

# Determinants of Consumer Purchase Intention towards Recycled Paper Products in China: A Conceptual Analysis

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## Abstract

Recycled paper products rise globally due to the potential environmental and economic benefits, especially in the Chinese market. However, despite the extensive use of recycled cardboard and packaging cartons by enterprises, the penetration rate of individual consumers to buy any recycled paper products is relatively low. Moreover, the upgrading of the paper industry is considered a crucial environmentally sustainable manufacturing process in the 21st century, and recycled paper is the best alternative. However, only the consumers willing to pay and continue to create more demand can signal manufacturers and investors that recycled paper demand and economy are feasible. Several past studies have been conducted to determine the influencing factors of Chinese consumers buying various sustainable products; nevertheless, there is no focus on recycled paper products. It is crucial to gain insight into the drivers of recycled paper purchase intention for its sustainable label, but there is a lack of relevant research. Therefore, using the Theory of Planned Behavior as the foundation, this conceptual paper investigated factors affecting recycled paper purchase intention, including attitude, subjective norms, perceived behavior control, and price sensitivity. Furthermore, this study reviews the relevant literature on sustainable consumption in the past and finally proposes a future research framework.

**Keywords:** Recycled Paper Purchase Intention, Attitude, Subjective Norms, Perceived Behavior Control, Price Sensitivity

## Introduction

The industrial revolution has unprecedentedly enhanced the ability of human beings to transform nature, and people's consumption demand has increased significantly (Hu, 2019). Due to the expanding consumption desire, large-scale and unsustainable production modes caused the rapid drained of natural resources and severe destruction to the ecology. Evidence shows that about 40% of ecological devastation is directly caused by personal consumption. Accordingly, all nationalities are aware of the environmental survival crisis, and the upsurge of sustainable consumerism has sprung up worldwide. Over the past 20 years, rapid economic development in China has also brought severe resource shortages and environmental pollution. An authoritative report showed that China's Environmental Performance Index (EPI) is relatively low, and its air quality index even ranks fourth from the bottom globally.

Therefore, it is particularly urgent to advocate sustainable consumption in the Chinese context.

Recycled product is considered a typical type of sustainable product. Its recycling process can reduce resource use, benefit from saving energy, and decrease waste emissions (Zhang et al., 2019). Recently, the recycled product attracted the attention of theoretical researchers and practitioners due to its remarkable economic and ecological effects (Chen & Taylor, 2020; Giannetti et al., 2019; Pelli & Lahtinen, 2020). According to Bigliardi et al (2020), recycled products include many kinds, such as recycled paper, textile, plastics, metals, rubber, and electronic products. Among them, recycled papers are widely used daily, such as recycled wrapping papers, shopping bags, recycled toilet papers, recycled printing and writing papers, postcards, etc. It is the most common and widely used category (Chakraborty, 2015). In short, recycled paper use is essential for advocating residents' sustainable consumption.

So far, there is no clear definition of recycled paper (Abdollahbeigi, 2021). However, most scholars agree that recycled paper contains a certain proportion of post-consumer content (30% - 100% of post-consumer waste), different from virgin paper without adding any recycled materials (Chakraborty, 2015). On the one hand, recycled paper takes recycled waste pulp as the primary material, which significantly saves the cost of cutting trees. On the other hand, it has significant environmental benefits compared with virgin paper in manufacturing because it requires less energy and fewer pollution emissions (Abdollahbeigi, 2021). Therefore, promoting recycled paper is a beneficial path to earth (Shahcheragh, 2021).

However, the current situation of recycled paper consumption is not optimistic in the Chinese context. According to the Environmental Paper Network, China is the largest nation manufacturing and consuming paper products. Unfortunately, the purchase proportion of individual consumers is relatively low, and there is even a huge gap compared with developed countries. According to China Paper Association, the proportion of recycled paper in Japan has reached 70%, while the application rate of recycled office paper in the United States approaches 98%. On the contrary, consumers seldom buy except for small-scale centralized government procurement in China.

Furthermore, the government and administrative departments have promoted it from the policy perspective; while manufacturers optimized their products simultaneously, consumers are still not enthusiastic. However, consumers' willingness to accept recycled products is at the core of a sustainable economic model (Blöse et al., 2019). In addition, Hickel (2019) pointed out that the buyers can continue to have a significant effect on protecting the environment and climate by creating demand for recycled papers. Their willingness will encourage market forces to collect more forms and signal manufacturers and investors that the demand for recycled paper is feasible and economical. Therefore, it should be seriously considered how to guide individuals to buy recycled paper products.

