

A review on the sustainable purchase behavior of Gen Z with the changing source of spending power

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Abstract

Sustainable consumption and production are a major concern all over the world in this environmentally and climatologically crucial phase of planet earth. In last few years, several studies tried to understand the changing global scenarios and identify remedies through a sustainable way. To understand the future consumption trends of the future generations and to derive right policies for a sustainable future, extensive study on this Generation Z (Gen Z) population is needed, as being the upcoming global consumers, Gen Z are dominantly taking their place in the global market. The present study attempted to understand the nature of sustainable consumption among Gen Z population all over the world. The review showcased that, in general, Gen Z population are aware about environmental concerns. However, there remains a gap between consumer's green attitude and their sustainable consumption. The present study also reviews the actual spending pattern of global youth and attempted to draw insights on the various avenues Gen Z are spending their money and the sources of their earning. The review found out that very less research attempted to understand the influence of income level/spending power on the sustainable purchase behavior of Gen Z population, majorly from developing countries. Therefore, the present review addresses a significant research gap in the context of sustainable purchase behavior development among Gen Z consumers.

Keywords: Sustainable purchase behavior; Generation Z; Spending power; Spending pattern

1. Introduction

As the planet earth is moving towards an environmentally and climatologically crucial phase, global consciousness about the balance between environmental conservation and economic well-being are coming to the major focus of the society (Bartels et al., 2016). United Nations (UN) in their sustainable development goals (SDGs) aimed to ensure abolishment of hunger and poverty, protection of environment and prosperous and fulfilling life of global citizens (Bebbington & Unerman, 2018; Ozili, 2022). In one of these goals of sustainable development of the planet, Sustainable Consumption and Production (SDG 12) is targeted to achieve by 2030 (GOAL 12: Sustainable Consumption and Production / UNEP - UN Environment Programme, 2021). According to International Resource Panel, these agenda can reduce the resource use by 25%, minimize

GHG emission by 90% and also can enhance economic growth substantially (Oberle et al., 2019). Still, SDG 12 has received very little attention from the scientific community and marketing agencies and global perspective regarding the sustainable consumption is lacking (Blicharska et al., 2021; Sakao et al., 2023).

Development of sustainable purchase behavior is deeply connected with SDG 12 where consumers pay attention towards more environment friendly alternatives, such as green restaurants, direct purchase from regional farmer's market, green manufactured products etc. (Su et al., 2019). Sustainable purchasing involves procuring sustainable products which own socio-economic and environmentally friendly attributes. By purchasing through a sustainable way, environmental degradation can

be reduced or prevented by the consumers (Biswas & Roy, 2015). Therefore, more studies are showing interest to record the sustainable purchasing behavior of consumers globally (Cerri et al., 2018; Joshi & Rahman, 2017; Kumar et al., 2017).

Being the upcoming global consumers, Generation Z (Gen Z) population are dominantly taking their place in the global market. Generation Z (Gen Z) are individuals born in between 1995 and 2012. In recent time, Gen Z consumers along with millennials (born between 1981 to 1995) are holding the consumer market all over the globe majorly. Gen Z population have grown up with internet and smartphones where 99% of them are accustomed with digital world, as their growth timeline coincided with it (Duffett, 2020). They are accustomed to using electronic devices, more frequent with social media information sharing and instant access along with browsing of online websites (Smith, 2020). They seek for individuality and independence as well as they are also interested in connecting with the outside world through online social platforms to gain social identity. Presently, Gen Z population has become the one-third of the global population and therefore can be considered as a significant consumer base (Brown, 2020). In US, the total spending power by Gen Z is almost \$150 billion and Gen Z alone account for 40 percent of global consumers (Amed et al., 2020). As Gen Z is going to take the place for highest number of active consumers in near future, more research is needed to be concentrated on the consumption of Gen Z population. Also, to understand the future consumption trends of the future generations and to derive right policies for a sustainable future, extensive study on this generation is needed.

