

Leveraging Technology for Sustainable Consumption: The Role of Digital Innovations in Transforming Consumer Behavior

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Leveraging Technology for Sustainable Consumption: The Role of Digital Innovations in Transforming Consumer Behavior

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ABSTRACT

Sustainable consumption plays a crucial role as we are experiencing long-term shifts in climate and weather patterns. To achieve sustainable development, it is essential to understand the opportunities of sustainable consumption. The study focuses on understanding how digital innovations transform consumer buying behavior. The main objective of the study is to analyze current trends in consumer behavior that influence sustainable consumption. The study emphasizes how digital technologies, like blockchain, the Internet of Things, e-commerce platforms, and artificial intelligence, are encouraging sustainable consumer choices. The study used a systematic examination of the literature and key concepts to determine how digital innovations contribute to sustainable consumption practices. The study implies that customers appreciate the information provided by transparent and accessible solutions for making sustainable product decisions. Digital technologies can be a powerful instrument for improving consumers' ethical, sustainable, and ecologically conscious perspectives.

Keywords: Sustainable Consumer Behavior, Circular Economy, Blockchain Technology.

1. INTRODUCTION:

In recent times, there has been an increasing consciousness among consumers regarding sustainable consumption. The rising carbon footprint is a major concern for those consumers who are environmentally conscious. The soaring number of consumers preferring sustainable consumption is giving an opportunity for businesses to engage in environmentally friendly practices. Considering the growing population, it is essential to reconsider the traditional consumption patterns and adopt innovative solutions that balance economic growth.

Customers are making sustainable decisions as a result of growing environmental consciousness and concern. This encourages businesses to use sustainable production methods. Innovation in consumer behavior involves techniques designed to improve customer experience. The goal of consumer innovation, which takes sustainability into account, is to reduce the adverse impacts that consumption has on the environment and society (Sharma et al.,2023) [1]. Customers must be exposed to a variety of situations in order to comprehend the significance of making decisions about sustainable living (Azizan et al.,2018) [2].

Climate change and its effects on the environment are so obvious that people started to think about the possibilities of bringing in a change. Many people have taken the initiative in spreading awareness about sustainable consumption, and they also took the lead in suggesting various techniques that can be practiced for avoiding overconsumption. Consequently, they have inspired many others to adopt sustainable consumption practices. For sustainable development, encouraging sustainable lifestyles enables the successful use of financial, natural, human, and economic resources (Creutzig et al.,2018) [3].

On one hand, rising global population and per capita consumption, and on the other hand, depletion of natural resources, pollution, change in climate, and extinction of species, both demand significant changes in human behavior. The Sustainable Development Goals (SDGs) are a critical guide for future sustainable development. Organic food products, handloom products, ecologically friendly detergents, liquid dishwash, etc., are among some of the items that environmentally concerned consumers look for. The attitude of consumers towards sustainability is likely dependent on their educational qualifications

and knowledge. The availability of information on online platforms and various purchasing websites favours the consumer's choice of green consumption.

One of the most powerful aspects of affecting long-term customer behavior changes is social influence. Social beliefs, social identity, and social desirability play a crucial role in making a consumer choose sustainability over other products. Consumers hold social beliefs that they perceive as correct, and a significant number of people adhere to them. Some of the inevitable behaviors that serve as examples of social beliefs include the use of solar energy, harvesting rainwater, eco-friendly products, recycling, energy conservation, and sustainable consumption. Social identity refers to the ways in which the behaviors of those in their immediate social circle influence consumers. Social identity can influence consumers to choose products that are used by their friends or relatives. Social desirability is one of those behavioral patterns where a customer's purchase intention is only to create a good impression on others (White et al., 2019) [4].

Digital innovations are changing the way we make purchase decisions. With the help of technologies like artificial intelligence (AI), machine learning, and big data, businesses have begun automating their processes to change the production and consumption methods (Mubarik & Naghavi, 2021) [5]. It is pertinent to create a technical and scientific platform that seeks to quicken the search for creative ideas for a safer, smarter, greener, and cleaner way of living (Triantafyllidou & Zabaniotou, 2021) [6]. Companies are using technology to meet consumer demand for sustainable products and deliver exceptional customer experience (Hina et al.,2024) [7].