Moreover, through the existing literature review, it is presented that some categories of recycled products, such as recycled fashion products, recycled ocean plastic products, and refurbished smartphones (Magnier et al., 2019; Park & Lin, 2020; Phantratanamongkol et al., 2018), have won the interest of researchers, but few scholars have discussed the recycled paper. Even if several related studies exist, they mainly focus on the manufacturing process but ignore the consumer perspective (Balea et al., 2019; Han et al., 2021). Zhang and Dong (2020) reviewed 97 sustainable consumption literature published in the past five years, further pointed out the lack of research on recycled paper consumption, and suggested that future researchers pay attention to this category of sustainable products to promote market sales.

Therefore, Using the Theory of Planned Behavior as the underpinning theory, this conceptual research provides an overview of the factors affecting recycled paper purchase intention by Chinese consumers. The attitude, subjective norms, perceived behavior control as directors, and price sensitivity as moderate are selected to analyze and further explain the influence mechanism of recycled paper purchase intention. Finally, this paper suggests an empirical study to explore how these variables play a crucial role in influencing consumers' choice to buy recycled papers.

## **Literature Review**

### *Theory of Planned Behavior (TPB)*

This conceptual research conducts an investigation based on the Theory of Planned Behavior (TPB). According to Ajzen (1991), the intention seemed like the optimal predictor of behavior. In this view, individuals are considered to rationally evaluate the valuable information obtained and predict the consequences of the behavior before making a decision. In addition, TPB is the most used theory in sustainable consumption and has been adopted by many researchers as the underpinning theory (Marvi et al., 2020).

Furthermore, TPB is developed from the Theory of Reasoned Action (TRA). Ajzen and Fishbein (1975) believed that attitude and subjective norms determine the willingness to act. Attitude is regarded as an evaluation of behavior, reflecting the approval or opposition degree. Personal criteria refer to the social pressure an individual feels from those others who are very meaningful to them. The TRA model was initially developed and focused on predicting behavioral intention to take reasonable actions in daily life, such as using contraceptives. Moreover, TRA was later used to predict behavioral preferences in marketing and consumer behavior and proved highly predictable (Asih et al., 2020; Zhao et al., 2019).

However, TRA claimed that behavioral decision-making is only controlled by volition; it ignored the necessity of specific opportunities and resources (Marvi et al., 2020). In one case, some consumers are favorable to a sustainable product but abandon it due to financial constraints or lack of availability. Therefore, TRA has been doubted. Accordingly, TPB improved TRA and added the non-volitional factor named perceived behavior control, which significantly improved the predictability of the theory. Perceived behavior control provides the constraint information such as money, time, and technology perceived by consumers. It is argued that if individual behavior cannot be entirely controlled by volition, perceived behavior control rises to the most critical factor (Xu et al., 2020). Thus, TPB contains those three variables above to predict intention.

Additionally, much of past literature on recycled products consumption chose TPB as the theoretical support by directly adopting the original model or conducting an extension or modification (Chaturvedi et al., 2020; Gaur et al., 2018; Khor & Hazen, 2017; Ko & Jin, 2017; Sheoran & Kumar, 2020a; Wang et al., 2018; Zheng et al., 2021). For this research, price sensitivity is added to the classical TPB model to expand it, then first applied to investigate consumers' intention to buy recycled papers in the Chinese context. Therefore, the current research includes the following variables: attitude, subjective norms, perceived behavior control as independent variables, and price sensitivity as the moderate variable.

### *Attitude*

Attitude reflects how individuals assess whether a particular behavior is favorable or unfavorable (Ajzen, 1991). Accordingly, in predicting the purchase intention of recycled paper, attitude is regarded as an evaluation of the recycled paper purchase behavior. In addition,

attitude is seen as a psychological emotion generated by consumers' perception of purchasing. Therefore, attitude is deemed the essential predictor of behavioral intention and the most discussed variable in sustainable consumption (Sharma & Foropon, 2019).

In addition, attitude is considered to directly affect consumers' confidence in purchasing sustainable products (Cheung & To, 2019). When individuals are concerned about environmental issues and the ecological benefits of a particular product, they may express a positive attitude towards purchasing behavior, which will prompt them to replace unsustainable products with sustainable ones (Oncioiu et al., 2021). Similarly, Ha and Kwon (2016) also pointed out that a positive environmental attitude will stimulate consumers to participate in sustainable consumption, especially by purchasing recycled products. On the contrary, a negative attitude is the most critical factor hindering consumers from practicing sustainable consumption (Sheoran & Kumar, 2020b). Moreover, Zhang and Dong (2020b) claim that different degrees of attitude and expectation will significantly differ in purchase intention. Specifically, the more positive attitude toward purchasing, the stronger one's purchase intention to the sustainable products (Laureti & Benedetti, 2018).

