CE adoption. This integrated TPB approach could provide a more comprehensive understanding of the factors influencing adopting CE solutions, enabling scholars to develop multifaceted models that reflect the complexities of human behavior in the context of sustainability. Additionally, the lack of empirical evidence regarding the effectiveness of specific CE practices, such as plastic recycling and e-waste management, indicates a pressing need for research to bridge this knowledge gap. Furthermore, theoretical frameworks should be expanded to incorporate the evolving landscape of sustainability challenges, enriching the discourse on behavioral intentions and CE adoption.

Decision-makers should cultivate an organizational culture that emphasizes environmental commitment, as this has been shown to enhance stakeholder relationships and facilitate the adoption of CE solutions. Managers are encouraged to implement targeted educational initiatives that address existing barriers to CE adoption, thereby empowering stakeholders and promoting collaborative efforts. It's crucial that organizations align their strategies with emerging trends in waste management, such as reverse logistics, to not only improve operational efficiency but also position themselves as leaders in sustainable innovation. This collective effort is key to promoting CE solutions.

Policymakers play a pivotal role in fostering the adoption of Circular Economy solutions, especially in developing regions where socio-economic factors significantly influence behavioral intentions. Targeted support mechanisms and incentive structures must be created to facilitate the transition to CE and encourage organizations to adopt sustainable practices. To successfully adapt CE solutions, the government should actively implement educational and training programs, fostering a positive mindset and commitment in this area.

Community awareness campaigns are essential for raising consciousness about the importance of CE practices and how individual behaviors contribute to environmental sustainability. By educating the public and promoting positive social norms around recycling and sustainable practices, communities can foster a culture of sustainability and enhance engagement in CE initiatives.

The study acknowledges the limitation of opting the Scopus database only which is believe to initiate future research on considering multiple databases. The study also accepts the significance of adopting a hybrid approach, for instance combined with thematic analysis, to explore the detailed research avenues on TPB applications in CE.

6. Conclusions

This study highlights the critical intersections between the TPB and CE, identifying key trends, influential publications, and emerging research gaps. By providing a comprehensive bibliometric analysis, the research not only elucidates the current state of knowledge but also

offers valuable insights for future inquiries into sustainable behaviors and practices. Ultimately, this work lays a foundation for advancing both theoretical understanding and practical applications of CE initiatives, inspiring future sustainability practices.

Acknowledgements

Co-financed from the funds of the Minister of Science granted under the "Regional Excellence Initiative" Program for the implementation of the project "Poznań University of Economics and Business for Economy 5.0: Regional Initiative – Global Effects (IREG)".

References

1. Aboelmaged, M. (2021). E-waste recycling behaviour: An integration of recycling habits into the theory of planned behaviour. *Journal of Cleaner Production*, *278*, 124182. https://doi.org/10.1016/j.jclepro.2020.124182
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179-211. https://doi.org/10.1016/0749-5978(91)90020-T
3. Aria, M., Cuccurullo, C. (2017). *bibliometrix*: An R-tool for comprehensive science mapping analysis. *Journal of Informetrics*, *11*(4), 959-975. https://doi.org/10.1016/j.joi.2017.08.007
4. Arman, S.M., Mark-Herbert, C. (2021). Re-Commerce to Ensure Circular Economy from Consumer Perspective. *Sustainability*, *13*(18), Article 18. https://doi.org/10.3390/su131810242
5. Arman, S.M., Mark-Herbert, C. (2022). Ethical Pro-Environmental Self-Identity Practice: The Case of Second-Hand Products. *Sustainability*, *14*(4), Article 4. https://doi.org/10.3390/su14042154
6. Arman, S.M., Mark-Herbert, C. (2024). Ethical Consumption: A Review and Research Agenda. *International Journal of Consumer Studies*, *48*(5), e13079. https://doi.org/10.1111/ijcs.13079
7. Arman, S.M., Ahmed, T. (2021). A Bibliometric Analysis on Dependency Theory. *Journal of Community Positive Practices*, *21*, 98-115. https://doi.org/10.35782/JCPP.2021.4.07
8. Baral, M.M., Mukherjee, S., Singh, R.K., Chittipaka, V., Kazancoglu, Y. (2023). Exploring antecedents for the circular economy capability of micro, small and medium enterprises: An empirical study. *Business Strategy and the Environment*, *32*(8), 5785-5806. https://doi.org/10.1002/bse.3448

