Factors Affecting Consumers' Intention to buy Green Cosmetics

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Abstract. The purpose of the study is to examine the influence of green self-identity and global self-identity on green knowledge that leads to green trust and later, purchase intention towards green cosmetics. This study used purposive sampling method to collect data from 400 consumers that met the criteria: those who have used green cosmetics for the last six months. The time horizon for this study is cross-sectional. Structural equation modelling was used to test the hypotheses. The findings show positive effects of green self-identity and global self-identity on green knowledge, green knowledge on green trust as well as green trust towards purchase intention. Results of the study may assist the marketers of green cosmetics to create advertisements that emphasize consumers' green self-identity as well as factors that can increase consumers' knowledge and trust towards green cosmetics. Further research should incorporate other variables to improve the predicting power of the proposed model. This study is among the first to explore two types of identity in the field of green cosmetics.

Keywords: green self-identity, global self-identity, green knowledge, green trust , purchase intention.

1. Introduction

Environmental issues that have made Indonesia the second largest producer of plastic in the world [1] have made many parties aware of the importance of preserving the environment. Environmentally friendly products have emerged, one of which is cosmetics. The data from Perhimpunan Perusahaan dan Asosiasi Kosmetika Indonesia (PPAK) shows that Indonesian cosmetics industry have experienced growth in 2021, which was 7.45 % [2]. The Ministry of Industry is also encouraging cosmetics businesses to design pro-environmentally packaging that will not harm the environment. Consumers are now looking for environmentally friendly cosmetics, and this trend creates opportunities for local cosmetics companies to fullfil consumers' needs. Indonesia's potential consumers are very large and the majority of cosmetics consumers are millenials in the age range of 18 until 35 years [3].

A report released by The World Economic Forums Global Shapers Survey at 2017 shows that the millenial generation does care about environmental issues [4]. Likewise, a survey of Indonesian people conducted by Statita shows that 82% respondents participated in the survey considered environmental issues are important in their lives [5]. Research conducted by Adnan, Ahmad and Khan [6] as well as Kautish and Sharma [7] shows that millennials in developing countries are now becoming more aware of environmental issues and preservation. Some other research found that young consumers in developing countries are willing to buy green products and consume in responsible way. [8] [9] [10]. These phenomenon give opportunities for green cosmetics producers to contribute to the achievement of sustainable consumption, one of the goals of Sustainable Development Goals, the world agenda to pursue Sustainable Development.

Previous studies show that individual factors such as green self-identity is considered to be important in green product purchase [11] [12] [13]. Green self-identity reflects one's self-perception in supporting environmental issues combined with social norms, values and influential others and buying environmentally friendly products will exhibit someone's environmental values [14]. Meanwhile, people are now living in diverse cultural values, interacting with people from other cultures and countries, making the world is borderless. Openness to other cultures influences people's perception about green products [15] and they seek identification due to multiculural adaptation as the result of cultural diversity. Cleveland et.al stated that cosmopolitanism and globalization encourage consumers to show that they live in a multiculural environment and are part of global society [16] as well as develop their global self-identity.

These two identities are the result of combination of people's demographic and psychographics factors that create global values, which is pro-environmental value in this discourse. Both identities will influence people's knowledge of green cosmetics, which reflects their global environmental concerns [15]. . People's knowledge about green cosmetics is rarely explored by researchers, compared to knowledge of green apparel. Previous research found that consumers' knowledge of eco-labels can support their trust to green products [17] [18] [19]. Trust is important in suppporting consumers' decision to buy green products, because trust means that consumers' expectation is fullfiled. Higher level of trust towards green product will increase consumers' intention to buy it [19] [20].

There has been a rise in green cosmetics production in Indonesia as well as ecological concern among consumers. Some companies use raw materials from nature that are cultivated in sustainable way. However, there is limited research about green cosmetics in Indonesia due to the acceptance of green cosmetics is still low. Therefore, it is crucial for the marketers to investigate factors that influence consumers' decision in buying green cosmetics. This will help marketers develop suitable strategies for green cosmetics.

The purpose of this research is to analyse whether the two self-identity constructs affect consumers' knowledge about green cosmetics and green trust that will encourage their purchase intention.

2.   Literature Review and Hypotheses Development

Self-identity is a person's view of himself. Bartels, J. and van den Berg, I. suggest that there is a green self-perception which shows a person's perception of himself as part of a green consumer [21]. This self-perception affects consumers' views on environmentally friendly products. Using environmentally friendly products reflects the extension of the green identity that a consumer tries to attach to himself. People who identify themselves having green self-identity are more willing to buy environmentally friendly products [14] [22] [23]. Consumers who want to become part of an elite social class and be different from others will consume products that shows their identity [24]. Openness to foreign cultures makes consumers more receptive to the existence of environmentally friendly products [7] [25]. This is due to the disclosure of information that allows consumers from various cultures to enter a market place that contains a variety of products, information and reviews from various people in the world. This phenomenon makes people more adaptable and have knowledge about new things. One's identity as a global consumer (global self-identity) will increase his /her understanding of green products [15]. Therefore, this research proposed these hypotheses:

H1 : Green self-identity positively influences green knowledge.