Similarly, although recycled paper benefits the environment, many people still choose virgin paper products, mainly due to their negative attitude. It is confirmed that consumers generally have skeptical and negative emotions about recycled products due to the "second-hand products" (Wang & Hazen, 2016). Furthermore, these are considered quality risks, and the utility is often lower than the original products (Wang et al., 2013). In fact, there exists no significant distinction in quality and use perception between recycled papers and virgin ones, while people show resistance because they are biased. In addition, Chinese consumers are considered to pursue the extreme whiteness of the document. They are unwilling to accept the recycled paper for its darker and yellower color, although there only aesthetically different.

### *Subjective Norms*

Subjective norms are regarded as feelings of social pressure from essential others, which in some way have a crucial impact on individual behavior (Ajzen, 1991). Specifically, subjective norms capture the psychological feelings of consumers, which believe the importance of others will affect whether they should conduct a specific behavior. Furthermore, these essential others include not only parents, relatives, peers, and business partners in real life but also celebrities and netizens on social networks (Seemiller & Grace, 2018). Lee (2008) pointed out that subjective norms may have a high effect on sustainable consumption because the social impact, environmental concerns, self-image, and consumers' perceived responsibility will affect their decisions. On the contrary, harmful subjective norms are considered the critical factor hindering consumers' purchase intention (Sheoran & Kumar, 2020b).

Furthermore, subjective norms are considered positively correlated with collectivism (Halder et al., 2020). In collectivist countries like China, social norms determine more sustainable purchasing. It is addressed that Chinese people are socially oriented, and social expectations often influence their behavior because they are worried about external criticism and social rejection (Jung et al., 2020). They also stressed that Chinese people are always eager to make a good impression on others and worry about adverse evaluation, so they only take actions in line with social norms. Cheng et al (2016) even claimed that in a collective-oriented country like China, subjective norms have a more significant impact on people's

decisions than individual attitudes. Therefore, the impact of subjective norms cannot be ignored in discussing recycled paper purchasing in the context of China.

However, a few studies believed that the relationship between subjective norms and purchase intention is insignificant (Asih et al., 2020; Kumar et al., 2017). Even in collectivist countries, social norms have no significant impact on consumers' choice of sustainable production (Lin & Huang, 2012). Liobikienė and Bernatoniene (2017) further pointed out that this disagreement may occur when individuals believe that sustainable consumption will not increase social recognition or make a good impression.

#### *Perceived Behavioral Control*

Perceived behavior control is regarded as the perceived difficulty in performing a specific behavior (Ajzen, 1991). It is argued that some external factors can not be controlled when purchasing sustainable products, such as time, price, knowledge, and skills (Paul et al., 2016). Therefore, perceived behavior control is essential for sustainable purchase intention (Kumar & Mohan, 2021). Furthermore, regarding having more resources and opportunities or having less perception of obstacles in the purchasing process, consumers may own a more powerful controlling perception and a stronger willingness to buy sustainable products (Wang et al., 2018).

The effect of perceived behavior control on sustainable purchase intention has been supported by many pieces of literature (Kumar & Mohan, 2021; Maichum et al., 2016; Paul et al., 2016; Xu et al., 2020). For example, an early study found that lack of time and availability is a significant obstacle for university students in Europe, North America, and Australia to practice a sustainable diet (Ede et al., 2011). Sheoran and Kumar (2020a) pointed out that inconvenience and unavailability are the most common barriers to sustainable consumption.

In a survey on Chinese consumers' willingness to buy green furniture, Cheung and To (2019) found that the impact of attitude on sustainable furniture purchase is not significant, while perceived behavior control has the most significant positive effect. Their findings can be attributed to the fact that consumers sometimes cannot make choices entirely according to their preferences due to the constraint of time, availability, or several other factors (Carfora et al., 2019). Joshi and Rahman (2015) further argued that although little evidence exists about the positive impact of perceived behavior control, thus still limited and requires more empirical research.