Gen Z populations are also known to be eco-friendlier, more specifically they are more concerned about the environment and have a higher quality of life compared to other generational cohorts (Su et al., 2019). In addition, the Nielsen Global Survey of Corporate Social Responsibility and Sustainability carried out in 2015 on almost 30,000 consumers all over the globe (60 countries) showed that Gen Z

are more willing to pay extra for products and services that come from organizations which are committed to positive social and environmental impact and they are increasingly tagged as 'Generation Green' along with millennials (Choudhary, 2020; Nielsen, 2015). Such evidences provide a higher prospect of Gen Z to be more oriented with sustainability goals. The present study focusses on the existing research on the sustainable consumption of Gen Z population and determinants of sustainable purchase decision of Gen Z. Along with this the study tries to understand the spending pattern of this young generation and how the spending pattern is affected by the changing sources of spending power. The present review aims to critically evaluate the consumption scenario globally through an extensive literature survey and tries to understand the future research avenues associated with this research.

2. Review on sustainable purchase behavior by young consumers

In recent time, a bloom in research has been observed in the sustainable purchase behavior of consumers all over the world. Number of studies has been concentrated on the sustainable food consumption by consumers. A cross-sectional survey conducted in US on the Gen Z consumers showed that these consumers with high environmental consciousness and moderate ecological awareness considered more eco-friendly and healthy attributes while purchasing sustainable food. On the contrary, consumers with low environmental consciousness considered more extrinsic product attributes, i.e., price and convenience while purchasing food items (Su et al., 2019). On similar note, research on sustainable food consumption by Gen Z conducted by the Institute of Emerging Issues at North Carolina State University (2015) showed that Gen Z are willing to pay more for healthy foods and it also suggested that Gen Z population wish to follow a healthy lifestyle from relatively young age. To understand the sustainable food consumption of Gen Z cohorts who are also living away from home, Kamenidou et al. (2019) studied the students from Greek universities. The empirical study showed that the focus of sustainable food consumption behavior of these

students was limited to eating seasonal fruits and vegetables only and purchasing regional food. Also, the students' behavior was not homogeneous and they can be classified into two groups, i.e., "the under-consideration students" and "the negatively positioned students". However, the major segments of the studied Gen Z population showed an inclination towards a lifestyle encompassing sustainable food consumption. In support to this study, another interview-based case-study on Gen Z population from Finland showed that the study participants took the climate change challenge associated with food waste and biased diets very seriously. The Gen Z consumers identified several obstacles which hamper their sustainable food consumption behavior and these were majorly purchasing large food packages, unplanned routines, less self-discipline etc. (Kymäläinen et al., 2021). Further, studies have shown that Gen Z population are more concerned about the plastic pollution and intent to recycle for sustainability. A study on Gen Z consumers from China showed that environmental concerns, self-expression and social pessimism play significant role in drawing the recycling intention among the Gen Z consumers (Wang et al., 2022).

Studies also showed that Gen Z generation is the one who will dictate many of the strategies and guidelines which will manifest themselves in the labor market (Anders, 2021) and these young people get involved in actions to protect the environment because it satisfies them (Dabija et al., 2020). Furthermore, Gen Z population are strongly influenced by the reputation of the organizations as well as by the information available on product packaging, by the use of symbols and specific terminology (Nadanyiová & Gajanová, 2018). Some research work showed that Gen Z avoids waste of green food (Bulut et al., 2017). In addition, female Gen Z consumers are found to be more inclined towards buying green products (Lorincová et al., 2019). Therefore, large number of studies are showing an environmental concern and pro-active nature for Gen Z consumers for green purchase and sustainable consumption behavior.

However, certain consumer surveys have shown that there is a gap between consumer's green

attitude and their sustainable consumption. Most of the consumer's report suggests a positive attitude towards eco-friendly products, however consumers often seem to be unwilling to actually pay (White et al., 2019). Similar to this notion, study from Romania showed that compared to other generations, Gen Z has lower awareness for waste separation as well as recycling in general (Lakatos et al., 2016). This is in contrast to another study from Russia where Gen Z population showed higher awareness towards circular economy compared to other age groups (Ratner et al., 2021). Therefore, it is evident that there are certain gaps in the understanding of Gen z's sustainable behavior and if it varies with culture, geography or socio-economic status. The next section explores the determinants of sustainable purchase behavior which help to comprehend the stimulating factors.

