LEEDS BECKETT UNIVERSITY
THE RETAIL INSTITUTE

GENERATION Z
& CONSUMER TRENDS IN ENVIRONMENTAL PACKAGING

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Introduction: Developments in environmental packaging research

Whether it is minimising food waste, recycling correctly or adjusting to new packaging designs that use different materials, the actions of consumers are key to the success or failure of product and packaging design interventions. Manufacturers and retailers need consumers to understand changes generated to reduce carbon footprint or limit waste going to landfill. This report considers the value of consumer insights to the potential effectiveness of strategies aimed at reducing the environmental impact of packaging. In particular, it looks at how generational research, with a particular focus on Generation Z, can help to identify trends in consumer attitudes and behaviour.

The report begins with a brief review of academic research published in the last year that analyses environmental packaging from a range of consumer perspectives. It then provides a profile of Generation Z based on emergent findings from a range of sources. It also includes a summary of generation's attitudes and likely behaviour with regard to the environment. We also report on the findings of focus groups conducted by The Retail Institute that sought to identify the specific shopping motivations and pro-environmental behaviour of different generational and class groups.

Consumers and the environment research review

Recent academic research reflects the increased scrutiny and expectation of the last few years and many studies published in the last year are relevant to environmental packaging. These cover diverse topics including consumer perceptions, packaging design and functionality, food waste, labels, waste management and methods of life cycle analysis.

To begin with, the consumer aspect of the environmental impact of a change in packaging design is the subject of a study published in the Journal of Industrial Ecology. Researchers conducted an environmental analysis of packaging-derived changes in food production and consumer behaviour[1]. Previous analysis of the trade-off between the benefits of packaging functionalization and the increased environmental impact from packaging production did not account for consumer behaviour, despite being key to reducing food loss and waste (FLW) and reducing environmental impacts.

Yokokawa and colleagues attempted to tackle this missing aspect using 'consumer behaviour scenario analysis' and a 'break-even rate of food loss'. Their study looked at packaging-derived changes in food production for milk and cabbage products. They found that extending the expiry date and apportioning the package size of milk products have the potential to reduce FLW and global warming potential (GWP). The total GWP decreased in several behaviour scenarios when consumers discarded the food after the expiration date or a few days after opening.

However, apportioning the package size of cabbage could have a negative effect on the total environmental impacts. Although it was effective for consumers eating after the expiry date, apportioning the package size of cabbage products induced an increase in the GWP of food production. The study found that to decrease the GWP effectively by apportioning the package size of a cabbage, the apportionment of the package size must lead to saving more than half of the edible parts.

Further research relating to consumers and pro-environmental packaging has looked at purchase intentions for bioplastics[2]. The study of German consumers found attitudes towards toward bioplastics, green consumer values and, most interestingly, bioplastic product experience and knowledge all influenced purchase intention. While the purchase intention for bioplastic products for all German citizens was around 56%, about 95% of the consumers with product experience intended to buy bioplastic products. The experience and interest in information is key to bioplastics as consumer understanding is still developing. The differentiation of bioplastic products from conventional plastics is not obvious to consumers and the findings suggest that overcoming that challenge could be significant for increasing purchase intention.

This study is part of other a wider group of studies providing insight into consumer preferences for new packaging designs. For example, experiments conducted to assess the effect of sustainable design strategies on purchase intentions found positive responses to circular designs (e.g. biodegradable materials) compared to linear redesigns (e.g. packaging lightweighting)[3].

In addition, consumers perceived packaging redesigns that combined multiple sustainable design strategies, as only marginally more sustainable than packaging with single strategy redesigns. Therefore, there appear to be diminishing returns in the moral satisfaction consumers achieve from buying products with multiple sustainable features.

The way that products communicate sustainability through packaging also continues to be a topic of interest within academia. This relates to both visual layout and different types of labelling. A study focusing on the 'visual ecology' of product packaging notes that brand-related packaging elements tend to be much more visually conspicuous than characteristics such as sustainability and nutrition[4].

The research also used a distinction between top-down and bottom-up control factors that influence consumer attention. Top-down factors include goals, task instructions, preferences, decision style, cognitive load, involvement, task complexity and mood. Bottom-up factors refer to the visual ecology of a product, in terms of visual salience, surface coverage and distance to centre.

The study challenges previous research suggesting that top-down factors tend to dominate bottom-up factors. However, analysis of 158 consumer products found that visual ecology (salience, size and distance to centre) does influence the probability of consumers fixating a packaging element and that top-down control does not interfere with bottom-up processes as much as previously assumed.

The value of studies like this are to identify what could happen if retailers, brand owners or possibly policy makers change the visual ecology of packaging by enhancing the visibility of sustainability or nutrition labels. Small changes could lead to much higher levels of consumer attention to sustainability or nutrition, especially if consumers have a related goal.

Another angle on consumer perceptions concerns how people interpret the CSR (corporate social responsibility) claims on packaging. A study examining the effect of on-package claims on perceptions of health benefits, taste and attitudes and behavioural intentions towards the company, found that claims relating to food manufacturing, employee welfare and eco-friendly packaging all positively influence consumers' intention to purchase[5]. Consumer most positively perceived employee welfare claims. They also had impacts on consumers' inferences of product-related attributes, particularly when the specific CSR claim are congruent with the consumer inference. For example, food-manufacturing claims are more strongly associated with health-related consumer inferences. The authors conclude from this that consumers perceive CSR activities as more credible when they are congruent with the product's attributes and image.

These studies are examples of the kind of research on consumer packaging perceptions that continue to offer insight into how new materials, formats, designs and communication methods may affect consumer attitudes and behaviour.

Many other papers published in the last year provide consumer-packaging insights from a range of different countries where attitudes and behaviour are likely to vary.

For example, a study of green packaging's impact on young Romanians' environmental responsibility found that the country has relatively recently become preoccupied with sustainability issues[6]. Noting the importance of environmental information, it emphasises the role of green marketing to raise awareness and change consumer behaviour. Another Romanian study found that difficulties in finding information about the packaging, along with price and costs, was a major obstacle to purchasing green packaging[7].

Another international study has noted that national cultures (in this case, Germany, France and the US) differ in how they weigh the relative impact of recyclability, reusability and biodegradability, which suggests a need to differentiate packaging strategies across countries[8]. In addition, a study aimed at developing a multidimensional measure of consumer perceptions of eco-labelling involved fieldwork undertaken in Malaysia, a country described as a pioneer in Asia with respect to promoting eco-friendly consumption[9]. There are also studies observing the influence of altruistic and egoistic values on Indian consumers' purchase intentions of eco-friendly packaged products[10], an increase in consumer awareness and purchase intention of eco-friendly food packaging in Latvia and the factors influencing young consumers' purchase intentions in Indonesia[11].

These studies are a reminder of the complexity of different factors that determine consumer behaviour with regard to packaged products. Environmental knowledge and concern is changing at different rates around the world and within different demographic segments. This is taking place alongside continuing innovation to reduce the environmental impact of packaging.

Continuing to monitor all of these dynamic factors is an important role for researchers and generational research is one area that can offer insight. This is not only in terms of the differences between age cohorts but also as indicators of market trends. With that in mind, The Retail Institute has followed up on last year's consumer survey on environmental attitudes and packaging-related consumer behaviour with focus groups to understand the perspectives of different demographic groups.

The value of generational research

In 2017, the Retail Institute's Consumer of the Future annual report noted some of the characteristics of the Millennial cohort (Generation Y) with particular reference to the influence of social media on consumer behaviour. Businesses have focused on Millennials for several years now as trend setters and their emergence as the most powerful market cohort. Increasingly, the attention is moving to understand what we know so far of the following cohort Generation Z.

Although definitions vary, Generation Z were born between 1995 and 2010, meaning that the oldest are in their early 20s while the youngest are not yet 10. This means that our understanding of Generation Z as a complete cohort is incomplete and still developing. Much of the existing research focuses on the older part of the cohort, from around age 16 and older. Because definitions do vary, analysis of the younger of the Millennial cohort is also relevant to understanding Generation Z. Nonetheless, the research reported here offers insight into a cohort whose life experiences are the first indication of the impact of growing up in a completely digital world.

Generational research highlights how social, cultural and technological changes influence different segments of society. While some generational differences may have more to do with cultural or psychological influences, studies of, and comparisons between generations show the extent that those other influences persist or evolve over time. If used correctly, generational research promises great value to marketers and retailers. It offers insights into the current and future desires and behaviours of different age cohorts. Analysis of the attitudes and behaviours of different generational cohorts suggest the likely demands and expectations of future consumers. This is particularly useful as we learn about consumer intentions with regard to the environment.