#### *Price Sensitivity as Mediator*

Price sensitivity is regarded as the psychological reaction of consumers to the price change of a specific product or the price discrepancy among different products (Stall-Meadows & Davey, 2013). In terms of sustainable consumption, consumers' price sensitivity is usually a crucial indicator affecting purchase decisions because sustainable products are generally higher than traditional products (Rahayu et al., 2017), and high prices are considered an obstacle (Sawitri & Rahanatha, 2019). Accordingly, although recycled paper uses waste materials, it has higher requirements for equipment and production processes, which increases the cost to a certain extent. Thus, the selling price of recycled paper is often higher than that of virgin paper, which is considered the main reason for hindering.

As a direct or indirect factor, price sensitivity has been supported in various sustainable products (Ferreira, 2018; Hartono et al., 2020; Hsu et al., 2017; Sheoran & Kumar, 2020a; Zinoubi, 2020). Moreover, it is valuable to explore its moderate effect. Several pieces of literature have tested the direct and indirect influence of price sensitivity on sustainable



purchasing, but limited studies tested its moderate impact (Ghali-Zinoubi & Toukabri, 2019). Dagger and David (2012) argued that adding moderate variables may increase a more accurate interpretation of the relationship between the facts. Accordingly, this conceptual study adds price sensitivity to the original TPB model. According to Ferreira (2018), for sensitive consumers who mind the pay cost, even if having a positive attitude towards a specific sustainable product, once the price exceeds expectations, it will reduce their intention to buy. Erdil (2018) also confirmed this statement and further pointed out that individuals with higher price sensitivity than the average always reluctantly purchase sustainable products, even if he/she has concern for the environment but will eventually choose traditional products.

### *Purchase Intention*

Purchase intention is the subjective tendency of individuals to choose a particular product (Wang et al., 2013). Moreover, it is regarded as a good predictor of behavior in various situations. Dezdar (2017) found that purchase intention significantly impacts actual purchase behavior, even as the representative of actual behavior. In sustainable consumption, purchase intention is also a significant explanatory variable of sustainable purchase behavior (Ajzen, 1991). Therefore, investigating the purchase intention of recycled paper benefits analyzing the actual purchase behavior. Furthermore, sustainable purchase intention is regarded as the possibility of individuals giving priority to the product with pro-environmental performance rather than the traditional product. Thus, the purchase intention of recycled paper is the possibility that consumers choose paper products with wastepaper content instead of virgin paper.

Recycled paper is considered a sustainable product (Zhang & Dong, 2020). Accordingly, Past literature has identified several factors affecting sustainable purchase intention, such as attitude (Singhal et al., 2019; Sreen et al., 2018), environmental concern (Goh & Balaji, 2016; Kim & Choi, 2005), subjective norms (Park & Lin, 2020; Singhal et al., 2019), perceived environmental responsibility (Mukhtar et al., 2017; Yue et al., 2020), perceived behavior control (Gaur et al., 2018; Khor & Hazen, 2017), perceived consumer effectiveness (Jaiswal & Kant, 2018), and price sensitivity (Liobikienė et al., 2017; Sawitri & Rahanatha, 2019). Therefore, this paper adopts the attitude, subjective norms, and perceived behavior control as independent factors and price sensitivity as a moderate to explore the determinants of recycled paper purchase intention.

### **Proposed Framework**

Based on the discussion above, previous literature shows that attitudes, subjective norms, and perceived behavior control affect consumers' purchase intention of sustainable products. Using TPB as the underpinning theory, this research establishes the link between these three classical variables and recycled paper purchase intention by adding the price sensitivity as a moderate.

Attitude has been widely used in discussing purchase intention of various sustainable products and has proved to have good predictive performance. When consumers encourage a positive attitude towards purchasing behavior, they will be concerned about its ecological and social benefits and further choose sustainable products to replace unsustainable ones (Cheung & To, 2019). Similarly, subjective norms are also essential in promoting sustainable purchase intention. Park and Ha (2012) argued that consumers who prefer buying sustainable products may have higher subjective norms than the unwilling individuals. In addition,

perceived behavior control is another factor positively correlated with sustainable purchase intention. When individuals have more resources and opportunities to buy a commodity, their perceived behavior control will be more robust, and they may desire to purchase sustainable products (PrakashYadav & Rai, 2017). Moreover, price is the crucial factor affecting consumers' purchase decisions and has been proved to be an effective moderator (Hsu et al., 2017).

Accordingly, this paper proposes a theoretical framework to investigate the impacts of attitude, subjective norms, and perceived behavior control on recycled paper purchase intention, further discussing the moderate effect of price sensitivity (Figure 1).