H2 : Global self-identity positively influences green knowledge.

Knowledge of environmentally friendly products (green knowledge) is important in encouraging purchase intention. This knowledge is in the memory of people related to environmental care and products/brands that have produced environmentally friendly products. For marketers, it is necessary to always educate consumers and maintain a brand image for the environmentally friendly products they produce. Green knowledge reflects people's understanding of eco-friendly products and environmental problems as well as how manufacturers can help to solve the problems [26]. Previous findings have proven that green knowledge increases people's interest in buying green products [8] [27] [28] [29]. It is not easy to evaluate green products' attributes because green products provide high credence values for consumers. Therefore, it is necessary to build consumers' trust before they are ready to consume green products. In the case of environmentally friendly products, eco-labelling, such as organic, biodegradable, recycling is considered to be important and consumers often rely on this information. Previous research revealed that knowledge about eco labels as determinant of consumers' trust on green product [17] [18] [30]. The following hypothesis was proposed:

H3 : Green knowledge positively influences green trust.

Consumers' beliefs on green products creates their confidence and willingness to buy eco-friendly brands [30]. Harris and Goede stated that trust is an important variable that predicts purchase intention [31]. Researchers have found that decision to buy energy-efficient home appliances was influenced by consumers' trust on the eco-labels attached to the products [17] [18]. Therefore, it was hypothesized that:

H4 : Green trust positively influences green purchase intention.
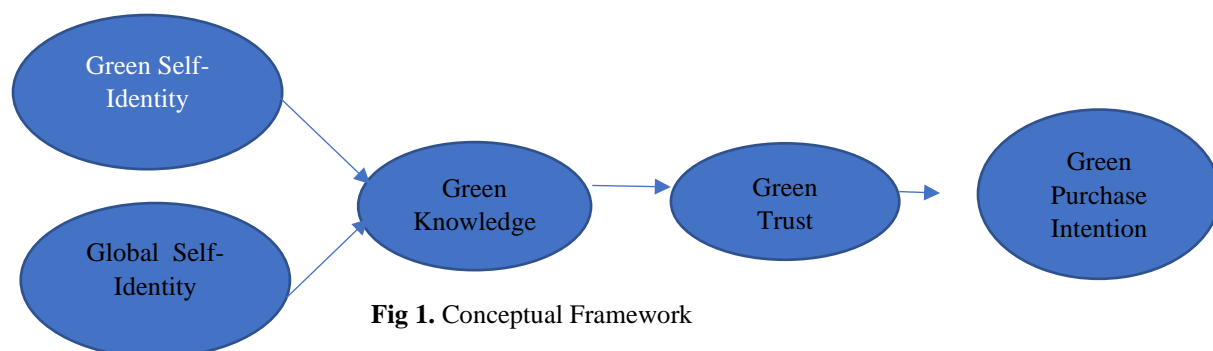
The conceptual framework is described in Figure 1.

Fig 1. Conceptual Framework

3.   Methods

According to Sekaran and Bougie [33], the research design consists of details of a study which can be explained in the following. This research used a survey as a strategy to collect information. Since this study is descriptive (correlational), it is conducted in a non contrived setting with minimal interference of the researcher. Next, this study used individuals as the unit of analysis and it was a cross-sectional study because the data were gathered just once in a few weeks. This research used a self-administered questionnaire to collect the data from targeted respondents. A non probability   purposive sampling approach was adopted to gather the data. A total of 400 respondents who were familiar and have ever consumed green cosmetics for the last six months during the survey participated in the survey which was conducted on January 2022. The measurements related to green self-identity and green trust were adopted from Khare and Pandey [14], and global self-identity constructs were adopted from Khare and Kautish [15]. Green knowledge was measured using items adopted from Suki [20] as well as Taufique, Vocina and Polonsky [19]. Next, items from Kautish and Sharma [7] were adopted to measure green purchase intention. The data was analysed using Structural Equation Model (SEM).