2. SUSTAINABLE CONSUMPTION:

Sustainable consumption is about doing more and using less. Sustainable consumption and production focus on using products and services that are part of basic requirements and lessening the usage of natural resources and toxic substances so as not to create a threat to the needs of the future generation. Sustainable consumption entails not only environmental problems; it also looks into matters such as natural resource protection, poverty alleviation, industrial efficiency, economic development, health, and education (Ayar & Gürbüz, 2021) [8].

Businesses must incorporate sustainability into their operations due to the rise of environmentally conscious consumers and their desire to make sustainable purchases (Purcărea et al.,2022) [9]. In line with sustainable development goals, the digital economy drastically lowers carbon emissions. Promoting sustainable consumption practices that support the goals of sustainable production and consumption is important. The study highlights the importance of sustainable policymaking, considering the consumption patterns, the digital economy, and carbon emissions for cleaner production and emission reduction (Jiang et al.,2024) [10].

Technological advancements alone cannot solve environmental problems without changing both individual and collective behavior. It entails giving the public accurate information, making knowledge more accessible to everyone, and enacting legislation that successfully meets societal needs (Triantafyllidou & Zabaniotou, 2021) [6].

3. CIRCULAR ECONOMY:

A circular economy is an economic system built on business models that replace the "end-of-life" concept by reducing, reusing, recycling, and recovering materials in manufacturing, distribution, and consumption processes. Its goal is to achieve sustainable development, which entails fostering social justice, economic growth, and preservation of the environment for both present and future generations (Kirchherr et al.,2017) [11]. Manufacturers are also getting a better idea of how the circular economy can benefit their business. The goal of a circular economy is to always maintain goods, materials, and resources at their maximum usefulness and value (Geissdoerfer et al.,2017) [12].

A circular economy uses waste-derived energy and requires minor changes for production and consumption. Circular economies and business models need to provide more convincing arguments for how they might improve social and environmental advantages rather than minimizing negative effects. Only when citizens are involved in the coproduction process can a sustainable circular economy be viable and long-lasting, even if it may require significant adjustments in cultures and traditions. To create a sustainable circular economy, careful technological and socioeconomic initiatives must be developed with an awareness of local contexts. The circular economy can lower material costs, lessen reliance on imports, provide new economic opportunities, and improve resource security (Velenturf &

Purnell, 2021) [13]. The circular economy model can be strengthened by the use of digital technologies, which provide transparency, authenticity, and visibility over the course of a product's life (Rosário & Dias, 2022) [14].

4. SYSTEMATIC REVIEW METHODOLOGY:

A systematic review method was used to do the study, which focused on some important areas, such as the circular economy, blockchain technology and sustainability, AI and sustainable consumption, and sustainable consumption and digital innovations.

Table 1: Review of Sustainable Consumption Behaviors and Digital Innovations

Sl.No	Area & Focus of the Research	The result of the Research	Reference
1.	To investigate how consumers' information-seeking behaviors and blockchain transparency lessen the confusion surrounding sustainable products.	Blockchain transparency indirectly affects consumer satisfaction and the uncertainty of sustainable products. It helps in reducing uncertainty by building trust and customer satisfaction. Customers are more satisfied when information about a product's sustainability is transparently disclosed through blockchain.	(Hina et al.,2024) [7].
2.	To examine how sustainable consumption practices are influenced by blockchain transparency.	Blockchain transparency has a significant effect on the satisfaction of consumers. Customers are more satisfied when sustainability-related information of the product is disclosed using the blockchain.	(Hina et al.,2023) [15].
3.	To analyze the potential of virtual reality environments in promoting sustainable consumption choices.	Virtual technology effectively promotes sustainable consumer behavior and reduces carbon footprint. It can enhance consumers' knowledge of sustainable options and decision-making.	(Laukkanen et al.,2023) [16].
4.	To examine how young people use the virtual world and what kinds of virtual stores they visit in order to make sustainable purchases	Fostering consumer education that encourages young people to think critically about the concept of incorporating sustainable and responsible purchase is essential.	(Calafell et al.,2019) [17].
5.	To access the ways in which AI technologies promote decision-making and helps in creating a positive environmental impact.	Artificial intelligence powered smart apps assist users in making environmentally responsible decisions by utilizing predictive analytics, tailored	(Sargin, 2024) [18].

		suggestions, and data-driven insights.	
6.	To analyze how sustainable artificial intelligence can influence online decision-making by customers.	Gaining insight into consumer motivations and decision-making processes enables firms to provide goods and services that are more sustainable and more tailored to the demands of their customers using AI models.	(Bjorlo et al.,2021) [19].