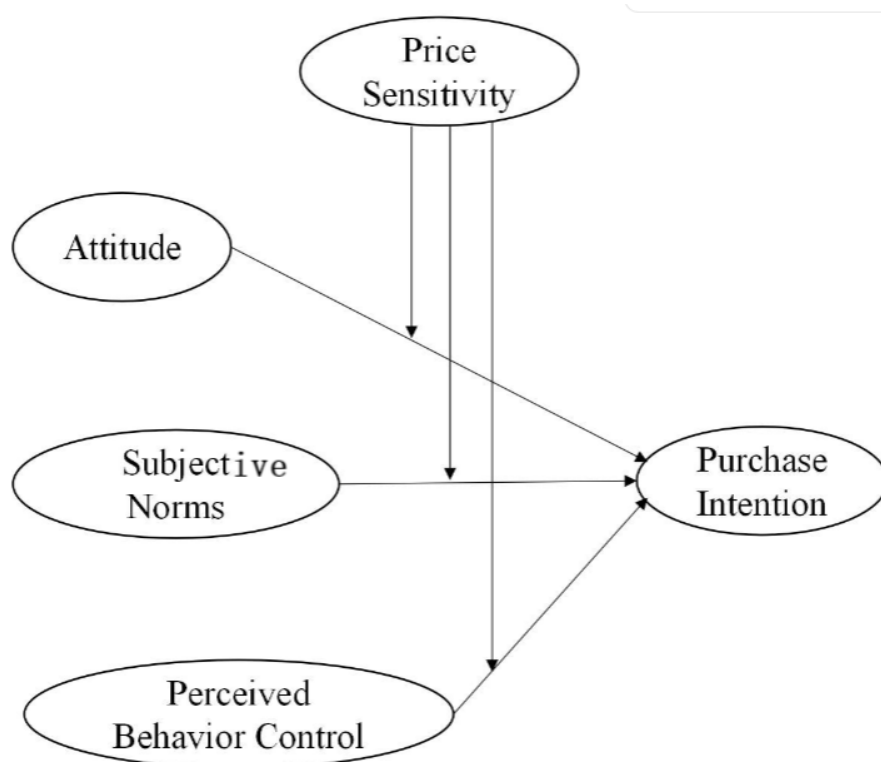


Figure 1: Proposed Conceptual Framework

**Conclusion and Future Research Direction**

Based on the above-mentioned literature review, the following propositions are proposed to examine Chinese consumers' intentions to purchase recycled paper through the perspective of the Theory of Planned Behavior. As such, the following propositions to be tested, as illustrated in Table 1.

Table 1

*Propositions to be tested*

P1	There is a positive relationship between attitude and purchase intention.
P2	There is a positive relationship between subjective norms and purchase intention.
P3	There is a positive relationship between perceived behavior control and purchase intention.
P4	<b>Price sensitivity has a negative moderate effect on the relationship between attitude, subjective norms, perceived behavior control and purchase intention.</b>

From a theoretical standpoint, the findings will represent the first attempt to discuss the factors influencing consumer intention to purchase recycled papers in the Chinese context, and may shed light on the factors influencing Chinese consumers' recycled paper purchase intention. In particular, the empirical evidence will contribute to the body of knowledge by employing the extended TPB theory to investigate the understudied drivers of purchase intention, including the moderate effect of price sensitivity. In addition, it proposed the necessity of future empirical research into the factors of recycled paper purchase intention. Thus, the researcher suggested using quantitative analysis to collect primary data and questionnaires to validate the influential factors.

From a practical perspective, researchers, manufacturers of recycled paper, and retailers can benefit from understanding how consumers purchase recycled papers. The purchase of recycled paper is gaining increasing interest among Chinese consumers. In addition, the urgent need for environmental improvement has caused the purchase of recycled paper to become widespread. In addition, further empirical research will benefit officials, policymakers in the recycled paper industry, and environmental organisations.