However, it is important to take care in the interpretation of these trends. It is tempting to make assumptions about the characteristics of certain age groups based on observed technological change. Some writers may exaggerate the differences between generations by interpreting events too simply or drawing conclusions on data that relates more to life stage than the experience of cohorts born in a specific era. Pollsters Ipsos Mori[12] distinguish between three types of age-related analysis. ‘Period effects’ involve people of all ages changing in a similar way due to a societal shift or event. ‘Life cycle effects’ are those changes in attitudes and behaviours change that come as people get older.

‘Cohort effects’ reflect generational differences in views and behaviours that people carry with them through life. Recognising these differences improves the accuracy and reliability of generational research. It is also important to remember that the differences between cohorts are likely to be marginal in that, for example, the youngest Millennials may have more in common with the oldest from Generation Z than with those who are the oldest in their own generational group.

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Introducing Generation Z

The first observation to make about Generation Z is the diversity of the cohort. This is in terms of both demographics and personal interests. They are ethnically diverse, as the populations of many countries have become increasingly multi-cultural and multi-racial. With more people living in urban areas, more young people grow up exposed to a wider range of cultural perspectives compared with previous generations[13]. Multiple studies also suggest a diversification of interest, describing the trend within Generation Z as individuality[14], non-conformism[15] and increased complexity and nuance[16]. A survey of 1500 US students found 'being different' to be a trend, with people within this group trying to be unique while still belonging to a peer group[17].

While this may make it more difficult to summarise this generation than it is for others, it is an important distinction to state that, as Ipsos Mori suggests, 'lives are becoming more stretched and varied within a cohort group'. The survey organisation states that having more ways to connect and experience things with technology enables people to pursue their own interests and engage with like-minded groups.

To add to this, there is a greater tendency for younger people to shift their interests, preferences and affiliations, which could be true for both politics and shopping patterns.

A mixed methods study including social media analysis, focus groups and expert interviews described shifting identities and the 'traditional hallmarks of adulthood in flux'. This involves 'age compression and acceleration' in which young people appear to make adult choices and decisions earlier while continuing certain aspects of childhood into later years.

Related to this diversification and greater tendency to change is the idea that Generation Z are relatively more open-minded and culturally aware. Commentators hypothesise this greater awareness to come from online access and growing up in a time of turbulent world events[18]. An international study of Generation Z noted that the cohort has "spent their entire lives online, and as a result, have been more intimately exposed to the failings of the powers-that- be to tackle world issues than any generation preceding them" and this has led to a breakdown in trust towards traditional political and civic institutions. This creates the potential for greater activism and expectations that authorities – either governmental or commercial – tackle perceived injustices and environmental damage.

Generation Z's very high media use links these trends together. Often described as 'digital natives', access to digital devices from a young age has made them accustomed to being connected at all times[19].

'Life casting', the practice of sharing one's life online, has created a need among social media users to find novel products and experiences to share.

This full integration with technology[20] has given them enhanced digital skills, the ability to follow their interests and monitor world events. It also has repercussions for shopping behaviour and the way that Generation Z engages with brands.

Aside from the sheer embeddedness in digital technology, the cohort's media usage is significant for the choice of media and the way it is used. The shift away from traditional cultural media such as television and the greater use of personal devices[21][22] and online channels for viewing has important implications for marketing.

Furthermore, the kinds of behaviour that are now habitual because living a life of digital connectivity may have changed the core motivations of young people as shoppers and consumers.

'Life casting'[23], the practice of sharing one's life online, has created a need among social media users to find novel products and experiences to share. This promises to alter how people find and choose products. The greater awareness of social and environmental issues could contribute to the desire to share products and experiences that are perceived to be 'doing good'.

Z Consumers

The implications of Generation Z's reported characteristics for retail and marketing are that the cohort is more varied and complex than previous generations, making it difficult to characterise with simple concepts or statements. While it is important to re-emphasise that differences between generations are very small at the margins, there does appear to be some consensus on the distinguishable features of Generation Z consumer behaviours. This includes a more pragmatic and cautious attitude to money compared with Millennials and a greater desire for unique and personal products and experiences.

The greater price-consciousness of Generation Z has a link to the economic circumstances they have lived through so far. In addition to the global financial crisis, the stagnation of young people's incomes, compared with those of older people, has generated a greater cautiousness among younger Millennials and Generation Z[24]. The accuracy of this is still unclear. However, some consumption patterns may indicate greater discernment in product choices. For example, Ipsos Mori states that there has been a shift away from materialistic values, with 30% of teenagers in 2018 feeling that the things they own say a lot about how well they are doing in life, compared with 42% of teenagers in 2011. Sun Branding Solutions' Guide to Generation Z distinguishes them from Millennials in that they are less likely to spend lots of money on a single designer item, preferring instead to make their money go further. While it is still important for them to be fashionable, designer brands is somewhat less likely to be their strategy for achieving it, as the table below suggests:

How important is it that products are:

	Gen Z	Gen Y	Gen X
Aligned with my beliefs	70%	71%	66%
Fashionable designs	67%	65%	51%
One of a kind	47%	47%	38%
Designer, luxury brands	34%	42%	27%

Source: Sun Branding Solutions, 2019

Related to this is the attitude towards brands. In our 2017 Consumer of the Future report, we noted that evidence did not support the perception that Generation Y had become less interested in brands compared with previous generations. It was more likely that the apparent differences in relationship with brands were due to engagement through different media channels. For Generation Z, the idea of brand dealignment continues to be compelling but the reality could relate more to a need for new brand strategies. An article citing multiple US-based surveys suggests that quality is preferred to brands for around four fifths of Generation Z[25]. However, Ipsos Mori's study found that 35% of teenagers still feel brand names matter to them. The analysis from that study suggests that lower disposable income has contributed to a bigger challenge for brands to maintain their appeal to this generation. Ipsos Mori states, "The importance of diversifying and retrofitting brands to the budgets of younger people with less disposable income will likely become ever more important"[26].

The slight differences in brand relationship could also relate to Generation Z's behaviour as online consumers. While Millennials are also associated with higher levels of online engagement (and people of all ages now shop online), Generation Z may be distinct from previous cohorts in that fewer of them spend time watching television, listening to the radio or reading print publications. Related to this is their receptiveness to advertising.

A study comparing Gen Z with both Gens X and Y found the youngest of these cohorts to be most discriminating in their preferences for advertisements. Generation Z was most positive about more innovative advertising formats that offered control over the viewing experience[27]. They tended to skip online adverts faster and more frequently than previous generations. This suggests a preference for interactivity such as the opportunity to influence a story or outcome. A US retail industry study found that 44% of Gen Z respondents said they would like to submit ideas for product design, given the opportunity[28].

Related to this is the strong expectation among Gen Z-ers that retailers continue to innovate in delivering quality and convenience both online and in stores. A study of Generation Z views of smart retailing found that they expect technology to make informed shopping decisions easier and transactions quicker[29].

Despite the characterisation as digital natives, this still includes in-store retailing. One survey in the US found that almost two thirds of Generation Z prefer shopping in-store to online, and three-quarters of respondents preferred an engaging in-store experience[30]. As one student of Gen Z suggests, “This generation of children has grown up in a world where many everyday objects and media experiences are dynamic, clickable, and swipeable”[31].

IIn particular, the flexibility and convenience demanded from retailers relates to creating individualised products and experiences. This is a key theme that emerges from the extensive mixed methods study conducted by US advertising agency RPA. The findings suggest that brands must recognise Generation Z on an individual basis and help them to both improve and market themselves[32]. Personalization, therefore, has moved to a ‘hyper’ level that avoids rigid categories and appeals to micro-interests[33].

In terms of product choices, health is common feature of Generation Z studies. Ipsos Mori state that access to technology, social media and the impacts of government interventions have contributed to healthier behaviour within this cohort. They are also less likely to indulge in unhealthy behaviours such as smoking and drinking, reflecting general social change and the shift to online activities[34]. Specifically, there has been a drop in teenage consumption of free sugars in England between 2010 and 2016 and a drop (29% to 18%) in adolescent daily consumption of soft drinks between 2002 and 2015. Sun Branding Solutions also note health consciousness of Generation Z, highlighting the influence of the greater efforts of Generations X and Y in this regard. There is also a tendency for more sophisticated food choices, a reflection of the diverse cultural influences experienced by this cohort.

