

Engaging Baby Boomers (55+) in sustainability conversations online – measuring the role of sustainability attitudes and mindset in Electronic Word-of-Mouth (eWOM) behaviour

Key words: sustainability attitudes, sustainability mindset, eWOM, Baby boomers, online behaviour, sustainability engagement, intergenerational sustainability dilemma

Abstract:

There is a vast amount of online content created every day with younger generations being the major generators of electronic word of mouth (eWOM). eWOM is particularly important when it comes to sharing positive messages around sustainability as eWOM is proven to influence consumer behaviour. There is very little known about how to engage older generations in eWOM, even though these generations have higher purchasing power than their younger counterparts. Therefore, this paper measures how to initiate eWOM of older consumers (55+) (n=310) by applying common sustainability constructs (sustainability mindset and attitudes) in their role of engaging older consumers online using PLS-SEM.

We find that having a sustainable mindset acts as a suppressor of willingness to participate in eWOM. However, we found evidence for the mediating role of positive sustainability attitudes turning this relationship into a positive relationship. We measured positive sustainability attitudes as the willingness to make sacrifices for the good of our planet. We show that those who are willing to make sacrifices are also likely to take part in eWOM about sustainability. We further find that this relationship is even stronger for those respondents using the internet for commercial purposes. Our findings are enhancing the current state of the literature as studies about sustainable consumer behaviour of older generations show varying, at times contradicting results. Our findings are relevant to marketers as it shows exactly what kind of older user should be targeted when the aim is to engage those in sustainability conversations online.

1. Introduction

Governments around the world are introducing environmental legislation to encourage change towards a more sustainable future. Examples such as achieving net zero by 2050 are common themes visible in the media. Businesses are increasingly put under pressure to ensure sustainable consumption and production. To create meaningful change, businesses can only succeed if stakeholders such as employees, investors, the supply chain and consumers believe in the sustainability actions set by the business (Dobele, Westberg, Steel, Flowers, 2014). Sheth, Sethia and Srinivas (2011) agree that businesses that do not directly focus on the customer when communicating their sustainability strategy will fail. Consumers are increasingly sceptical of businesses that use sustainability efforts as an advertising instrument (Lee, 2017) which can lead to the loss of customer trust and loyalty (Signitzer & Prexl, 2008). One way of knowing whether consumers are 'buying into' the sustainability efforts of a business is by monitoring and initiating consumer conversations online – also referred to as electronic word-of-mouth (eWOM).

There is a vast amount of online content created every day. Adolescents are major generators and transmitters of electronic word-of-mouth (eWOM) as they like to talk about their purchases and consumption experiences (Mishra, Maheswarappa, Maity and Samu, 2018). There seems to be ample research exploring eWOM among those younger consumers (see for example Affifa, Amir, Shaikh & Liaqat, 2021; Mishra et al., 2018; Koenig, Clarke, Hellenthal & Clarke III, 2022; Yang, 2013). Yet, businesses have a great interest in the older customer segment as those consumers (60+) have a higher repurchase probability (Mittal & Kamakura, 2001) and the highest disposable income (Lissitsa & Kol, 2016). Shaikh, Karjaluoto and Häkkinen (2018) find that age influences eWOM behaviour by demonstrating that the older the customers the more they talk about a product online if they perceive the product to be valuable.

Even though younger consumers seem to be willing to pay premium prices for sustainable product attributes (Tait et al., 2020; Yamane & Kaneko, 2021), older generations are more frequently recommended to marketers as they have higher purchasing power (Lissitsa & Kol, 2016). Despite those recommendations, there is little known about how to engage older consumers in sustainability conversations online.

Therefore, this paper aims to measure how to initiate eWOM of older consumers (55+) belonging to the Baby Boomer Generation (born between 1946 and 1964) by applying common sustainability constructs (sustainability mindset and attitudes) in their role of engaging older consumers online. We have explored a commercial mindset as a moderator in this relationship as many sustainability studies focus on purchase intention demonstrating the importance of commercial intent when surfing the web.