## References

- Abdollahbeigi, M. (2021). An Overview of the Paper Recycling Process in Iran. *Journal of Chemical Reviews*, 3(1), 1-19.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-21
- Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological bulletin*, 82(2), 261.
- Asih, D., Setini, M., Soelton, M., Muna, N., Putra, I., Darma, D., & Judiarni, J. (2020). Predicting green product consumption using theory of planned behavior and reasoned action. *Management Science Letters*, 10(14), 3367-3374.
- Balea, A., Sanchez-Salvador, J. L., Monte, M. C., Merayo, N., Negro, C., & Blanco, A. (2019). In situ production and application of cellulose nanofibers to improve recycled paper production. *Molecules*, 24(9), 1800.
- Bigliardi, B., Campisi, D., Ferraro, G., Filippelli, S., Galati, F., & Petroni, A. (2020). The intention to purchase recycled products: Towards an integrative theoretical framework. *Sustainability*, 12(22), 9739.
- Blose, J. E., Mack, R. W., Pitts, R. E., & Xie, H. Y. (2019). Exploring Young U.S. and Chinese Consumers' Motivations to Recycle. *Journal of International Consumer Marketing*, 32(1), 33-46. <https://doi.org/10.1080/08961530.2019.1618776>
- Carfora, V., Cavallo, C., Caso, D., Del Giudice, T., De Devitiis, B., Viscecchia, R., . . . Cicia, G. (2019). Explaining consumer purchase behavior for organic milk: Including trust and green self-identity within the theory of planned behavior. *Food quality and preference*, 76, 1-9.
- Chakraborty, D. (2015). Recycled Paper from Wastes: Calculation of Ecological Footprint of an Energy-Intensive Industrial Unit in Orissa, India. In *Environmental Implications of Recycling and Recycled Products* (pp. 259-282). [https://doi.org/10.1007/978-981-287-643-0\\_10](https://doi.org/10.1007/978-981-287-643-0_10)
- Chaturvedi, P., Kulshreshtha, K., & Tripathi, V. (2020). Investigating the determinants of behavioral intentions of generation Z for recycled clothing: an evidence from a developing economy. *Young Consumers*.



- Chen, Q., & Taylor, D. (2020). Economic development and pollution emissions in Singapore: Evidence in support of the Environmental Kuznets Curve hypothesis and its implications for regional sustainability. *Journal of Cleaner Production*, 243, 118637.
- Cheng, S., Lam, T., & Hsu, C. H. C. (2016). Negative Word-of-Mouth Communication Intention: An Application of the Theory of Planned Behavior. *Journal of Hospitality & Tourism Research*, 30(1), 95-116. <https://doi.org/10.1177/1096348005284269>
- Cheung, M. F., & To, W. M. (2019). An extended model of value-attitude-behavior to explain Chinese consumers' green purchase behavior. *Journal of Retailing and Consumer Services*, 50, 145-153.
- Dagger, T. S., & David, M. E. (2012). Uncovering the real effect of switching costs on the satisfaction-loyalty association: The critical role of involvement and relationship benefits. *European Journal of Marketing*.
- Dezdar, S. (2017). Green information technology adoption: Influencing factors and extension of theory of planned behavior. *Social Responsibility Journal*.
- Ede, J., Graine, S., & Rhodes, C. (2011). Moving towards sustainable food consumption: Identifying barriers to sustainable student diets. In.
- Erdil, M. (2018). UNDERSTANDING THE DRIVERS OF GENERATION Y CONSUMERS' GREEN PURCHASE INTENTION: PRICE SENSITIVITY AS A MODERATING VARIABLE. *Journal of Business Economics and Finance*, 7(1), 89-100.
- Ferreira, G. (2018). "Green Consumption" in Rio de Janeiro: A Comparative Study between Generations Y and Z. *London Journal of Research in Humanities and Social Sciences*.
- Gaur, J., Mani, V., Banerjee, P., Amini, M., & Gupta, R. (2018). Towards building circular economy: A cross-cultural study of consumers' purchase intentions for reconstructed products. *Management Decision*.
- Ghali-Zinoubi, Z., & Toukabri, M. (2019). The antecedents of the consumer purchase intention: Sensitivity to price and involvement in organic product: Moderating role of product regional identity. *Trends in Food Science & Technology*, 90, 175-179.
- Giannetti, B., Agostinho, F., Almeida, C., Yang, Z., Liu, G., Wang, Y., & Huisingh, D. (2019). Ten years working together for a sustainable world, dedicated to the 6th IWACP: Introductory article. *Journal of Cleaner Production*, 226, 866-873.
- Goh, S. K., & Balaji, M. (2016). Linking green skepticism to green purchase behavior. *Journal of Cleaner Production*, 131, 629-638.
- Ha, S., & Kwon, S. (2016). Spillover from past recycling to green apparel shopping behavior: the role of environmental concern and anticipated guilt. *Fashion and Textiles*, 3(1), 1-14.
- Halder, P., Hansen, E. N., Kangas, J., & Laukkanen, T. (2020). How national culture and ethics matter in consumers' green consumption values. *Journal of Cleaner Production*, 265, 121754.
- Han, N., Zhang, J., Hoang, M., Gray, S., & Xie, Z. (2021). A review of process and wastewater reuse in the recycled paper industry. *Environmental Technology & Innovation*, 24, 101860.
- Hartono, G. M., Salendu, A., & Gatari, E. (2020). Understanding Indonesian Consumer's Intention to Purchase Organic Food Products: The Moderating Role of Price Sensitivity. *Jurnal Psikologi TALENTA*, 6(1). <https://doi.org/10.26858/talenta.v6i1.13949>
- Hickel, J. (2019). The contradiction of the sustainable development goals: Growth versus ecology on a finite planet. *Sustainable Development*, 27(5), 873-884.