Generation Z's Environment

It is almost inevitable that researchers and commentators will link Generation Z's attitudes and behaviour relating to the environment to the online media use. The greater awareness and empowerment promised by social media means that many expect this cohort to hold stronger views on environmental issues compared with previous generations. Although technology has made age or personal prominence less important in determining individual impact, Ipsos Mori's evidence suggests that Generation Z's activism on social causes is just equal to other generations. However, there is clearly a strong pro-environmental element within this the cohort with surveys finding that 47% of Gen Z in the US has stopped purchasing their favourite brand after finding the manufacturer did not produce environmentally friendly products[35] and 45% choose brands that are eco-friendly and socially responsible[36]. Interviews with marketing executives support these views, as they perceive Generation Z as having greater expectations that brands demonstrate their care for the environment with action rather than words[37].

The differences between generations may only be marginal and the attitudes of Generation Z as a whole cohort are still emergent. Therefore, some of the latest literature on Millennials, particularly those at the younger end of that cohort, could be indicative of what to expect from Generation Z. For example, the question of whether Millennials' greater pro-environmental attitudes translate into behaviour are behind studies into their particular motivations as consumers. Nielsen's 2015 study found that around three quarters of Millennials were willing to pay more for brands compared to only half of baby boomers (born before 1965)[38]. A study of young Millennials suggests that this willingness may be mostly self-interest as Millennials demonstrated more rational and self-oriented rather than emotional and others-oriented motives leading them to act pro-environmentally[39]. The authors suggest that while Millennials grasp the environmental consequences of their actions, they have not yet integrated their beliefs and actions completely. They also note that psychographic variables such as altruism, frugality, risk aversion and time orientation, have more explanatory power than demographic variables.

Other influences on cause-related consumer behaviour include brand loyalty and trust in companies. A survey of Italian Millennials found that both trust and loyalty played a key role in affecting consumers' willingness to support corporate social responsibility initiatives of food companies. It found that trust in cause-related marketing CRM campaigns and environmental concern positively influenced consumers' willingness to support a product. However, brand loyalty can be a constraint to people switching from a favourite snack to a similar one supporting social and environmental causes[40].

In another study of green purchase triggers, a survey of young Millennials found that environmental knowledge and environmental concern were significant predictors of environmentally conscious consumer behaviour[41]. The study investigated issues raised by previous research that revealed a gap between the willingness to purchase green products and actual behaviour. Prior studies of environmental knowledge – defined as "the 'general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems" – found that it could not predict responsible environmental behaviour on its own. The influence of environmental concern – the "evaluation of, or an attitude towards, the facts of one's own behaviour, or others' behaviour, with consequences for the environment" – may influence green behaviour through higher purchase intention or socially responsible behaviour. The study also looked at the significance of perceived consumer effectiveness, the "belief that the efforts of a consumer can make a difference in the solution", which previous literature suggested was a strong predictor of environmentally conscious behaviour. However, perceived consumer effectiveness was not directly related to environmentally conscious consumer behaviour.

The study also found that although younger shoppers placed the highest importance on green issues, they did not integrate those issues into their shopping practices to the same extent as their older counterparts. This suggests that younger Millennials' concern about the environment is not yet turning into action. However, the strongest predictor of environmentally conscious consumer behaviour among the young Millennials was environmental concern. This, in turn, was associated strongly with environmental knowledge. This suggests that communication messages should offer background information about environmental issues that are relevant to a product and its role in tackling ecological problems.

Even if younger Millennials and Generation Z are not yet transforming their attitudes into action, their environmental knowledge and beliefs could still develop into green purchasing behaviour in later life. A systematic review of studies investigating sustainability in retail has characterised Generation Z as showing very different behaviour from previous generations in being more sustainability oriented and willing to choose retailers that are eager to offer green products[42]. The authors suggest that green strategies, either in production processes or in marketing using sustainable principles, are essential for selling products to young people. Green product features are no longer just an added feature to improve sales but an expected pre-requisite among environmentally concerned young people.

Generation Z – Summary

In summary, it is very tempting to focus on the 'digital natives' aspect of Generation Z as its defining characteristic. While this is certainly vital to our understanding of the cohort, it is also important to recognise other social and economic influences. The diversity of the cohort comes from them growing up in a multicultural world with access to greater range of ideas, influences and tastes. Digital connectivity feeds that diversity. Economic and political uncertainty has possibly made Generation Z more cautious financially and their awareness is developing at an earlier life stage than was the case for previous generations. They are also more aware of the need for health consciousness, generating particular shopping demands in that regard.

The diversity of interest is individualising consumer behaviour more than ever. Personalisation is becoming exaggerated to the point that young consumer demand products and experiences that are unique. This is partly so that they can share them online and develop a persona that has the flexibility change to over time.

With regard to the environment, existing research suggests that although there is not significant difference in attitudes between Generation Z and previous generations, there is a large segment of this group that have strong environmental views. As they develop further into adulthood, gaining independence and financial stability, the impact of this may become clearer than it is currently. However, it is likely that the expectations of much of Generation Z will be for businesses to deliver low cost products that do minimum harm to the environment.

Generations: shopping, the environment and packaging

We conducted eight focus groups, including three mixed groups of middle-class men and women and three mixed groups of working-class men and women. In addition, we conducted two focus groups of only (working and middle class) female consumers. Consumers self-defined their class and usually related to their origin, i.e. their upbringing rather than their current occupational or social status. We also divided the focus groups by generation – Generation X and older, Generation Y (millennials) and Generation Z.

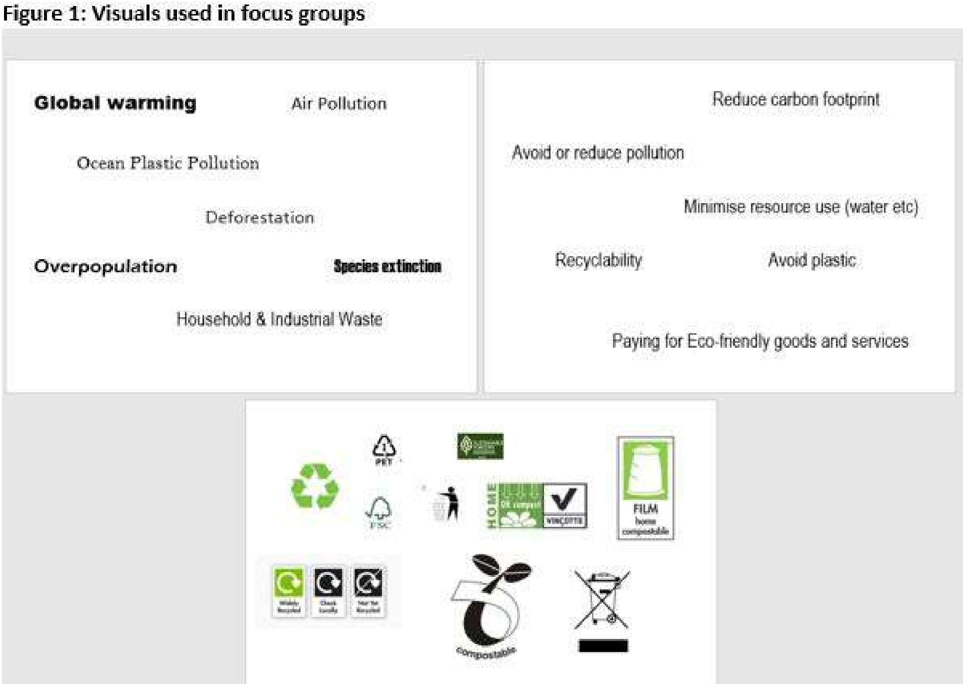
We selected participants from those expressing interest in the research from the Retail Institute's database of (mostly) Leeds-based participants. The project team also advertised through social media. In addition, personal contacts helped to diversify the sample. We conducted focus groups in May and June 2019.

Consumers were asked a number of questions regarding environmental issues and consumer behaviour, e.g. whether they shop for groceries online, what they think is the most pressing environmental issue of today, what they do personally to reduce their environmental impact, and their views on the packaging.

Three visuals (figure 1) were used to offer points of discussion to consumers and avoid issues with group behaviour where one consumer says something and many others follow, sometimes simply because they cannot remember any other answer.