9. Belmonte-Ureña, L.J., Plaza-Úbeda, J.A., Vazquez-Brust, D., Yakovleva, N. (2021). Circular economy, degrowth and green growth as pathways for research on sustainable development goals: A global analysis and future agenda. *Ecological Economics*, *185*, 107050. https://doi.org/10.1016/j.ecolecon.2021.107050
10. Boesen, S., Bey, N., Niero, M. (2019). Environmental sustainability of liquid food packaging: Is there a gap between Danish consumers' perception and learnings from life cycle assessment? *Journal of Cleaner Production*, *210*, 1193-1206. https://doi.org/10.1016/j.jclepro.2018.11.055
11. Bosman, J., Mourik, I. van, Rasch, M., Sieverts, E., Verhoeff, H. (2006, June). *Scopus reviewed and compared: The coverage and functionality of the citation database Scopus, including comparisons with Web of Science and Google Scholar* [Report]. Utrecht University Library. https://dspace.library.uu.nl/handle/1874/18247
12. Bota-Avram, C. (2023). Bibliometric analysis of sustainable business performance: Where are we going? A science map of the field. *Economic Research [Ekonomska Istraživanja]*, *36*(1), 2137-2176. https://doi.org/10.1080/1331677X.2022.2096094
13. Cesarina Mason, M., Pauluzzo, R., Muhammad Umar, R. (2022). Recycling habits and environmental responses to fast-fashion consumption: Enhancing the theory of planned behavior to predict Generation Y consumers' purchase decisions. *Waste Management*, *139*, 146-157. https://doi.org/10.1016/j.wasman.2021.12.012
14. D'Amato, D., Droste, N., Allen, B., Kettunen, M., Lähtinen, K., Korhonen, J., Leskinen, P., Matthies, B.D., Toppinen, A. (2017). Green, circular, bio economy: A comparative analysis of sustainability avenues. *Journal of Cleaner Production*, *168*, 716-734. https://doi.org/10.1016/j.jclepro.2017.09.053
15. Ding, Z., Wen, X., Zuo, J., Chen, Y. (2023). Determinants of contractor's construction and demolition waste recycling intention in China: Integrating theory of planned behavior and norm activation model. *Waste Management*, *161*, 213-224. https://doi.org/10.1016/ j.wasman.2023.03.005
16. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., Lim, W.M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, *133*, 285–296. https://doi.org/10.1016/j.jbusres.2021.04.070
17. Fauzi, M.A., Nguyen, M., Malik, A. (2024). Knowledge sharing and theory of planned behavior: A bibliometric analysis. *Journal of Knowledge Management*, *28*(2), 293-311. https://doi.org/10.1108/JKM-11-2022-0933
18. Fiori, G.V.B., Bouzon, M., Kerber, J.C. (2023). Consumer Role in Closing the Loop in the Apparel Industry Towards Circular Systems. *Circular Economy and Sustainability*, *3*(3), 1233-1254. https://doi.org/10.1007/s43615-022-00228-z
19. Godinho Filho, M., Gonella, J. dos S.L., Latan, H., Ganga, G.M.D. (2024). Awareness as a catalyst for sustainable behaviors: A theoretical exploration of planned behavior and

value-belief-norms in the circular economy. *Journal of Environmental Management*, *368*, 122181. https://doi.org/10.1016/j.jenvman.2024.122181