- Hsu, C.-L., Chang, C.-Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services*, 34, 145-152.
- Hu, F. (2019). The Impact of Environmental Values on Consumers' Green Consumption Behavior. *Ekoloji*, 28(108), 2243-2247.
- Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60-69.
- Joshi, Y., & Rahman, Z. (2015). Factors Affecting Green Purchase Behaviour and Future Research Directions. *International Strategic Management Review*, 3(1-2), 128-143. <https://doi.org/10.1016/j.ism.2015.04.001>
- Jung, H. J., Choi, Y. J., & Oh, K. W. (2020). Influencing factors of Chinese consumers' purchase intention to sustainable apparel products: Exploring consumer "attitude-behavioral intention" gap. *Sustainability*, 12(5), 1770.
- Khor, K. S., & Hazen, B. T. (2017). Remanufactured products purchase intentions and behaviour: Evidence from Malaysia. *International Journal of Production Research*, 55(8), 2149-2162.
- Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *ACR North American Advances*.
- Ko, S. B., & Jin, B. (2017). Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management: An International Journal*.
- Kumar, B., Manrai, A. K., & Manrai, L. A. (2017). Purchasing behaviour for environmentally sustainable products: A conceptual framework and empirical study. *Journal of Retailing and Consumer Services*, 34, 1-9.
- Kumar, N., & Mohan, D. (2021). Sustainable apparel purchase intention: Collectivist cultural orientation and price sensitivity in extended TPB model. *Journal of Revenue and Pricing Management*, 20(2), 149-161.
- Laureti, T., & Benedetti, I. (2018). Exploring pro-environmental food purchasing behaviour: An empirical analysis of Italian consumers. *Journal of Cleaner Production*, 172, 3367-3378.
- Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing intelligence & planning*.
- Lin, P.-C., & Huang, Y.-H. (2012). The influence factors on choice behavior regarding green products based on the theory of consumption values. *Journal of Cleaner Production*, 22(1), 11-18.
- Liobikiene, G., & Bernatoniene, J. (2017). Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review. *Journal of Cleaner Production*, 162, 109-120.
- Liobikiene, G., Grinceviciene, S., & Bernatoniene, J. (2017). Environmentally friendly behaviour and green purchase in Austria and Lithuania. *Journal of Cleaner Production*, 142, 3789-3797.
- Magnier, L., Mugge, R., & Schoormans, J. (2019). Turning ocean garbage into products—Consumers' evaluations of products made of recycled ocean plastic. *Journal of Cleaner Production*, 215, 84-98.