Therefore, the first visual offered consumers major environmental issues recognized by scholars and activists. These encompass global warming, air pollution, ocean plastic pollution, deforestation, overpopulation, species extinction and household and industrial waste. The second visual encompassed personal actions to reduce environmental impact and these options included: reduce carbon footprint, avoid or reduce pollution, minimise resource use (water, etc), avoid plastic, recyclability, paying for eco-friendly goods and services. Finally, the third visual provided logos for recycling and handling waste and consumers were asked whether they know what each one means and whether they use them when handling packaging and waste.

Figure 1: Visuals used in focus groups



As some groups had five consumers and some six, and as not all groups are the same, there was a time constraint and thus not all consumers managed to answer the question of online shopping and recognition of logos. We made this decision to enable an in-depth understanding of recognition of environmental issues and personal action on the environment, all seen as most relevant for companies to decide on their sustainable policies and public relations efforts when promoting those policies. We present the results below according to each group to enable an in-depth understanding of generational views.

Each group presentation includes a summary of each group's views. We have included plenty of direct quotes from our participants to provide an accurate depiction of the way that many consumers are likely to view the issues discussed. In many cases, it shows the struggle people experience in wanting to achieve environmental objectives when shopping but feeling constrained by time, money or lack of choice.

Table 1: Focus groups demographics

Class	Gender	Number of Participants	Generation
Middle class	mixed	5	39+ including Baby Boomers
Middle class	mixed	6	Generation Y (Millennials) (25-39 years old)
Middle class	mixed	6	Generation Z (18-24 years old)
Working class	mixed	6	39+ including Baby Boomers
Working class	mixed	5	Generation Y (Millennials) (25-39 years old)
Working class	mixed	5	Generation Z (18-24 years old)
Middle-class	Women	5	Mixed
Working-class	Women	6	Mixed

Research Findings Per Demographic Group

Generation X and Older

Online shopping

Both the working and middle class Generation X and Baby Boomer groups demonstrated a mixture of perspectives on online shopping. Some participants stated they did online shopping when it was first introduced because they saw it as an advantage but were disappointed because of missing or replaced products. Therefore, some found it "more time-consuming buying it online rather than actually going into the shop myself and buying it myself" (Lucy). Others stated that they like online shopping for its convenience, particularly in regards to the bulky and heavy goods but prefer to shop in person for fresh produce, which helps them manage shopping better (Amrit). Alternatively, they found it helpful, particularly for larger shopping missions at times when they did not have a car (Wendy). However, some consumers stated they never shop online for groceries because they enjoy going to the supermarket:

> "I tend to do a big shop, but I am a visual person, so I do not know what I want until I see it. So, for me, having to search and scroll, I just prefer to have everything in front of me, so I quite enjoy going to the supermarket…" (Cat).

> "I sometimes do it, because it's convenient (…) but I don't do it all the time because I enjoy the experience of picking my own fruit and veg, and being able to look at the offers, just visual and tangible…" (Janine)

Another participant focused on aspects of the experience of shopping in stores that are lacking when shopping online:

> "They don't seem to have the produce that you want, they don't seem to have the range, the deals don't seem to be there. There's no big yellow sticker saying "3 for 2", all these things seem missing. There's no music being piped in which is making your experience… (Christian)

Importance of environmental issues

In response to the visual on environmental issues, participants in the oldest groups had varied views in which was most important. One consumer immediately answered that ocean plastic was most important, adding littering as the second major issue. This consumer recognised the importance of public awareness about the problem, which is not always the case,

> "Ocean plastic for me (…) I remember having littering chats at school. We used to have to make no littering posters when I was at school thirty years ago, so I do not think it is as relevant and as current as ocean plastic pollution, which seems to be very relevant at the moment and very much a topical subject at the moment…" (Amrit).

However, global warming and plastic were an issue for other consumers, who stated that global warming has a dramatic effect on people and species. Consumers also recognised that individuals have the power to do something, and they expressed irritation with the amount of plastic in supermarkets,

> "… it is within our capabilities as a species to do something about it. So, I am not completely pessimistic." (Dan)

> "I went to the supermarket this morning to get some bits for our breakfast and everything was just in a plastic container and I was just feeling wretched" (Wendy)

Consumers in the working class Generation X and older group mentioned global warming, overpopulation, food waste and ocean plastic pollution as the main environmental problems in the present. For example, Sid stated that global warming is a problem because "if we carry on as we are, there'll be none of us left. So we've got to cut that out". Those that stated overpopulation justified this by saying that every other issue is related to it (Christian) and those who mentioned food waste did so because food waste is something that everyone can tackle,

> "I think I'd pick 'Household and industrial waste'. And the reason for that is because it feels tangible, it's closer to me... (Janine).

> "When I had my first child I would just buy, buy, buy. Clothes, food, and when we've looked back at how much we've spent in the past and how much we've given away to charity or got rid of or just thrown away, yes, that does make me feel a bit sick really. So that's the closest to home... (Tracey)

However, consumers also recognise that the pressure is on people to make a difference whereas they do not perceive that businesses are not doing enough.

> "There seems to be pressure on us at the bottom, doesn't there, to change? But there seems to be no will for it at the top" (Christian).

> "Because I'm sort of thinking my walk to work is not going to... Well America's not going to buy into the agenda, or whatever; it's not going to make a massive difference, but I do it. And the same with the household and industrial waste, I think more about that. And because ocean plastic is so in the news at the moment, I think that's a bit of a difficult thing in my head, but I'm sort of saying, "Well I'm doing this, but look at all the cars driving into work" (Jenny).

Personal action on environmental issues

Choice of energy provider was the most common way that the Generation X and Baby Boomer group took personal action on environmental issues. For example, consumers in the middle class group stated they switched energy provider to a more environmentally friendly energy provider such as Bulb, not only to reduce their environmental impact:

> "I actually did not know it was a better energy provider in that respect, but it was cheaper as well than N-Power and that was my motivator. But it is also better, more eco-friendly, I believe" (Lucy).

Amrit emphasized problems with recycling comparing the UK with the rest of the world and arguing that other countries have more recycling bins available,

> We seem so far behind in that respect. So, the bins, for example, the litter bins on the high streets are quite basic, whereas if you go abroad, you have got this bit for this, you have got about five sections to put your waste in, whereas here, it is about two..." (Amrit)

In echoing this view, other consumers emphasized the importance of education:

> "Yeah, I just think more needs to be done maybe for the other generations... just to educate people of the simple things they can do and find an outlet to get the message over (...) I think the big thing is that people recycle but there are so many other things that people are not doing ... they would be able to fit into their everyday lives and people are just not aware. They do not know" (Cat)

Wendy added that she also recycles whenever possible and saves on water and equipment and goods, and she uses public transport,

> "If something is in a plastic bottle against a glass bottle, I will go for that because I think it is better to do that ... I have got a whole range of reusable bags that I take with me. If I could afford it, I would pay for eco-friendly goods, but unfortunately, it is not something that I can do and it would be great to afford solar panels, but again, not something that I can. I do not waste food, so I recycle clothes, make stuff, so I use public transport every day. I do have a car, but I do not drive it on a daily commute basis..."

Some consumers, however, stated that they do not believe in eco-friendly goods and services because it costs a lot and they feel like someone is making money off them,

> "... I mean the 'Eco-friends goods and services'; I'm still not completely sold on that because I think there's a lot of people making money out of that, and aren't actually that eco-friendly, and often again because of budgets and less money, you tend to go, "Well it would be lovely to buy the eco-friendly bread – or whatever it is – but it's three times the price," and when you've got a family of four you can't afford it. But the other stuff, yes, I definitely try and do everything. I cycle to work so I don't use a car to come into work..." (Stuart)

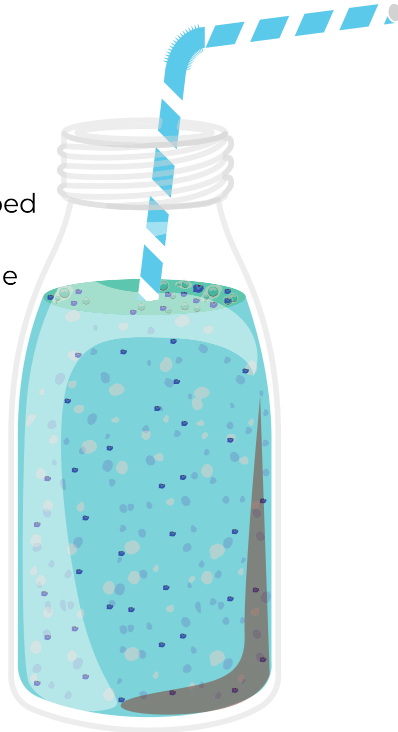
Packaging

When asked about the importance of eco-friendly packaging, the consumers in the oldest groups responded that there are supermarkets where they do not like shopping because they perceive them as irresponsible when it comes to plastic. However, they recognized Morrisons as a supermarket that makes more effort,