3. Determinants of sustainable purchase behavior

The factors which influence the sustainable purchase behavior of consumers are needed to be understood. Social media advertising is considered as one of the significant antecedents of sustainable purchase behavior. To understand the Gen Z's green purchase intention in China, questionnaire survey through social networking sites revealed that social media sharing positively influence the green purchase intention and perceived green value and subjective norms mediate the relationship significantly (Sun & Xing, 2022). On a similar note, Nekmahmud et al. (2022) also demonstrated that attitude, perceived behavior control, subjective norms, green thinking and social media marketing influence the Hungarian consumers to buy sustainable products. Some studies also agreed that social media activities of consumers develop the pro-environmental behavior of consumers (Săplăcan & Márton, 2019). In addition, personalized advertising through social media marketing also showed to influence sustainable purchase decisions of Chinese consumers. Interestingly, the study showed that personalized advertising influence the impulsive buying tendency of the consumers which further enhance the sustainable purchase decisions (Zafar et al., 2021). Along with this,

sustainable marketing efforts and sustainable labelling are the comparatively newer methods to communicate sustainability information to the customers (Ateş, 2021; Cho & Baskin, 2018). Siraj et al. (2022) along with the factors of Theory of planned behavior showed that consumer's sustainable purchase intention significantly influenced by sustainable labelled products and the awareness of sustainable labels.

Apart from the influence of social media, perceived behavioral control along with perceived value and willingness to pay premium play a significant role in developing the green purchase intention among consumers (Yadav & Pathak, 2017). Prior studies have shown that perceived inconvenience negatively influence the eco-friendly product's purchase decision. Prior research highlighted the role of environmental knowledge to understand the purchase intention for environmentally sustainable products. Kumar et al. (2017) further illustrated that attitude towards environmentally sustainable products mediates the relationship between environmental knowledge and purchase intention. Pilgrimiene et al. (2020) divided the factors into two groups, namely internal and external factors while examining the factors for consumer engagement for sustainable consumption. Environmental attitude, perceived behavioral efficiency and perceived responsibility were categorized under the internal factor and conditions for sustainable consumption, promotion of sustainable consumption and social environment were thought as external factors. The study showed that internal factors have more impact on consumer engagement which is similar with other studies which showed that the positive attitude to environmental issues (Geng et al., 2017; Wu et al., 2016), perceived responsibility (P. Wang et al., 2014) and perceived effectiveness of one's behavior (Geng et al., 2017) had a direct positive impact on consumer behavior. Further, consumer engagement leads to the purchase of sustainable product has been observed in the study (Pilgrimiene et al., 2020). Al-Nuaimi and Al-Ghamdi (2022) gathered the research findings of the influence of education on

sustainable consumption globally. The study indicated a positive and significant effect of education on pro-environmental and sustainable consumption behavior and higher education institutes were identified as the most effective provider of enhancing consumer's attitude towards sustainable consumption.

4. Empirical studies on spending pattern of Gen Z

Gen Z is well known for their attitude of self-branding and also, they try to keep their lifestyle up-to-date and not fall behind others (Chow, 2017). Gen Z population are still young and they are less likely to work full time for long time which cause them to have generally less money compared to other generations. However, they do not compromise the quality for price. A survey conducted on more than 16,000 consumers in six countries—Australia, China, Indonesia, Japan, South Korea, and Thailand showed that most of the Gen Z consumers preferred to buy higher-quality products with long life-time which certainly differs with other generations spending pattern (Kim et al., 2020).

To understand their shopping pattern, a qualitative study from Malaysia was conducted on the Gen Z population through face-to-face or phone call interview. Five female undergraduates from five public universities in Malaysia were interviewed and their responses were categorized into different themes to understand deeply about their spending pattern. The study showed that food, fashion and skincare were the must-spend pattern for the Gen Z respondents (Kamardin & Sarif, 2021). The study showed that for food, they spend in a regular manner. Similar to this finding a survey report on 5,690 US teenagers showed that food was the number one spending item for respondents specially by the male consumers (Piper Sandler, 2021). Another study from university students from the United Kingdom indicated that the students who chose less healthy foods along with smoking, low physical activity, generally consume more red meat and alcohol and are more likely to spend more on food (Sprake et al., 2018). Other study from Australian secondary school students with an age range of 12-17 years showed that students

who get more pocket money, usually spend more money in buying soft-drinks from school canteen/ school vending machine.