20. Gomez-Borquez, C.L., Török, A., Centeno-Velázquez, E., Malota, E. (2024). Female stereotypes and female empowerment in advertising: A systematic literature review and future research agenda. *International Journal of Consumer Studies*, *48*(2), e13010. https://doi.org/10.1111/ijcs.13010
21. Goodell, J.W., Kumar, S., Lim, W.M., Pattnaik, D. (2021). Artificial intelligence and machine learning in finance: Identifying foundations, themes, and research clusters from bibliometric analysis. *Journal of Behavioral and Experimental Finance*, *32*, 100577. https://doi.org/10.1016/j.jbef.2021.100577
22. Ignacio, J.J., Malenab, R.A., Pausta, C.M., Beltran, A., Belo, L., Tanhueco, R.M., Promentilla, M.A., Orbecido, A. (2019). A Perception Study of an Integrated Water System Project in a Water Scarce Community in the Philippines. *Water*, *11*(8), *Article 8*. https://doi.org/10.3390/w11081593
23. Islam, M.T., Jabber, M.A., Sakib, Md.N. (2023). Application of revised theory of planned behavior model to assess the readiness of circular economy in the RMG sector of Bangladesh. *Journal of Cleaner Production*, *420*, 138428. https://doi.org/10.1016/j.jclepro.2023.138428
24. Jacob, B.M., Thomas, S., Joseph, J. (2024). Over two decades of research on choice overload: An overview and research agenda. *International Journal of Consumer Studies*, *48*(2), e13029. https://doi.org/10.1111/ijcs.13029
25. Jain, S., Singhal, S., Jain, N.K., Bhaskar, K. (2020). Construction and demolition waste recycling: Investigating the role of theory of planned behavior, institutional pressures and environmental consciousness. *Journal of Cleaner Production*, *263*, 121405. https://doi.org/10.1016/j.jclepro.2020.121405
26. Jia, Q., Li, Y., Zhang, C., Jha, R., Wang, Y., Li, F. (2024). What determines plastic recycling intention and behavior of consumers in megacities of emerging economies? Evidence from Shanghai, China and Mumbai, India. *Journal of Cleaner Production*, *469*, 143219. https://doi.org/10.1016/j.jclepro.2024.143219
27. Kent Baker, H., Pandey, N., Kumar, S., Haldar, A. (2020). A bibliometric analysis of board diversity: Current status, development, and future research directions. *Journal of Business Research*, *108*, 232-246. https://doi.org/10.1016/j.jbusres.2019.11.025
28. Khan, F., Ahmed, W., Najmi, A. (2019). Understanding consumers' behavior intentions towards dealing with the plastic waste: Perspective of a developing country. *Resources, Conservation and Recycling*, *142*, 49-58. https://doi.org/10.1016/j.resconrec.2018.11.020
29. Khan, O., Bellini, N., Daddi, T., Iraldo, F. (2023). Effects of behavioral intention and dynamic capabilities on circular economy adoption and performance of tourism SMEs. *Journal of Sustainable Tourism*, *31*(8), 1777-1796. https://doi.org/10.1080/09669582.2022.2066683