> "I try very hard not to shop Aldi, Lidl, Asda because they have pretty much reduced the number of open fruit and veg, everything is in plastic, so I tend to go more for Morrison's, which I do think does try more than any of the others to provide you with a choice and they have also stopped using plastic bags for fruit and veg; they use paper bags. So, I do if I have to, but it drives me crazy when I go into these places, considering what we are all going through at the moment. Everything is wrapped in plastic..." (Wendy)

One consumer said that cost is a factor that influences shopping decisions as more environmentally friendly produce tends to be more expensive. She expressed criticism of supermarkets for not doing enough to influence changes:

"It is like gluten-free food. That is all expensive because that is not the norm and anything that is not the norm is just so expensive. I do think supermarkets have such a big responsibility, such a big responsibility" (Cat)



Other consumers described the difficulty of avoiding plastic and recognised the need to educate people more about the issue:

> "I would if I could; I find it difficult. Because nothing's not wrapped in plastic, is it? Even if you go to the loose fruit and veg it's generally a plastic bag that you get to put it in" (Christian)

> "I think it's educating people. The supermarkets have gone far too much down the road of 'everything's got to look perfect', and I think people then get that mindset that your fruit's got to be perfect, your veg has got to be perfect otherwise it'll spoil, and people actually think that's what it is. So it's a bit of re-education there that actually it doesn't really matter..." (Stuart).

In addition, some consumers recognise the difficulty of being more environmentally conscious when shopping for a family and thus see environmentalism as a single person's issue,

> "I think if you're single you can shop locally, take your own plastic bag, get the loose fruit and veg put in, go to the fish shop and just get that wrapped; that's one way of avoiding it. But I recognise that when I had a family with me there's no way I would have had the time to do that..." (Jenny)

Consumers also stated that they do not look at recycling logos when purchasing products, thus stating that their purchase decisions are not influenced by environmental concerns. They also reported a lack of recognition and understanding of logos:

> "I recognise some of them but it doesn't influence my decision. And I try and recycle, and I try to encourage my family to recycle, but it's not something that I check" (Janine)

> "It's not something I check when I buy, but when we throw the stuff away we do check, mainly because it's really frustrating – I think the point I made before – that some things aren't recyclable. Because you think, "Why is that not recyclable?" (Stuart)

In addition, consumers felt that there is a problem with bin collection because some items require washing before they can be recycled and this leads to the issue of using more washing-up liquid which is also damaging for the environment. There was also scepticism about businesses' approaches sustainable packaging:

> "I think the big business is scaremongering and going, "Well if we made everything recyclable it would cost loads more to buy it, so, therefore, we're keeping the prices down for you." And it's actually, "No, you're keeping the prices down to make more profit." And actually, if everything was recyclable and everyone bought the same thing the prices might come down anyway because everyone would be using the same products" (Stuart)

> "The coca-cola lids, "Oh look at what we've done, we've reduced the plastic to save the environment." No you haven't, you've saved 2p a lid which is worth millions of pounds to a big company like you" (Christian)

Some consumers also expressed frustration with buying products that look like cardboard but appears to be plastic once they open it, and they also mentioned that they read logos and labels after the purchase and sometimes it is too late. In addition, some consumers stated that a traffic light system would be good if it was on products alerting consumers that the packaging is not recyclable at all. They also noted the difficulty of dealing with 'check locally' logos because of local councils having different collection policies.

Generation X - Summary

Consumers in the Generation X and older group preferred to shop in person, and those who shop for groceries online did so out of convenience, which is related to bulky items, lack of transport and having to manage time. Those consumers preferring not to shop online mentioned the tradition and discounts available in store.

When it comes to environmental issues, middle class consumers recognized littering and ocean plastic pollution but also linked global warming with all other issues such as pollution and species extinction. The working class consumers of this generation saw global warming, ocean pollution, overpopulation and food waste as the most relevant problems of today.

On personal actions, consumers mostly engaged with recycling, but indicated a need for more knowledge on how to recycle. Some also try to walk as much as possible and use public transport while some consumers had become aware of the environmental impact of their food consumption.

There was criticism of supermarkets for not doing enough to reduce plastic and help consumers reduce environmental impact. Consumers found it difficult to avoid plastic and buy more sustainable packaging. There was a feeling that the pressure to do something about the environment is on people rather than big businesses. Finally, Generation X and Baby Boomers did not recognise all logos and tended to read them after the purchase, thus admitting that environmentalism might not influence the purchase decision.

Generation Y/ Millennials

Online shopping

The millennials group described mixed feelings and tendencies toward online grocery shopping. For example, Sarah stated she tried online shopping “Once just to see how it went” and saw it more as:

> “A time management thing. I thought it could save time in future if we do it because you save your shop, don't you? If you don't have time, you can just buy again what you bought last time. So I think that's why we tried it, but I've only done it once. Prior to that, we were just going to the shop when we needed to”.

Others said that they shop online for groceries occasionally,

> “it tends to be non-perishable heavy items because we live in an apartment and I don't have a car.” (Katie)

> “Just to top up, but also I sometimes order stuff from Amazon now, because you can get it on the day if you have forgotten it. But that's the only time I've ever bought groceries online”. (Liam)

The reason for not shopping online seems to be about the routine of going to supermarkets and because shopping online for groceries does not always feel right. There appeared to be an attitude towards online grocery that was distinct from other kinds of online shopping.

> “I do a lot of online shopping outside of groceries – in fact, I do most of my shopping online – but for groceries, it doesn't feel right” (Liam)

> “It just feels very wrong. I'm used to going to the market, and actually, at the market, I can choose how much I want, and how it looks, so I've never bought groceries online”. (Tadala)

Some other consumers stated that they will do a big shop online, but then if they need anything specific to make a meal in the evening they will go to the shop personally to get that. Within the working class millennials group, those who shopped online said they prefer it because they find it easier to budget or because they do not have a car:

> “When we do it in the supermarket, we’re like, ‘Oh, that looks good, that looks good.’ You kind of think that you are adding it up as you’re going around, but it’s always £20 or £30 more expensive than you calculated it to be.” (Chris)

Those who do not shop online say they prefer going to the supermarket to see what they are buying, take advantage of offers, or to provide diversity in their shopping baskets.

The most important environmental issues today

There was a variety of views among millennials on environmental issues at present. Sarah stated global warming was most important,

> "...because it is the overarching issue and everything else falls within that. But I think, at the minute, it is a lot about waste, so I guess it would be household and industrial waste, but it falls under global warming as a whole".

Katie's view on ocean plastic pollution was influenced by the area where she grew up, where "people's livelihood depends on people going to the beach and having the oceans clean, and seafood, so that strikes right at the heart of where I live". However, some other consumers saw overpopulation as a problem because that issue conditions all other issues and felt that there is not that much they can do since there are countries that do not bother, such as China,

> "I think at the moment, everybody's going on about global warming, but I have often thought, what can I do? My little bit, I know you shouldn't think like that, but will it really make a difference, when you've got countries like China that don't seem to bother at all?" (Geraldine)

Others in this group did feel that global warming and plastic pollution were the main issues.

> "I suppose, global warming is the thing you always think about when you're concerned about what is going to happen in 100 years' time or something. Ocean plastic pollution bothers me because I went and worked at a turtle hatchery, [laughing] so now I'm like, the turtles, we need to save them" (Vicky)

Personal action on environmental issues

Most consumers in the middle class millennials group mentioned that they were trying to avoid plastic. For example,

> "This year, I said that I'd try not to buy a plastic bottle this year, and I've managed it so far. And I think plastic straws as well, just because of David Attenborough, I try not to use them..." (Sarah)

> "I do generally try to avoid plastic. I'm not militant about it, but I definitely prefer to try not to use plastic. I normally drink out of a water bottle, a hiking water bottle..." (Liam)

Some other consumers stated they try to minimize the resources they use, water and electricity in particular, or try to walk to most places to reduce their environmental impact.

Among the working class millennials, consumers again recognized that changing energy providers as a personal action to reduce environmental impact.