4.   Results and Discussion

Overall, the result of the analysis showed an adequate fit of the measurement model as recommended by Hair et.al [32]   (CMIN/df: 3.412; RMSEA: 0.078; GFI: 0.849; AGFI: 0.806; CFI: 0.921; $\dot{\rho}$:0.000).   Also, standardized factors loading of all the measurement items met the criteria, which was above 0.30 [32]. The reliability values (Cronbach Alpha) were above 0.70, and it indicated that the measurements were internally consistent [32]. The hypotheses tests showed that all hypotheses were supported. H1 proposed the positive influence of green self-identity on green knowledge and it was confirmed ($\dot{\rho}$:0.000). This finding is aligned with past studies by Khare and Pandey [14], Ahn, Koo and Chang [22] and Khare [23]. H2 predicted that global self-identity affects green knowledge and it was also confirmed ($\dot{\rho}$: 0.013). This in line with previous research by Kautish and Sharma [7] and Khare and Kautish [15]. H3 examined whether green knowledge influences green trust, and it was supported ($\dot{\rho}$: 0.000) and this finding confirmed past research by Norazah [27], Pagiaslis and Krontalis [28], Yadav and Pathak [8], Warris and Ahmed [18] as well as Warris and Hameed [17]. Further examination of H4 supported the idea that green trust positively affects green purchase intention ($\dot{\rho}$: 0.000) and this finding is consistent with past research conducted by Tesla et.al [30], Harris and Goode [31], Warris and Hameed [17] also Warris and Ahmed [18].

This study contributes to the existing research on green cosmetics by testing the role of two types of self-identity which are green self-identity and global self-identity along with green knowledge and green trust in predicting consumers' intention to buy green cosmetics. This research also provides a conceptual framework that incorporate some important variables that have already proven to understand people' intention to buy green cosmetics.

The findings show that consumers who identify themselves as green consumers and part of global society have knowledge about attributes of green cosmetics and they know that buying green cosmetics is perceived as long-term investment for the environment. To the best of the authors' knowledge, earlier studies on green cosmetics have not examined the use of two constructs, green self-identity and global self-identity simultaneously in order to predict consumers' knowledge and trust on green cosmetics that later will drive purchase intention. As mentioned by Khare and Pandey [14], green self-identity is a focal construct that drives individuals to purchase environmentally friendly products. People will define themselves as green consumers when they are practising pro-environmental behaviour, such as recycling and buying organic food. According to Zabkar and Hosta [34] consuming green products reflects highly symbolic value and as people would like to increase their prosocial status, they will be using green products publicly. Moreover, Khare and Kautish [15], as people are becoming part of global society, they are more concerned about environmental problems that will help them to understand more about ways to overcome the problems, including using green product and its attributes (e.g. environmentally friendly, organic, recycle, energy-efficient and biodegradable).

The current study also posited that knowledge about green cosmetics helps consumers to trust the stores where they buy the products. The more consumers trust the stores, they are more likely to buy green cosmetics and give recommendation to others. Meanwhile, Warris and Hameed [17] and Testa et.al [30] found that consumers' knowledge about eco-labels is an important determinant to build their trust in green products. Related to this research, it is obvious that stores carrying green products must guarantee that all the products contain eco-labels such as third-party certification or environmental information attached in the packaging, because eco-labels convey information and can be used as a marketing tool in promoting green products [30].

5. Conclusion, Managerial Implications, Limitations and Suggestions for Future Research

The aim of this study is to analyse the influence of green and global self-identity on green knowledge, green knowledge on green trust and green trust on green purchase intention regarding green cosmetics. All the hypotheses were supported and it can be concluded that both green and global self-identity positively influences green knowledge as well as green knowledge affects green trust positively. Lastly, green trust was proved to influence green purchase intention.

The emerging of pro-environmental consumers becomes a good opportunity for green cosmetics producers, and the findings of this study can help marketers to design appropriate marketing campaigns to introduce and educate consumers. Green cosmetics marketers can use green self-identity and global self-identity to frame the messages that highlight the importance of being green. By showing the conformity with global society that attempts to preserve the environment, consumers will be more likely to accept the ideas of green cosmetics. Furthermore, marketers can use online communities and social media to promote the new lifestyle, which is using green cosmetics that give benefits to the global natural environment and the consumers themselves. Nowadays, it is imperative to use online communities and social media because people can exchange ideas and sharing information globally. Also, participating in online communities give opportunities for consumers to connect with environmental groups and social activists and discuss the important of adopting sustainable consumption. Using celebrities and opinion leaders in environmental issues will also increase consumers' knowledge and trust on green cosmetics. Marketers must also educate consumers about the meaning of eco-labels via advertisements or publicity, since many consumers rely on eco-labels when they make purchase decision. Also, marketers can use public relations to introduce their green brands by conducting talk show, seminar, press conference as well as participating in public events, such as "car free day' or exhibition that introducing green products.

This study had several limitations. Firstly, it did not examine the impact of the demographic factors on intention to purchase green cosmetics. Further research needs to investigate these factors. The current research used only four green brand cosmetics. Future study should add more local brands that position their products to be green and have already sold in Indonesia. Moreover, this study did not incorporate online communities and e-WOM as antecedents of green knowledge. These variables may play important role in predicting green purchase intention due to the facts that consumers are more likely to rely on information from digital platform nowadays. Future research may add online communities and e-WOM as new two constructs in the proposed conceptual framework.

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