2. Literature review

2.1. Generational sustainability

The survival of our planet and humankind depends on the sacrifices one generation is willing to make for the following generation (Shahen, Koji & Tatsuyoshi, 2021). Such sacrifices are necessary to resolve intergeneration dilemmas and maintain resources and are only possible by ensuring generations communicate and cooperate with each other (Shahrier, Kotani, & Saijo, 2017). Shahen et al. (2021, p.1) refer to the intergeneration sustainability dilemma (ISD) as 'a situation of whether or not a person sacrifices herself for future sustainability'. It is argued that communication across generations is challenging as generations often do not seem to interact or overlap (Krznicaric, 2020). This is particularly true for generational behaviour on social media channels. Age is often a determining factor in how people use social media. Usage differs in terms of channel choice, interests and different behaviours. Generation Z (people born between 1997 and 2012) do not search on traditional search engines but instead prefer to find information on social media (Rover, 2022). Whilst Generation Z wants to get their information from personally relatable and trusted sources, Millennials (those born between 1981 and 1996) seem to rely on social media for identity

formation (Guacci, 2022). Research shows that Generation X (those born between 1965 and 1980) seems to have a growing interest in searching social media to research and buy products and is influenced by perceived authenticity when it comes to choosing brands (Cassidy, 2017). Baby boomers (born between 1946 and 1964) seem to have positive attitudes towards social media with roughly 84% saying that social media improves their lives overall (Security, 2022).

These differences in social media preferences make cooperation and communication among different age groups challenging which in turn can lead to a more prominent intergenerational sustainability dilemma. When reviewing sustainability across generations it is pertinent to understand what constitutes a generation. Brand et al. (2022, p. 2) refer to Mannheim's sociology of generations as 'comprising of individuals of similar age, who are exposed to the same political, social and economic events and have a collective consciousness based on values, common beliefs, and attitudes'. Those shared ideas influence the purchasing and consumption behaviour of a generation (Schewe & Meredith, 2004). It is argued that those belonging to a generation also share common sustainability behaviour (Brand et al., 2022) and values and attitudes have been recognised as relevant factors of sustainable consumption practices (de Leeuw et al., 2015; Jacobs et al., 2018). Studies show differences among generations when it comes to sustainable consumption patterns even though results do not seem to be consistent. Some results show Baby Boomers as less concerned about sustainability (see for example Buluy et al., 2017) and others found that Baby Boomers present greater environmental sustainability awareness (Severo, et al., 2017). These differing findings require a deeper understanding of factors that influence older consumers' engagement with sustainability messages.

2.2. Sustainability mindset

One of the antecedents of achieving the goal of sustainability is seen in the promotion of a sustainable mindset (Sheth et al., 2011). Lee (2017) argues that a sustainable mindset needs to be considered in marketing communications such that sustainability communication should stimulate people's consideration of sustainable consumption. It is argued that by considering the results of their consumption and the influence the consumption has on individual people, communities and nature pro-sustainable purchasing decisions can be achieved. Sheth et al. (2011) argue that those consumers who think about the consequences of their behaviour may realise that overconsumption is the act of disregarding personal, community and environmental well-being. The outcome of a sustainability mindset is described as mindful consumption.

2.3. Sustainability attitudes

Bask, Halme, Kallio and Kuula (2020) describe attitudes as less lasting than values but stress that attitudes are useful as a measurement as they can have an object, i.e., sustainable development. Sustainability attitudes have often been applied as part of the Theory of Planned behaviour (see for example Heeren et al., 2016; Thoradeniya et al., 2015; Tommasetti et al., 2018). Results indicate that engaging in sustainable behaviours is more strongly correlated with norms and attitudes than with prior knowledge (Heeren et al., 2016). Sustainability attitudes have been identified to affect sustainability behaviour intention (Tommasetti et al., 2018). Bask et al. (2020) measure sustainability attitudes about sacrifices that people are willing to make. For example, they asked respondents whether they would accept a lower standard of living if it contributed to decreasing environmental pollution or whether respondents would be prepared to change their way of life to protect the environment.