Source: Secondary Data

5. OBJECTIVES OF THE STUDY:

- (1)Objective 1: To analyze the current trends in consumer behavior influencing sustainable consumption.
- (2)Objective 2: To examine the influence of digital technologies on consumer behavior towards sustainable consumption.
- (3)Objective 3: To analyze the role of digital innovations in transforming awareness level and decision making regarding sustainable consumption.

6. DIGITAL INNOVATIONS AND SUSTAINABLE CONSUMER BEHAVIOR:

Digital innovations facilitate sustainable practices by optimizing the utilization of resources and minimizing waste and energy use. It also helps in lowering the carbon footprints. There are applications that monitor and evaluate individual carbon footprints and motivate users to make sustainable decisions. AI-driven systems can recommend sustainable products to customers based on their purchasing behaviors (Michels et al.,2022) [20]. Customers can obtain information about a product's background, processing, and ethical standards by scanning the QR code on it with the support of AI and blockchain technology. This openness of information increases trust among consumers and has an impact on decisions about sustainable products (Sargin, 2024) [18].

Digitalization can help with sustainable development by encouraging the circular economy-sharing, restoration, and reuse. The way that market systems operate and collect information about people and their surroundings has been profoundly altered by digitalization. Digital platforms use cutting-edge computer power and data analytics techniques to understand, regulate, and alter behavior in order to create new forms of commodities. Due to their direct and indirect contributions to rising energy and material usage, digital technologies represent a serious threat to sustainable consumption (Gossen & Lell, 2023) [21]. Sustainability solutions are developed and implemented through the use of technology, including artificial intelligence (AI), big data analytics, the Internet of Things (IoT), social media, and mobile applications (Rosário & Dias, 2022) [14]. To ensure sustainable production and consumption, a number of technologies are emerging to streamline product traceability, such as blockchain, artificial intelligence (AI), digital tools, and the Internet of Things (IoT) (Hina et al.,2024) [7].

6.1. Digital Tools

New digital technologies have altered how people and companies conduct their business and daily operations. By enabling digital tools to model processes and activities, the digital transition idea describes the shift from analogue to digital processes, which enhances performance. Digital technologies can support sustainability in a number of ways, such as fostering the changes that are required at the corporate level; enhancing organizational planning procedures to help them anticipate demand and discover opportunities; and enabling businesses to test out new, effective business models. There are several challenges and uncertainties involved in digital transformations that could support sustainability (Rosário & Dias, 2022) [14].

6.2. Artificial Intelligence

AI helps businesses optimize their distribution and logistics systems, which lowers carbon emissions and fuel consumption. Manufacturers of electric vehicles apply AI to reduce dependency on fossil fuels and improve safety and efficiency features. AI assists consumers in choosing sustainable products by assessing them according to their carbon footprint, water consumption, and organic certifications. Companies use AI to forecast product demand. By minimizing waste and overstocking, this ensures the effective and sustainable supply of goods. We must address uncertainty about data privacy when using AI systems (Sargin, 2024) [18]. From a sustainability perspective, we might use AI to gather and assess data about environmental issues (Kunkel et al., 2023) [22]. Businesses apply AI technologies to address social challenges with a focus on sustainability (Rosário & Dias, 2022) [14].

6.3. Internet Of Things

The purpose of the Internet of Things is to collect data and send it to other internet-connected devices (Zeeshan et al., 2022) [23]. The application of sustainability-related security features of IoT devices must be carefully designed, taking into account their integration, new ideas, and potential hazards. The Internet of Things entails establishing radically new connections between gadgets in industries like manufacturing, healthcare, energy, and transportation. IoT can accomplish sustainability goals and enhance quality of life by employing technology to successfully address the present environmental, energy, water, and health concerns. Sensors in water and soil, for instance, aid in knowing their physical characteristics, which promotes water conservation and increases crop productivity (Salam, 2024) [24]. A comprehensive set of methods for environmental forecasting and prediction is desperately needed to comprehend and predict the effects of climate variability, extreme weather, and climate change. By using simulations, the climate IoT paradigm helps determine the impacts of weather patterns. It is possible to learn more about how the ocean-atmosphere relationship affects weather forecasting. It is possible to create prediction systems, storm behavior models, and climate models, as well as techniques for climate systems at various temporal scales (Salam, 2024) [25].