30. Khan, O., Daddi, T., Slabbinck, H., Kleinhans, K., Vazquez-Brust, D., De Meester, S. (2020). Assessing the determinants of intentions and behaviors of organizations towards a circular economy for plastics. *Resources, Conservation and Recycling*, *163*, 105069. https://doi.org/10.1016/j.resconrec.2020.105069
31. Klimas, P., Ratajczak-Mrozek, M. (2024). Chapter 7: The links between cooperation and coopetition relationships and circular economy. In: *The Human Dimension of the Circular Economy*. Edward Elgar Publishing Limited. https://www.elgaronline.com/edcollchap/book/9781035314225/book-part-9781035314225-15.xml
32. Koshta, N., Patra, S., Singh, S.P. (2022). Sharing economic responsibility: Assessing end user's willingness to support E-waste reverse logistics for circular economy. *Journal of Cleaner Production*, *332*, 130057. https://doi.org/10.1016/j.jclepro.2021.130057
33. Miles, D.A. (2017). A Taxonomy of Research Gaps: Identifying and Defining the Seven Research Gaps. *Journal of Research Methods and Strategies*. https://www.academia.edu/35505149/ARTICLE_RESEARCH_A_Taxonomy_of_Research_Gaps_Identifying_and_Defining_the_Seven_Research_Gaps
34. Mondéjar-Jiménez, J.-A., Ferrari, G., Secondi, L., Principato, L. (2016). From the table to waste: An exploratory study on behaviour towards food waste of Spanish and Italian youths. *Journal of Cleaner Production*, *138*, 8-18. https://doi.org/10.1016/j.jclepro.2016.06.018
35. Moreno-Miranda, C., Dries, L. (2024). Circular economy intentions in the fruit and vegetable sector of Central Ecuador. *Ecological Economics*, *219*, 108056. https://doi.org/10.1016/j.ecolecon.2023.108056
36. Mukherjee, D., Lim, W.M., Kumar, S., Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, *148*, 101-115. https://doi.org/10.1016/j.jbusres.2022.04.042
37. Mukherjee, D., Lim, W.M., Kumar, S., Donthu, N. (2022). Guidelines for advancing theory and practice through bibliometric research. *Journal of Business Research*, *148*, 101-115. https://doi.org/10.1016/j.jbusres.2022.04.042
38. Njoku, A., Mouloudj, K., Bouarar, A.C., Evans, M.A., Asanza, D.M., Mouloudj, S., Bouarar, A. (2024). Intentions to Create Green Start-Ups for Collection of Unwanted Drugs: An Empirical Study. *Sustainability*, *16*(7), *Article 7*. https://doi.org/10.3390/su16072797
39. Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D., Shamseer, L., Tetzlaff, J.M., Moher, D. (2021). Updating guidance for reporting systematic reviews: Development of the PRISMA 2020 statement. *Journal of Clinical Epidemiology*, *134*, 103-112. https://doi.org/10.1016/j.jclinepi.2021.02.003
40. Pattnaik, D., Kumar, S., Burton, B. (2021). Thirty Years of The Australian Accounting Review: A Bibliometric Analysis. *Australian Accounting Review*, *31*(2), 150-164. https://doi.org/10.1111/auar.12332