Both, a sustainable mindset, and sustainability attitudes seem to impact consumer behaviour in some ways. It is important to see what exactly drives engagement in sustainability conversations which is why we will review sustainability engagement via eWOM in the following section.

2.4. Sustainability engagement via eWOM

The extant body of literature on sustainability and social media utilization seems to be split into two distinct research strands. Firstly, a predominant part of the literature is in the field of sustainability education (Blewitt, 2011; Andersson, 2015; Abbas, 2019; Ahmed, 1999). Secondly, the investigation into how corporate entities should effectively convey their sustainability endeavours through social media channels remains relatively limited, as exemplified by the work of Lee (2017). Lee (2017) suggests a consumer-centric framework for sustainability communication. However, the research fails to address the intricate issue of consumer perception regarding the veracity of the disseminated information and the consequent determination of its adoption. Han et al. (2018) found that pro-environmental eWOM encourages tourists to engage in pro-environmental personal behaviours. This finding aligns with the results of Chang (2015), who discovered that green viral communication could influence individuals' intentions to make environmentally friendly purchases.

When researching older generations' engagement with sustainability content, it becomes apparent that 55+ have a lot of knowledge of sustainability. For example, awareness of Net Zero is higher among people aged 45 or over compared to those aged under 45 (Department for Energy Security and Net Zero, 2023). However, this knowledge does not necessarily translate into actions. Baby boomers are least likely to pay more for sustainable products (Nguyen, 2021) or to make changes towards living sustainably (Ruiz, 2023). There also seems to be a 'generation gap' with sustainability messaging not reaching all consumers equally. Consumers aged 30 or under are more likely to be exposed to sustainability messaging online than their older counterparts (Ruiz, 2023). Baby Boomers have been found to show reluctance when talking about personal issues (which sustainability attitudes can be regarded as) on social media and show a sense of alienation when observing the self-presentation of younger generations (Mayer et al., 2020). The higher level of knowledge around sustainability does not seem to be translated into their social media engagement. Baby boomers have been identified as generally being more critical towards the internet and social media use (Mayer et al., 2020).

In addition, there seems to be differences with regard to personality types and engaging with green messages and taking part in sustainable behaviour. When looking at personality traits of older consumers, it was found that the openness personality trait is positively linked to green behaviour (Gordon-Wilson & Modi, 2015). Markowitz, Goldberg, Ashton, & Lee (2012) research into personality traits and pro-environmental (green) behaviour found that the openness personality trait was strongly related to older individuals with a mean age of 51.3 years. Additional support for the relationship of the openness personality trait with green behaviour was also found in Hirsh & Dolderman's (2007) research that showed a positive link between consumer goals and environmental attitudes. Positive environmental attitudes seem to be prevailing among those with an open personality and are important predictors of environmental behaviour (Hirsh & Dolderman, 2007).

Based on the above literature review, we theorise that there is a negative relationship between the sustainability mindset of older users and their engagement with sustainability messages online. We believe that this relationship is mediated by having positive sustainability attitudes as these can be seen as being a result of having an open personality which in turn leads to sustainable (green) behaviour i.e. engaging with sustainability messages in the form of eWOM. We further believe that commercial intent strengthens the direct relationship between sustainability attitudes and eWOM as those users having a purchase intent when surfing the web are seen as being active rather than passive users of the web. The theoretical model is depicted below.

Figure 1: Theoretical model

H1: Older users (55+) with a high sustainability mindset are less likely to engage in sustainability electronic word-of-mouth.

H2: There is a direct positive relationship between a positive sustainability mindset and sustainability attitudes.