However, consumers reported some difficulties with going green,

> "I looked at electric cars. The problem is, you have to spend a lot to get the electric car. It's the same with solar panels, you have to spend that money to see the savings. You've got to have the money first, to make the savings there. That's something I want to do, or cycle, but then it all depends on good cycle lanes as well..." (Joe)

Other consumers mentioned trying to walk to work, avoiding plastic and buying disposable products,

> "I try to walk back from work every day. It's partly to save money, but also, when I did use to drive quite a long way, I did feel a bit guilty about it. So, I have reduced my carbon footprint a bit (...) I generally try to recycle, although occasionally, if I'm tired, and something's really dirty, I wouldn't bother, but generally, I do tend to recycle..." (Lyndsey)

"

I think avoiding plastic is the only one I might consciously think of. I would like to recycle more, but I feel like everywhere else has loads of bins where it's done for you. Where I live (...) we've just got a skip. It's not really an option" (Vicky)

"I try to buy things that are going to last a long time, clothes and technology. I know technology dies, but I try to if I'm going to buy a laptop, I will pay a few quid more to make it last a couple of years longer and keep it. A lot of stuff makes economic sense as well. With a lot of my clothes, I will go and get them mended..." (Chris)

Packaging

Most of the middle class millennial consumers stated that the whole issue of plastic is new to them and while they do care about the issue, it does not necessarily stop them from buying anything. For example, Sarah stated,

> “I'm not making any changes to what I'm buying yet. It's more that after I buy it, and when I get home, I'll look at the packaging and think, actually, that's not that great, or that is quite good. And then I do it that way, so I know for next time, but at the minute, I'm aware of it, but I haven't made any changes”.

Katie stated that she is trying to buy more aluminium cans when she goes out during weekends and this is because aluminium is easier to recycle than plastic. Liam admitted that it does not stop him from buying a product but it is something he will consider when making a purchase decision,

> “If there were two products, and one was aggressively packaged and not very recyclable, and the other one wasn't, and it was much more eco-friendly, I would definitely go for the eco-friendly one. But if I didn't have the choice between the two, and it was just one that was aggressively packaged, I'd probably still buy the thing if I wanted it, rather than not buy it at all. Which probably isn't very good of me” (Liam).

Tadala stated, however, that she hadn’t “thought about it all. I just buy what I like”. In contrast, Chloe thought,

> “about it all the time. Everything I buy, I’ve been gradually trying to buy the more eco-friendly versions. So I've stopped buying plastic toothbrushes and started buying bamboo ones. I'd rather spend a bit more money and know that they're not going to go into landfill”.

The group acknowledged that more eco-friendly packaged products would encourage them to reduce plastic use. However, they also admitted that they do not always know what eco-friendly packaging is.

> A lot of things have it pretty much stamped on there if it's eco-friendly because it's a selling point at the moment. So if something is, I think it's quite clear. It's mainly with new products though. If it's with existing products, it’s probably not as clear. You feel like you have to sacrifice your favourite brand or whatever it is if it's not recyclable. So not having to sacrifice what you actually want will probably make people buy into that more” (Sarah).

Consumers also stated that it would be good if big brands did more to encourage reducing environmental impact. For example, Katie directly called upon supermarkets to do more,

> “I like statistics, and I like facts and things like that, so speaking about the fact that I’m flying, it would be cool if Morrisons said, ‘use your Morrisons card and we can show that you reduce your carbon footprint by this much by using this much packaging.’ I know it's not great, but it would make me feel a little bit better if I could see a whole year's worth, and it said, ‘we've been tracking you, and you've used this much.’ That would probably gamify it, using gamification, to make you feel like, ‘I'm going to get extra points if I make sure I pick this packaging. It's a little bit money, but **it would make me feel a little less guilty**’”.

Some mentioned examples of bad environmental policy management while others called for reputation damage on social media,

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Some mentioned examples of bad environmental policy management while others called for reputation damage on social media,

> “Aldi have all these signs up in the shops about how sustainable they are in terms of energy, but they're the worst supermarkets in terms of packaging. They seem to be hypocritical. They're trying to get on the bandwagon, but doing as little as possible” (Chloe).

> “In the social media world, you have to wait for someone to shame them, and then they will change (...) Once somebody makes a big deal of it, then they say, ‘okay, we’ll change it.’ If nobody says anything, they're not going to do anything” (Katie).

When asked about packaging logos, consumers said that they do not use logos when buying but were more likely to when disposing of packaging. However, they also state they do not recognise all of the logos or fully understand what they mean. This particularly applies to logos on compostable items. One saw PET as a negative logo but was not sure what it meant and thus was not sure how to use it. When it comes to understanding logos, consumers stated that recycling logos are easy to understand but interestingly some consumers stated they paid more attention when they lived abroad because they were being refunded for returning and recycling items,

> “I looked at them more when I lived in the States because you get money for recycling things in the States. So I would look on it to see how much… If it had a duty of tax paid on it, I would think, that's five cents, I'll put that in the thing … I've never understood why that isn't done here because it meant that there are never cans or bottles on the side of the road because it's literally money on the side of the roads” (Katie).

The main reason for not understanding logos and rules around recycling lies in the lack of information. Some in this group reported that the information from local councils is not detailed enough, which then requires online searches to understand rules about recycling.

Working class millennials mentioned the price of eco-friendly products as well as the fact they return home and then realize the packaging is not recyclable, thus again emphasizing buying first and then thinking environmentally second,

> "If something is cheaper than something else, a lot of people will go for that. That determines a lot" (Geraldine)

> "You don't have that time to start examining all the labels, necessarily. But if something was a few pence more expensive and it was eco-friendly, I would buy it. If it was significantly more expensive, I would probably stick with the same thing" (Lyndsey).

Some in this group also blamed big companies for not doing enough to help the environmental cause, but they also recognise they tend to notice more in some situations than others.

> "...You don't walk around the supermarket blown away with how eco-friendly everything is" (Vicky).

This group also mentioned that they do not always recognize logos and understand their meaning. In some cases, they thought that the logo means the item is recyclable but then later they discover it is not. Some also stated they would prefer to have a written instruction rather than a logo because that would be clearer and some reported confusion with different councils having different rules. In addition, some consumers mentioned that councils do not send enough information and clarification on what that particular council is willing to recycle.

Generation Y/ Millennials - Summary

Millennials expressed mixed feelings about online grocery shopping. Some engage with that activity for top-up shopping and for convenience (e.g. for non-perishable items) or because they do not have a car but the majority seemed to agree that they enjoy going to supermarkets in person.

Millennials recognized global warming, ocean pollution and overpopulation as the most pressing issues of today. However, they expressed a sense of powerlessness, saying they do not know how much they can contribute. Personal actions included trying to recycle, reduce plastic, walk more and save on utilities. As with the Generation X and Older group, some of these consumers had changed energy providers.

However, our groups of millennials did not always follow-up the views expressed on the environment with regard to packaging. While some mentioned ocean plastic pollution as a pressing issue and said that they try to reduce plastic, when it came to packaging, it did not necessarily influence their purchase behaviour. This was justified with the fact that the packaging issue was new to them and they are still learning about it, thus going in line with views from the older group, which expressed a need for more education about packaging and recycling. Several millennials also said they will buy what they like regardless of the recyclability of the product. In this group, consumers also mentioned the role of big companies and the fact they do not do enough to help consumers reduce environmental impact.

Generation Z

Online shopping

Generation Z consumers in the middle class group tended to shop online more than the other groups, although this is often due to the continuing influence of their parents rather than a preference towards online shopping. For example,

> "This is going to sound really bad and I don't want it to sound bad, but my parents do my shopping for me so that means that I get a food delivery every week. I would personally shop online as well. Now that we have the service – like you say, some places don't have the privilege of having it – as we have it I think as I grow up I will use that to an advantage. I do go to the supermarket. I will go to Morrison's and do odd bits there... (Courtney).

> "My family and myself don't tend to online shop for groceries because we live close to a Tesco's so we will pop in anyway. I think for convenience in the sense of if we know we are running out of something then mum will go, 'Right, I will go to the shops,' because it is not so far away rather than ordering it and then waiting in. Sometimes the waiting in and the delivery can be a bit of a pain..." (Rebecca).

Others suggested that online shopping makes it too easy to overspend,

> "A lot of the time I do my food shop at Aldi, which doesn't do online shopping so I can't. (...) It is convenient, but I feel like if I did that I would end up spending loads of money because I would be scrolling through and going, I will have that and have that, whereas in the shop there's certain aisles I won't go down. I won't go down the snack aisle or the chocolate aisle" (Yasmin).