IoT applications in developing countries include fire and smoke detection with alarms in densely populated areas, early warning tsunami monitoring systems, public transportation systems that monitor acceleration, speed, and braking to prevent reckless driving, illegal fishing activity monitoring, air pollution monitoring systems that detect outdoor air pollution, tracking animals in game park management, drone and ground camera surveillance at the National Park Service, weather monitoring for weather forecasting, sensor-enabled water pumps, and bird migration patterns and population counts (Salam, 2024) [26].

6.4. Blockchain Technology

Blockchain's capabilities can play a major role in encouraging consumers to make sustainable purchasing decisions and boosting their confidence in eco-friendly goods (Liang et al., 2023) [27]. Blockchain can increase consumers' trust and confidence in product sustainability promises by providing accountability, authenticity, and consistency. This will increase the demand for sustainable items. Blockchain serves as a distributed database that allows multiple users to store and access information. Customers are empowered in their pursuit of sustainable consumption by using blockchain technology to obtain and track information on sustainable products and to positively influence others (Hina et al., 2024) [28]. Customers are more inclined to continue purchasing a product from a company that uses blockchain if they believe it will have a positive environmental impact (Watson et al., 2010) [29]. It assists companies in providing external audiences with reliable information about their corporate image (Boukis, 2020) [30]. Customers need less time and effort to make thoughtful judgements since it speeds up the process of acquiring knowledge about sustainable production (Hina et al., 2024) [28].

7. FINDINGS:

Some of the major findings from the literature review are discussed here. The circular economy, which emphasizes reuse, repair, and recycling, and minimalism are two current trends in consumers' purchasing habits. Additionally, the market for upcycled goods, rental models, and used goods is expanding. Artificial intelligence (AI), big data analytics, the Internet of Things (IoT), blockchain technology, social media, gamification, and mobile applications are some of the major digital innovations used to regulate sustainable consumption behaviors. There are numerous applications that

emphasize on gamification techniques and offer incentives for making sustainable consumption decisions or for lowering carbon footprints. This facilitates efficient customer engagement. AI-driven systems can recommend sustainable products to customers based on their purchasing behaviors (Michels et al.,2022) [20]. With the use of blockchain and artificial intelligence, customers can use QR codes to obtain detailed product information. The decision-making process is made considerably simpler and easier with the use of this information (Sargin, 2024) [18].

8. CONCLUSION:

The study revealed how digital innovations encourage sustainable consumption behavior. Digital platforms, blockchain, artificial intelligence, and smart technology work together to address environmental issues. Customers' experiences with blockchain significantly influenced their random purchases of sustainable products. Accessibility to digital technologies can boost customers' faith in the sustainability of products (Liu et al.,2023) [31]. The study suggests that transparent and accessible solutions provide customers with valuable information for making sustainable product decisions. Digital technologies can be a powerful instrument for improving consumers' ethical, sustainable, and ecologically conscious perspectives. Improved digital infrastructure will enable the widespread adoption of smart apps that promote sustainable consumption practices. Digital technologies can simplify, expedite, and significantly reduce the cost of customers' sustainable decision-making process.