Fashion was categorized as another important spending area, mostly among females (Piper Sandler, 2021). A study from US demonstrated that Gen Z are more willing to spend on fashion as they found appearing elegant and confident all the time is important and a key to take care of the appearance (Amed et al., 2020). Another study from Mumbai, India showed that youth aged between 13-25 years are spending majorly on buying clothes and accessories, grooming and gifts and female participants were dominantly spend compared to male members. On the contrary to other studies, the participants also displayed a money saving nature. Apart from major spending on food and fashion, a study from Kerala, India based on secondary data sources showed that young generation spent their money mostly on entertainment, cloth, electronic items, food cosmetics and others following a decreasing manner of spending. In terms of savings, banks are their first choice while mutual funds and equity share comes at the last. For investing purpose, this generation is more prone to invest where attractive returns are expected and easy withdrawal with higher flexibility and convenience are experienced. Also, recent investment data is revealing that 54% of the first-time mutual fund investors are gen Z population for the last 5 years. Also, this generation is highly experimental with new investment options such as cryptocurrencies and stocks (Nahar, 2023).

5. Spending power sources of Gen Z

Spending power is the income source of the youth by which they can spend for their own expenditure (Mahapatra & Mishra, 2019). Recent studies are showing that Gen Z are holding spending power of approximately \$143 billion which surpasses that of millennials (Davis, 2020). To obtain the socio-economic status of the younger generation, several studies attempted to understand the source of their spending power. Li et al. (2017) conducted research on Chinese children in megacities and their spending sources. The study used the data of Childhood Obesity Study performed in 2015

in China mega-cities, namely Beijing, Shanghai, Nanjing and Xi'an. Most of the students receive some amount of pocket money and 20% of students received more than 30 yuan per week.

However, there was no gender disparities for pocket money was noticed. In addition, the study revealed that students receive more pocket money when their parents could not get enough time to spend with their children. On a similar note, a longitudinal study for three years from China mega cities demonstrated that pocket money is the key spending power of Gen Zs and children's pocket money increased with their age. Other studies from various countries are also demonstrating that pocket money from parents or lucky money earned from relatives are the major income source for Gen Z population (Adamu et al., 2020; Hayei & Khalid, 2019; Labbutan & Carbonel, 2022). Very less students earn from some part-time job or business and are financially independent (Adamu et al., 2020; Harrison et al., 2015). Also, some studies pointed out that students get money very easily after they exhaust their pocket money (Sabharwal, 2016).

The concept of money allowance to the children is generally are performed to boost the financial management power and financial responsibilities (Collins & Odders-White, 2021; Deenanath et al., 2019). Such gestures induce good behavior among children and equip them with resources to be used for their future consumption (Drever et al., 2015). However, research on spending power of young generations depict various results. Some of them showed that pocket money may function as an intra-household resources allocation device in association with high financial literacy or providing education and good lifestyle habits to the children (Falese et al., 2021; Furnham, 1999). On the other hand, other research indicated association of risky and unhealthy lifestyle with increasing spending power of young generations (Cui et al., 2019; Lozza et al., 2023). It is needed to be thoroughly researched to understand how the spending source of Gen Z's affecting their spending attitude and spending pattern.