All of the participants in the working class Generation Z group said that they do not shop online, and reasons include getting a sense of a product, especially perishable ones, and not seeing shopping in store as an inconvenience,

> "I do not feel the need to do my shop online. I am sure it would be fine if I did do it online, but I just like going to store. Sometimes you can walk around and pick up things that you do not really need, whereas I feel like if I did do it online, I would not be as likely to do that." (Caitlin)

Others stated that groceries are the only thing they would not buy online, or stated firmly that they will always shop in store and never shop online because they have a car and all supermarkets are close by and thus there is no reason to shop online.

Importance of environmental issues

Participants in the middle class Generation Z group mostly selected global warming as the most pressing issue, linking the issue with species extinction, which they also linked to plastic in oceans. Some consumers stated it is appalling that the world is not doing enough about it, however, interestingly this group mentions they have learnt about the issue in schools,

"I think that global warming is a massive issue, but like you pointed out, we have been learning about it. I remember in primary education having to do A3 posters about global warming. I believe in it. I do think it is a thing. I am not like a Trump that is like, 'That doesn't even exist'" (Rebecca).

Those in the working class Generation Z group mentioned a variety of issues we face today but the majority agreed that air pollution is a major issue. For example, Jay stated that this came from a personal experience of trying to cycle to work where he is becoming even more aware to what extent cars pollute the environment. Bilal also agreed with this view and added littering, and emphasized that this is something he can associate with and on which each individual can act. Other consumers agreed with this view,

"I think mine would be littering and air pollution. It is the two things that are commonly talked about and we can associate ourselves with and something that we can possibly change. I think global warming just seems a bit too big, a bit too large for a common person to have an impact on, whereas littering is something that each individual can change and air pollution is something that each individual can change..." (Bilal).

However, some consumers also mention the sense of despair because they are not sure what they can do personally about the problem even if they are aware of it and concerned about it. Haikah, however, thought that all issues are interrelated but the most pressing one at the moment would be species extinction because so many species are dying out.

Personal action on environmental issues

Relating to personal actions, some Generation Z participants expressed strong views about recycling saying it is hard to go plastic free, and expressed criticism of big supermarkets, such as Tesco, for not doing enough,

"Imagine how much plastic is in Tesco right now. I think it is the organisations that should need to do something for us to do anything. Fair enough, the pubs aren't serving plastic straws any more, which is great and we are not drinking them, we are buying our metal straws, but there is still that big 80-90 per cent chunk of your life that you have to have the plastic because if not, how can you buy the item?" (Rebecca).

Participants stated they always recycle, cycle, and do what they can but they also feel manufacturers have a responsibility to reduce the plastic they use in products,

"I think a lot more pressure should be put on manufacturers about plastic as well... but it seems like a lot of the onus is on people to make sure that they do their bit and they are being good to society and recycling and things like that. [Manufacturers] need to practice what they preach" (Sarah).

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Packaging

When asked if they consider packaging when shopping, some of the middle class Generation Z group said that they do try to buy from more sustainable producers but they also recognize this is not always easy. In other words, some consumers felt that it is not easy to avoid plastic because it is everywhere. Other said that they favour convenience because of parenting responsibilities,

> "I use shampoo and conditioner and body wash from a company called Lush, who have got a big mantra about animal cruelty and against that, but they have started doing non-plastic packaging (…) I did think about that and I liked that, so I have bought that, but then at the same time if I need some shaving razors and they are in the most incredible crazy packaging because it is a razor, I am going to buy them because I need them. That is my other point. If I need that product and that is the way that product is packaged across the board, I am going to buy it regardless of my own mantra, which is why I felt like it falls on the brand before the person because you can only buy what is available" (Rebecca)

> Before I became a mum I was a right little activist (…) Now I am all about the convenience. I will do whatever is closest." (Yasmin).

Some in the working class Generation Z group noted that eco-friendly products tend to be more expensive, which is often a reason why they buy products that use more plastic,

"... when I am buying groceries, I do try to buy loose products instead of those that are pre-packaged using plastic or seals because first of all, those products are more fresh compared to those packaged goods. ... it is not something that I do very frequently because I have cheaper and more easily available options than eco-friendly goods as well" (Haikah).

"I would definitely say it is to do with the price. That would be the reason I would not be picking the eco-friendly option and I feel that is the only reason for me personally as a student ... I cannot afford to buy all eco-friendly packaged products as opposed to those that are available to me. I would like to if they were less expensive." (Caitlin)

Some said they had noticed recycling information and logos at home after they have already purchased a product. In addition, they recognise only recycling logos but do not always use them,

"I would say that in store, I probably would not actively look for symbols, but definitely once I have finished with the packaging, I think I look and see where can this go? What bin do I have to put this in? Where does it go? But yeah, not in store" (Caitlin)

There was also a recognition of a need for more education on how to recycle and what can and cannot be recycled along with the fundamental role of local councils in providing the service and the information,

"I should probably be more educated on what they mean because even that... [points to one of the logos on the third visual]... I just probably would have now gone home and googled that because I do not know what that means." (Caitlin)

Generation Z - Summary

Generation Z consumers said that they do not shop online, except for those whose parents buy groceries for them. Most of these consumers stated that they do not shop online and the main reason mentioned is the tangible feeling of seeing and touching the product. Global warming and air pollution were the most pressing environmental issues cited by Generation Z, although species extinction and ocean pollution were also important to this group. They also expressed the feeling of powerlessness and inability to change regardless of the level of personal involvement.

Generation Z also expressed negative views of supermarkets and big business, saying they are not doing enough to reduce plastic and help consumers be more environmental. They did report trying to buy eco-friendly packaging but said this is not always easy since supermarkets are full of plastic. This generation is engaged pro-environmental activities but also said that they buy products with plastic because of the difference in price. Similar to other groups, consumers in this group also tend to notice logos once they are at home, and thus after they have purchased the product. Consumers in this group recognize the need for more education about recycling and waste collection.

Mixed Generation Groups

In addition to the six generational working- and middle class groups, we also conducted two focus groups with mixed generational working and middle class women, focusing particularly on environmental issues and packaging. Many of their comments and responses reflected the other groups.

Importance of environmental issues

Some of the mixed group saw global warming and air pollution as umbrella issues that cover all others. However, they also raised the issue of ocean plastic pollution. A sense of personal responsibility and the idea that any individual action can make an impact was also prominent:

> "I think if one person did one little thing like I've just gone vegetarian and I recycle, and if somebody just does whatever it is, just recycling, then I think we could make a big impact" (Nicky)

> "It's down to us, isn't it?" (Dena)

One consumer also spoke about emotional aspect of pollution thus revealing that some consumers taker environmental issues to heart:

> "That ocean plastic pollution, it just breaks your heart. And when you see a fish or a dolphin or something that's just choked on plastic, it's just... And I hate littering. I will actually stop somebody in the street if they drop something. And I will shame them; rather than telling them to pick it up, I will shame them..." (Jane)

One participant said that there is nothing she can do about overpopulation and that it is a general problem. Another felt disheartened and emotional but also powerless about ocean plastic pollution and species extinction that comes as a result,

> "I find a couple of these stand out more to me, and it's because it's emotive. And it's ocean plastic pollution, and it's species extinction. And then I feel a bit ashamed because I recognise that that provokes more of a response in me; that's almost such a generic expression now. Again, I can't do anything about that..." (Frances)

Household and industrial waste was raised in connection with bin collection problems and the lack of ability to recycle everything. It was also seen as an area where individuals can make a difference. Consumers also revealed that they did not know until recently what kind of impact they can make,

However, some consumers also mentioned global warming as a pressing issue saying they feared for what it will be like for their children. Overpopulation and species extinction were also recognised as having a general impact and affecting all other species and environmental events,

Personal action on environmental issues

When it came to personal actions, there was a debate in the mixed groups centred on supermarkets and what they could do to help the environment, as well as personal responsibility in not shopping in supermarkets that do not engage with reducing plastic, thus effectively advocating a boycott of organisations not perceived as environmentally conscious,

> "It has to start from the individual. Because at the end of the day, the supermarkets put the greengrocers out of business, the little ones. so we can't change them, we can't change politics, we can't change anything. But what we can do is change ourselves. So, if you're not happy with all the plastic in Marks and Spencer, don't shop there; try and shop somewhere else" (Dena)

Consumers recognised Morrisons and Waitrose as supermarkets trying to make an impact on paper bags and reusable food containers respectively. One M&S customer expressed frustration in her chosen supermarket:

> "I shop at Marks, and only because I live on my own, so I can do that. And there is so much plastic, they use so much plastic, and I am so aware of all the plastic that Marks and Spencer use. It annoys me, it really, really annoys me" (Jane)

Other personal actions mentioned in the mixed group include water saving at home with water meters, which had the benefit of financial savings, and avoiding plastic with reusable water bottles. Other participants who recycled and avoided plastic observed that their bins were not getting emptied often enough.