REFERENCES:

- [1] Sharma, M., Shah, J., Joshi, S., Youssef, A. B., & Misra, A. (2023). Digital Innovation and Sustainability Driven Consumer Behavior: A Review and Research Agenda, 1-20. <https://www.preprints.org/manuscript/202306.1604>
- [2] Azizan, M. T., Mellon, N., Ramli, R. M., & Yusup, S. (2018). Improving teamwork skills and enhancing deep learning via development of board game using cooperative learning method in Reaction Engineering course. *Education for Chemical Engineers*, 22, 1-13. <https://www.sciencedirect.com/science/article/pii/S1749772816300720>
- [3] Creutzig, F., Roy, J., Lamb, W. F., Azevedo, I. M., Bruine de Bruin, W., Dalkmann, H., ... & Weber, E. U. (2018). Towards demand-side solutions for mitigating climate change. *Nature Climate Change*, 8(4), 260-263. <https://www.nature.com/articles/s41558-018-0121-1>
- [4] White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of marketing*, 83(3), 22-49. <https://journals.sagepub.com/doi/abs/10.1177/0022242919825649>
- [5] Mubarik, M. S., & Naghavi, N. (2021). Digital technologies and consumption: How to shape the unknown?. *The Palgrave handbook of corporate sustainability in the digital era*, 529-541. https://link.springer.com/chapter/10.1007/978-3-030-42412-1_26
- [6] Triantafyllidou, E., & Zabaniotou, A. (2021). Digital technology and social innovation promoting a green citizenship: development of the “go sustainable living” digital application. *Circular Economy and Sustainability*, 1-24. <https://link.springer.com/article/10.1007/s43615-021-00111-3>
- [7] Hina, M., Islam, N., & Dhir, A. (2024). Blockchain for sustainable consumption: an affordance and consumer value-based view. *Internet Research*, 34(7), 215-250. <https://www.emerald.com/insight/content/doi/10.1108/INTR-07-2023-0523/full/html>
- [8] Ayar, I., & Gürbüz, A. (2021). Sustainable consumption intentions of consumers in Turkey: A research within the theory of planned behavior. *Sage Open*, 11(3), 21582440211047563. <https://journals.sagepub.com/doi/abs/10.1177/21582440211047563>
- [9] Purcărea, T., Ioan-Franc, V., Ionescu, Ş. A., Purcărea, I. M., Purcărea, V. L., Purcărea, I., ... & Orzan, A. O. (2022). Major shifts in sustainable consumer behavior in Romania and retailers' priorities in agilely adapting to it. *Sustainability*, 14(3), 1627. <https://www.mdpi.com/2071-1050/14/3/1627>

- [10] Jiang, H., Elahi, E., Gao, M., Huang, Y., & Liu, X. (2024). Digital economy to encourage sustainable consumption and reduce carbon emissions. *Journal of Cleaner Production*, 443, 140867. <https://www.sciencedirect.com/science/article/pii/S0959652624003147>
- [11] Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, conservation and recycling*, 127, 221-232. <https://www.sciencedirect.com/science/article/pii/S0921344917302835>
- [12] Geissdoerfer, M., Savaget, P., Bocken, N. M., & Hultink, E. J. (2017). The Circular Economy—A new sustainability paradigm?. *Journal of cleaner production*, 143, 757-768. <https://www.sciencedirect.com/science/article/pii/S0959652616321023>
- [13] Velenturf, A. P., & Purnell, P. (2021). Principles for a sustainable circular economy. *Sustainable production and consumption*, 27, 1437-1457. <https://www.sciencedirect.com/science/article/pii/S2352550921000567>
- [14] Rosário, A. T., & Dias, J. C. (2022). Sustainability and the digital transition: A literature review. *Sustainability*, 14(7), 4072. <https://www.mdpi.com/2071-1050/14/7/4072>
- [15] Hina, M., Islam, N., & Dhir, A. (2023, November). Unveiling the Golden Thread: Unmasking the Power of Blockchain for Sustainable Consumption. In *Conference on e-Business, e-Services and e-Society*. Cham: Springer Nature Switzerland, (pp. 265-276). https://link.springer.com/chapter/10.1007/978-3-031-50040-4_20
- [16] Laukkanen, T., Xi, N., Hallikainen, H., Ruusunen, N., & Hamari, J. (2022). Virtual technologies in supporting sustainable consumption: From a single-sensory stimulus to a multi-sensory experience. *International Journal of Information Management*, 63, 102455. <https://www.sciencedirect.com/science/article/pii/S0268401221001481>
- [17] Calafell, G., Banqué, N., & Vicianá, S. (2019). Purchase and use of new technologies among young people: Guidelines for sustainable consumption education. *Sustainability*, 11(6), 1541. <https://www.mdpi.com/2071-1050/11/6/1541>
- [18] Sargin, S. (2024). Artificial intelligence, smart applications and sustainable consumption: a theoretical overview. *İktisadi İdari ve Siyasal Araştırmalar Dergisi*, 9(25), 803-820. <https://dergipark.org.tr/en/pub/iktisad/issue/87734/1461652>
- [19] Bjørlo, L., Moen, Ø., & Pasquine, M. (2021). The role of consumer autonomy in developing sustainable AI: A conceptual framework. *Sustainability*, 13(4), 2332. <https://www.mdpi.com/2071-1050/13/4/2332>
- [20] Michels, L., Ochmann, J., Günther, S. A., Laumer, S., & Tiefenbeck, V. (2022). Empowering consumers to make environmentally sustainable online shopping decisions: A digital nudging approach. <https://aisel.aisnet.org/hicss-55/in/human-centricity/8/>
- [21] Gossen, M., & Lell, O. (2023). Sustainable consumption in the digital age. *How sustainable is the digital world?*, 614(7947), 71. https://www.bosch-stiftung.de/sites/default/files/publications/pdf/202303/GAIA_2023_S1_GesamtPDF.pdf#page=73/
- [22] Kunkel, S., Schmelzle, F., Niehoff, S., & Beier, G. (2023). More sustainable artificial intelligence systems through stakeholder involvement?. *GAIA-Ecological Perspectives for Science and Society*, 32(1), 64-70. <https://www.ingentaconnect.com/content/oekom/gaia/2023/00000032/a00101s1/art00010>
- [23] Zeeshan, K., Hämmäläinen, T., & Neittaanmäki, P. (2022). Internet of Things for sustainable smart education: An overview. *Sustainability*, 14(7), 4293. <https://www.mdpi.com/2071-1050/14/7/4293>
- [24] Salam, A. (2024). Internet of things for sustainability: perspectives in privacy, cybersecurity, and future trends. In *Internet of things for sustainable community development: wireless communications, sensing, and systems*, Cham: Springer International Publishing, (pp. 299-326). https://link.springer.com/chapter/10.1007/978-3-031-62162-8_10