6. Relationship between Spending power and spending pattern of Gen Z

Recent researches are focusing more to comprehend the impact of spending power on the spending behavior of Gen Z populations. In recent time, Gen Z populations are entering in the professional world and start earning their own. The earlier researchers have attempted to understand the spending pattern of Gen Z and how various sources and amount of spending power induce their spending pattern. Nevertheless, most of the research came out with the adverse effect of high spending power of younger generations. Lozza et al. (2023) examined the influence of pocket money on the behavioral pattern of adolescents by studying the regional data from the 2018 wave of the Health Behaviour in School-aged Children (HBSC) in Italy. The study showed that those who received pocket money were more likely to spend over smoking. The study also suggested that adolescents having less than 10€ on request from parents were less likely to engage in at least four at-risk behaviors. On a similar note, other study from six European countries showed that personal income of adolescents was strongly associated with smoking behavior. The study further suggested that the relation between personal income and smoking was independent of family socio-economic status (Perelman et al., 2017). Another research conducted on urban adolescents and young adults in Bangladesh demonstrated the similar impact of access to money on smoking intensity (Ahmed et al., 2022). Not only for Gen Z population, but similar impact of higher income on the spending pattern has been observed for Gen Y population. The research showed that different income source has various impact on the spending of young adults. It showed that when Gen Y has pocket money to spend, they spend the money majorly on status consumption than discretionary money from earned income (Kim & Jang, 2014). Therefore, the spending pattern may not be particular for any generations, rather age play the vital role in determining the spending habits. However, large number of studies carried on the Gen Z population have showed such extravagant nature of spending money. On the contrary, some recent studies are emerging showing a

frugal lifestyle of Gen Z population where they spend their money intelligently. The study pointed out that when Gen Z like any product with high price, they tend to look for information about how they can find something similar and equal quality in cheaper price. Therefore, they simultaneously think about a shopping strategy keeping their budget in mind (Kusumawardhany, 2023). As past literature represents contrasting suggestions regarding the spending behavior of Gen Z population, further studies are needed to explore the subject area.

7. Research gap and future directions

The present review on existing literature on global sustainable development found out that there is lack of research on the SDG 12 compared to other SDGs. Furthermore, it has been observed that though recent studies are focusing more to understand the sustainable consumption and according purchase behavior of Gen Z population, there are certain gaps remaining. Firstly, there is a gap exists between the consumer's action and intention. The intention of sustainable consumption is not majorly followed by the consumers in real life (White et al., 2019). Moreover, self-reported assessment of sustainable consumption may obstruct in understanding the real scenario in sustainable consumption not only by Gen Z population, but from other generational cohorts also. Therefore, more empirical studies are needed which will focus in the actual sustainable purchase behavior of Gen Z population.

The present study also gathered information regarding the factors influencing the sustainable purchase behavior of Gen Z population (Nekmahmud et al., 2022). However, no studies have been found showing the influence of spending power on the sustainable consumption of Gen Z population. Spending power of Gen Z population mostly come from pocket money provided by parents (Labbutan & Carbonel, 2022). However, in the near future, as Gen Z population will be joining the workforce and will start to earn their own money, detailed studies will reveal the consumption and spending pattern of this generation. Most of the studies, while performing research on the effect

of spending power on Gen Z, have shown unsustainable purchase behavior by Gen Z students with large amount of fast-food consumption with smoking and alcohol intake (Ahmed et al., 2022; Lozza et al., 2023). Future study will demonstrate whether such spending pattern is unique to Gen Z or a characteristic of adolescents and young adults. Also, a large number of surveys have been carried out in the developing countries regarding the spending pattern and spending source of Gen Z population (Falese et al., 2021; Lozza et al., 2023). Further studies are needed from Asian and African countries to understand the consumption variation globally. Therefore, the review calls for further detailed studies on the relationship between sustainable purchase behavior and spending power sources of Gen Z population.

8. Conclusions

The present review explored the existing research on the sustainable consumption of the Gen Z cohorts all over the globe. The study demonstrated that there is awareness among Gen Z population regarding sustainable consumption and this generation are more inclined towards the sustainable purchase of everyday needs. However, there are barriers in the path of sustainable purchase which cause significant action-intention gap. The review also gathered information regarding the usual spending power sources of this generation. Most of the surveys showed the major source of spending power of Gen Z population till date is pocket money earned through parents and relatives. The study also reviewed the existing literature on the impact of spending power (pocket money) of Gen Z population on their spending pattern. Mostly it was observed that with increasing pocket money, Gen Z adolescents and young adults are mostly be inclined towards unsustainable consumption such as unhealthy lifestyle, unhealthy foods along with alcohol and tobacco intake. However, no studies have been found to conduct research on the influence of spending power on the sustainable purchase behavior of Gen Z population.

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