Some in the group then said they do not have all bins, and suggested there is a "postcode lottery" and that the problem with full bins is that it prevents consumers from using them properly. Some also expressed concerns about not knowing how to recycle and suggested that as a society we need more education on how to recycle and which bins to use,

Packaging

When asked about shopping for eco-friendly packaging, participants in the mixed generation group stated they would buy eco-friendly packaging and that they are more willing to give it a try now than before,

> "I think about it when I'm shopping, because like I say, I can't believe how much plastic there is about. And I know Morrison's have started with these paper bags, but then they've got all the products in plastic. So yes, I would definitely buy something that's more eco-friendly" (Nicky)

> "Yes, I think I would now, I'd be a bit more, "Give it a try." But I am noticing when I'm chucking stuff away, probably more than when I'm buying it in" (Francis)

Others expressed dissatisfaction with the possibility of having to pay more for eco-packaging and openly stated they would frequently go for cheaper packaging,

> "That will not be justified ... you are paying for the packaging, so I am not having Iceland turn around and say to me, 'Oh, new fact. Turn up with your wooden crate and you can pay 5p more for the privilege.' I do not think so" (Jane)

Finally, one participant was critical of the idea of paying more,

> "I think if I was in a better financial position ... then I would think about it, but it is whatever is the cheapest and it sounds awful really" (Ruth)

Mixed Generation Groups - Summary

The mixed group of consumers saw global warming and air pollution as the most pressing environmental issues, from which all other issues emerge. However, there was also a view that household and industrial waste were more personally relevant issues. This led to discussion of bin collections, the lack of recyclable bins for all waste and the idea that there is a so-called postcode lottery where some areas are more privileged compared with others.

The personal actions of the mixed group reflected those of the other groups, including recycling, saving on utility bills and reducing plastic. They echoed the need for education with the view that many consumers do not know how to recycle, what is recyclable and what is not. There was also dissatisfaction that eco-friendly packaging is more expensive, and acknowledgement that this is the reason why they buy cheaper products even though they would like to buy eco-friendly and reduce environmental impact.

The feeling of individual responsibility conflicted with feelings of powerlessness, especially relating to ocean pollution. There was criticism of supermarkets not doing enough to reduce plastic calls for avoiding shopping in supermarkets that seen as irresponsible. Although some were willing to pay more for eco-packaging, some also admitted that even though plastic policy in their favourite supermarket bothers them, they still shop there.

Focus Groups - Summary

The findings present a range of views, however, differences between classes or generations appeared to be small. Differences seemed to be more on an individual level but also related to the availability of services. For example, some consumers debated the postcode lottery and stated they do not get all bins to recycle effectively in contrast to areas with wealthier residents where bins are allegedly more readily available.

What seems to run across the majority of groups is a sense that too much responsibility is being placed on consumers. Many of our participants felt that manufacturers and especially supermarkets are not doing enough to tackle packaging and reduce plastic. These views are present in nearly all the groups. Interestingly, in many groups (both the middle class and working class and in different generations), consumers recognized Bulb energy company as a sustainable service provider changed to that service as part of their personal action on the protection of the environment.

The sustainable policies of supermarkets – even though considerable – were not recognized, with the exception of Morrisons, which was mentioned in several groups as an organization that is trying to do something with introduction of paper bags and selling fresh produce unwrapped in plastic. What is also relevant is that views on packaging are similar among all groups where the vast majority expressed a lack of knowledge and education about recycling and the use of bins. In this, the majority blamed local councils and stated that more knowledge is needed on this matter.

What is particularly interesting is the similarity views on online shopping for groceries where all groups reported a preference to physically go to the supermarket rather than shop online. This is a particularly interesting finding for Generation Z, perceived as a digital generation and predictions of a complete shift to online shopping. However, when we look at these eight focus groups, there seems to be a generational consensus that supermarkets will survive without going online so long as they provide value for money and produce that consumers want.

Report Summary

Meeting the packaging brief for any kind of grocery product is already complex and demanding. Choosing materials, formats and functionality features while ensuring an attractive design and minimising environmental impact is difficult enough without then taking into account the actions of consumers as part of a pack's environmental credentials. The research reported here demonstrates that a complete environmental assessment would include an understanding of consumer behaviour in terms of the food waste implications of packaging design. Similarly, consumer acceptance of packaging marketed as more environmentally friendly is an important aspect of the success or failure of that product. Prior environmental knowledge and concern, along with experience of using such products is vital to the uptake of such products. This has implications for marketing and the design of packaging as the visual ecology of a product is just as important as consumer goals and preferences. Further complexity comes from the different interpretations of corporate responsibility claims and their congruence with overall brand image.

Retailers and marketers must consider these factors within context of differences between countries, cultures and market segment. Generational research provides that kind of context as it helps us to compare generational attitudes and behaviours and observe emergent patterns brought about social and technological developments. While care in the interpretation of generational claims is necessary, observing consumers in this way helps to identify potential growth in demand for particular types of product.

Our review of existing knowledge about Generation Z – a cohort still to move fully into adulthood – noted that its main distinguishing feature is actually its diversity. It is not easy to sum up this generation in a few simple statements. This group has diverse interests and has grown up in a time that has encouraged them to carve a separate identity. Being different is a trend and this could lead to a growth in hyper-personalisation – the demand for products that are just for the individual. Furthermore, their interests are likely to change often and they want businesses to help them market themselves. This generation also seems to be more cautious with money, shifting somewhat from possessions as a status symbol but also expecting a high standard of experience when they do go shopping. They want brands to offer interactivity and to be flexible in the products they offer.

The report has also noted a greater awareness and open-mindedness among Generation Z on world issues that, along with an apparent breakdown of trust in institutions, promises more activism and higher expectations of companies to act responsibly with regard to the environment. The amount of environmental concern among this cohort may not be any greater than it is for other generations but there does seem to be a passionate pro-environmental element among them that demands more from businesses. However, it is still unclear whether this stronger desire for environmentally friendly shopping will translate into behaviour change. Research into millennials suggests that cost is still more important than saving the planet and the financial constraints they live is likely to make this equally true for Generation Z. However, should they retain that desire for a better future, their expectations of businesses will be backed up by spending power as they become more financially independent.

Our own recent research into consumer attitudes to environmental issues aimed to identify differences between generations in terms of their preferences and behaviours. However, there were few clear differences found and several recurring themes in the focus groups. The most notable difference was the desire among Generation Z to be responsible shoppers was constrained by affordability and the fact that they were not yet fully independent from their parents' shopping choices. This is a reminder that some generational differences have more to do with current age than the effect of the time when each generation grew up.

The common themes among our consumers included a developing awareness of a range of environmental issues and frustration and criticism of retailers and other businesses. While it was common for our respondents to state the importance of issues such as global warming and overpopulation to all of the other environmental problems, many also noted the emotional responses to ocean plastic pollution and species extinction. Many reported feeling a sense of powerlessness to respond to these global problems. However, most of our consumers said that they engage in pro-environmental behaviours such as recycling, switching energy provider or avoiding using the car when possible. The discussions that took place also provided a sense that many are still learning about these issues as they shared knowledge of ways to reduce plastic or cut carbon emissions.

However, our participants described their actions as individuals alongside their criticisms of retailers and other big businesses for producing too much plastic and placing too much responsibility on the consumer. They felt that they could do little to affect global warming and plastic pollution while businesses could be doing much more. The perception that environmental alternatives cost more may have limited their pro-environmental purchases, although they did not feel that higher prices for such products was always justified. Finally, it is clear that consumers do not yet have environmental issues at the forefront of their minds when standing in a supermarket making purchase decisions. They do not look at recycling labels until they have finished using the product and many are still learning about what is and is not recyclable.

This report has shown that consumers are an essential part of the calculation of green credentials. Environmental consumerism is becoming a social norm and the greater awareness and concern of younger generations will continue to push for green products to be an essential standard for business.

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