41. Paul, J., Lim, W.M., O'Cass, A., Hao, A.W., Bresciani, S. (2021). Scientific procedures and rationales for systematic literature reviews (SPAR-4-SLR). *International Journal of Consumer Studies*, *45*(4), O1-O16. https://doi.org/10.1111/ijcs.12695
42. Pisitsankkhakarn, R., Vassanadumrongdee, S. (2020). Enhancing purchase intention in circular economy: An empirical evidence of remanufactured automotive product in Thailand. *Resources, Conservation and Recycling*, *156*, 104702. https://doi.org/10.1016/j.resconrec.2020.104702
43. Rabbi, M.F., Amin, M.B. (2024). Circular economy and sustainable practices in the food industry: A comprehensive bibliometric analysis. *Cleaner and Responsible Consumption*, *14*, 100206. https://doi.org/10.1016/j.clrc.2024.100206
44. Razmjooei, D., Alimohammadlou, M., Ranaei Kordshouli, H.-A., Askarifar, K. (2024). A bibliometric analysis of the literature on circular economy and sustainability in maritime studies. *Environment, Development and Sustainability*, *26*(3), 5509-5536. https://doi.org/10.1007/s10668-023-02942-6
45. Sharma, A., Foropon, C. (2019). Green product attributes and green purchase behavior: A theory of planned behavior perspective with implications for circular economy. *Management Decision*, *57*(4), 1018-1042. https://doi.org/10.1108/MD-10-2018-1092
46. Si, H., Shi, J., Tang, D., Wen, S., Miao, W., Duan, K. (2019). Application of the Theory of Planned Behavior in Environmental Science: A Comprehensive Bibliometric Analysis. *International Journal of Environmental Research and Public Health*, *16*(15), *Article 15*. https://doi.org/10.3390/ijerph16152788
47. Singh, M.P., Chakraborty, A., Roy, M. (2018). Developing an extended theory of planned behavior model to explore circular economy readiness in manufacturing MSMEs, India. *Resources, Conservation and Recycling*, *135*, 313-322. https://doi.org/10.1016/j.resconrec.2017.07.015
48. Stegmann, P., Londo, M., Junginger, M. (2020). The circular bioeconomy: Its elements and role in European bioeconomy clusters. *Resources, Conservation & Recycling: X*, *6*, 100029. https://doi.org/10.1016/j.rcrx.2019.100029
49. Tan, M., Hou, Y., Zhang, L., Shi, S., Long, W., Ma, Y., Zhang, T., Li, F., Oenema, O. (2021). Operational costs and neglect of end-users are the main barriers to improving manure treatment in intensive livestock farms. *Journal of Cleaner Production*, *289*, 125149. https://doi.org/10.1016/j.jclepro.2020.125149
50. Tong, X., Nikolic, I., Dijkhuizen, B., van den Hoven, M., Minderhoud, M., Wäckerlin, N., Wang, T., Tao, D. (2018). Behaviour change in post-consumer recycling: Applying agent-based modelling in social experiment. *Journal of Cleaner Production*, *187*, 1006-1013. https://doi.org/10.1016/j.jclepro.2018.03.261
51. Tong, X., Yu, H., Han, L., Liu, T., Dong, L., Zisopoulos, F., Steuer, B., de Jong, M. (2023). Exploring business models for carbon emission reduction via post-consumer recycling

infrastructures in Beijing: An agent-based modelling approach. *Resources, Conservation and Recycling*, *188*, 106666. https://doi.org/10.1016/j.resconrec.2022.106666

52. Vieira, E.S., Gomes, J.A.N.F. (2009). A comparison of Scopus and Web of Science for a typical university. *Scientometrics*, *81*(2), 587-600. https://doi.org/10.1007/s11192-009-2178-0
53. Walzberg, J., Burton, R., Zhao, F., Frost, K., Muller, S., Carpenter, A., Heath, G. (2022). An investigation of hard-disk drive circularity accounting for socio-technical dynamics and data uncertainty. *Resources, Conservation and Recycling*, *178*, 106102. https://doi.org/10.1016/j.resconrec.2021.106102
54. Wan, C., Cheung, R., Qiping Shen, G. (2012). Recycling attitude and behaviour in university campus: A case study in Hong Kong. *Facilities*, *30*(13/14), 630-646. https://doi.org/10.1108/02632771211270595
55. Wang, B., Ren, C., Dong, X., Zhang, B., Wang, Z. (2019). Determinants shaping willingness towards on-line recycling behaviour: An empirical study of household e-waste recycling in China. *Resources, Conservation and Recycling*, *143*, 218-225. https://doi.org/10.1016/j.resconrec.2019.01.005
56. Witek, L., Kędzia, G., Staniec, I. (2023). Towards sustainable purchase: The effect of social responsibility, innovativeness and knowledge of natural cosmetics purchasing consumers' intentions. *Economics and Environment*, *87*(4), *Article 4*. https://doi.org/10.34659/eis.2023.87.4.629
57. Xu, X., Hua, Y., Wang, S., Xu, G. (2020). Determinants of consumer's intention to purchase authentic green furniture. *Resources, Conservation and Recycling*, *156*, 104721. https://doi.org/10.1016/j.resconrec.2020.104721
58. Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, *155*, 104660. https://doi.org/10.1016/j.resconrec.2019.104660