- [25] Salam, A. (2024). Internet of things for environmental sustainability and climate change. In *Internet of Things for sustainable community development: Wireless communications, sensing, and systems*, Cham: Springer International Publishing, (pp. 33-69). https://link.springer.com/chapter/10.1007/978-3-031-62162-8_2
- [26] Salam, A. (2024). Internet of things for sustainable community development: introduction and overview. In *Internet of Things for Sustainable Community Development: Wireless Communications, Sensing, and Systems*, Cham: Springer International Publishing, (pp. 1-31). https://link.springer.com/chapter/10.1007/978-3-031-62162-8_1
- [27] Liang, X., Hu, X., Li, E. Y., & Meng, H. (2023). Untangling the influence of perceived sustainability orientation on value-co-creation behavior in crowdfunding process: investigating a mediation model. *Internet Research*, 33(4), 1544-1572. <https://www.emerald.com/insight/content/doi/10.1108/INTR-12-2021-0921/full/html>
- [28] Hina, M., Islam, N., & Luo, X. (2024). Towards sustainable consumption decision-making: Examining the interplay of blockchain transparency and information-seeking in reducing product uncertainty. *Decision Support Systems*, 114370. <https://www.sciencedirect.com/science/article/pii/S0167923624002033>
- [29] Watson, R. T., Boudreau, M. C., & Chen, A. J. (2010). Information systems and environmentally sustainable development: energy informatics and new directions for the IS community. *MIS quarterly*, 23-38. <https://www.jstor.org/stable/20721413>
- [30] Boukis, A. (2020), "Exploring the implications of blockchain technology for brand–consumer relationships: a future research agenda", *The Journal of Product and Brand Management*, Vol. 29 No. 3, pp. 307-320, doi: 10.1108/jpbm-03-2018-1780. <https://www.emerald.com/insight/content/doi/10.1108/JPBM-03-2018-1780>
- [31] Liu, H., Ma, R., He, G., Lamrabet, A., & Fu, S. (2023). The impact of blockchain technology on the online purchase behavior of green agricultural products. *Journal of Retailing and Consumer Services*, 74, 103387. <https://www.sciencedirect.com/science/article/pii/S0969698923001340>