- Maichum, K., Parichatnon, S., & Peng, K.-C. (2016). Application of the extended theory of planned behavior model to investigate purchase intention of green products among Thai consumers. *Sustainability*, 8(10), 1077.
- Marvi, M. H., Minbashrazgah, M. M., Zarei, A., & Baghini, G. S. (2020). Knowledge foundation in green purchase behaviour: Multidimensional scaling method. *Cogent Business & Management*, 7(1), 1773676.
- Mukhtar, D., Shen, F., Shin, L., Nazli, N., Rahim, N. A. A., Adnan, S. M., & Hassan, H. (2017). Influencing factors of purchasing behaviour among generation Y on green products in universities and colleges. *Intercont. J. Mark. Res. Rev*, 5, 20-35.
- Oncioiu, I., Ifrim, A. M., Petrescu, M., Petrescu, A. G., Petcu, C., & Silvestru, C. I. (2021). Considerations regarding the purchase behaviour for clothes made from recycled textile waste in Turkey. *Industria Textila*, 72(01), 97-101. <https://doi.org/10.35530/it.072.01.1840>
- Park, H. J., & Lin, L. M. (2020). Exploring attitude–behavior gap in sustainable consumption: Comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623-628.
- Park, J., & Ha, S. (2012). Understanding pro-environmental behavior: A comparison of sustainable consumers and apathetic consumers. *International Journal of Retail & Distribution Management*.
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123-134.
- Pelli, P., & Lahtinen, K. (2020). Servitization and bioeconomy transitions: Insights on prefabricated wooden elements supply networks. *Journal of Cleaner Production*, 244, 118711.
- Phantratanamongkol, S., Casalin, F., Pang, G., & Sanderson, J. (2018). The price-volume relationship for new and remanufactured smartphones. *International Journal of Production Economics*, 199, 78-94.
- PrakashYadav, G., & Rai, J. (2017). The Generation Z and their social media usage: A review and a research outline. *Global journal of enterprise information system*, 9(2), 110-116.
- Rahayu, L. M. P., Abdillah, Y., & Mawardi, M. K. (2017). *Pengaruh green marketing terhadap keputusan pembelian konsumen (Survei Pada Konsumen The Body Shop di Indonesia dan di Malaysia)* [Brawijaya University].
- Sawitri, I., & Rahanatha, G. B. (2019). Pengaruh Green Marketing Dan Brand Image Terhadap Loyalitas Pelanggan. *E-Jurnal Manajemen Universitas Udayana*, 8(8), 5267.
- Seemiller, C., & Grace, M. (2018). Generation ZA Century in the Making. *Generation ZA Century in the Making*.
- Shahcheragh, S. F. (2021). Investigating the possibility of using recycled magazine paper in the production of newsprint with the aim of proper management of paper waste.
- 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*.
- Sheoran, M., & Kumar, D. (2020a). Benchmarking the barriers of sustainable consumer behaviour. *Social Responsibility Journal*.
- Sheoran, M., & Kumar, D. (2020b). Benchmarking the barriers of sustainable consumer behaviour. *Social Responsibility Journal*, ahead-of-print(ahead-of-print). <https://doi.org/10.1108/srj-05-2020-0203>

- Singhal, D., Jena, S. K., & Tripathy, S. (2019). Factors influencing the purchase intention of consumers towards remanufactured products: a systematic review and meta-analysis. *International Journal of Production Research*, 57(23), 7289-7299.
- Sreen, N., Purbey, S., & Sadarangani, P. (2018). Impact of culture, behavior and gender on green purchase intention. *Journal of Retailing and Consumer Services*, 41, 177-189.
- Stall-Meadows, C., & Davey, A. (2013). Green marketing of apparel: Consumers' price sensitivity to environmental marketing claims. *Journal of Global Fashion Marketing*, 4(1), 33-43.
- Wang, S., Wang, J., Yang, F., Wang, Y., & Li, J. (2018). Consumer familiarity, ambiguity tolerance, and purchase behavior toward remanufactured products: The implications for remanufacturers. *Business Strategy and the Environment*, 27(8), 1741-1750.
- Wang, Y., & Hazen, B. T. (2016). Consumer product knowledge and intention to purchase remanufactured products. *International Journal of Production Economics*, 181, 460-469.
- Wang, Y., Wiegerinck, V., Krikke, H., & Zhang, H. (2013). Understanding the purchase intention towards remanufactured product in closed-loop supply chains: An empirical study in China. *International Journal of Physical Distribution & Logistics Management*.
- Xu, X., Wang, S., & Yu, Y. (2020). Consumer's intention to purchase green furniture: Do health consciousness and environmental awareness matter? *Science of the Total Environment*, 704, 135275.
- Yue, B., Sheng, G., She, S., & Xu, J. (2020). Impact of Consumer Environmental Responsibility on Green Consumption Behavior in China: The Role of Environmental Concern and Price Sensitivity. *Sustainability*, 12(5). <https://doi.org/10.3390/su12052074>
- Zhang, X., & Dong, F. (2020). Why do consumers make green purchase decisions? Insights from a systematic review. *International Journal of Environmental Research and Public Health*, 17(18), 6607.
- Zhang, Y., He, Y., Yue, J., & Gou, Q. (2019). Pricing decisions for a supply chain with refurbished products. *International Journal of Production Research*, 57(9), 2867-2900.
- Zhao, L., Lee, S. H., & Copeland, L. R. (2019). Social media and Chinese consumers' environmentally sustainable apparel purchase intentions. *Asia Pacific journal of marketing and logistics*.
- Zheng, X., Li, C., Fang, X., & Zhang, N. (2021). Price sensitivity and consumers' support for renewable energy in China. *Energy*, 222, 119862.
- Zinoubi, Z. (2020). Motives of green consumption: The moderating roles of perceived consumer effectiveness and price sensitivity. *Archives of Business Research*, 8(1), 261-277.