H3: The relationship between a sustainability mindset and engaging in sustainability eWOM is

mediated by sustainability attitudes in older users (55+)

H4: The direct relationship between positive sustainability attitudes and engaging in sustainability eWOM is moderated by commercial intent.

3. Methodology

This study targets the population of British internet and social media users above the age of 55 years old. There have been several calls for including older digital technology users as these are often ignored (Vincent, 2023). The older internet user is still a segment which is growing. Whilst there has been very little change in internet use for adults ages 16-44, the number of older users has nearly doubled between 2013 and 2020 (Prescott, 2021). The data collection occurred with a consumer panel of active social media users compiled by Smart Survey. Data has been collected over a time frame of four weeks between October and November 2022. Prior to distributing the survey, three researchers reviewed the questionnaire regarding structure, content, and wording. Following this, it was pilot tested with colleagues and students to review ambiguities in terms, meanings, and other potential issues. A total of $n=310$ usable questionnaires were obtained. The sample is divided roughly between 161 female and 149 male respondents with all the respondents being 55 years or older.

The study applied existing scales as much as possible and adapted some existing scales from the literature to fit the context of the study. It used seven-point Likert scales for the measurement of the questionnaire items. Respondents were asked to rate responses from strongly disagree to strongly agree. The scale for sustainability mindset comprises three items and is based on the concept of sustainable mindset introduced by Sheth et al. (2011). The concept is centred around caring for personal well-being, for well-being of the community and the well-being of nature. Example items for the scale are 'I am aware that overconsumption undermines the collective well-being'. The sustainability attitudes scale comprises 5 items and is based on the TNS Kantar Atlas scale of attitudes towards sustainable consumption (Bask et al., 2020). An example item for the scale is 'I would accept a lower standard of living if it contributed to decreasing environmental pollution'. The dependent variable of sustainability eWOM comprises four items and is adapted from Roy et al. (2014). An example item is 'I often share social media posts in which firms talk about their sustainability efforts to others'. The commercial intent variable is based on Alt (2015).

4. Analysis and findings

We test our hypotheses through a partial least square structural equation modelling approach using the WarpPLS 8.0 software (Kock, 2022). Prior to the path analysis, we assessed variables' reliability through composite reliability (CR) Cronbach's alpha (α). These should be greater than 0.7. Thereafter, we inspected convergent validity through items' loadings and Average Variance Extracted (AVE). These should be 0.5 and more. Discriminant validity was also checked via the square roots of AVE. Here, values should be higher than the scores in the diagonal (As per the Fornell and Larcker's (1981) criterion). Lastly, the model was checked for collinearity issues using the Variance Inflation Factor (VIF). The latter should be less than 5. Table X depicts the validity and reliability of all constructs.

Table 1: CR, α , AVE, and VIF

4.1. Hypotheses testing

Following the assessment of constructs' reliability and validity, results of the path analysis are presented in Figure 2. First, it appears that baby boomers' sustainability mindset holds a negative direct relationship with their eWOM ($\beta = -0.10$, $P = 0.02$). In contrast, the indirect link between these two constructs seems to be positive and significant ($\beta = 0.15$, $P \leq 0.01$). In fact, the results reveal that baby boomers' sustainability mindset significantly increases their sustainability attitudes ($\beta = 0.56$, $P \leq 0.01$), which, in turn, enhances their eWOM ($\beta = 0.29$, $P \leq 0.01$). Therefore, one may conclude that

sustainability attitudes act as a suppressor in the relationship between sustainability mindset and eWOM. That is, the intervening role of attitudes alters the relationship from negative to positive. In other words, only when baby boomers' sustainability mindset leads to the development of favourable attitudes toward sustainability, eWOM is enhanced. Moreover, we find that baby boomers' commercial engagement strengthens the impact of sustainability attitudes on eWOM. Overall, the model explains 31% of sustainability attitudes and 15% of eWOM. To conclude, H1, H2, H3 and H4 are accepted.

Figure 2 Measurement model depicting the results of the hypothesised relationships

5. Discussion and conclusions

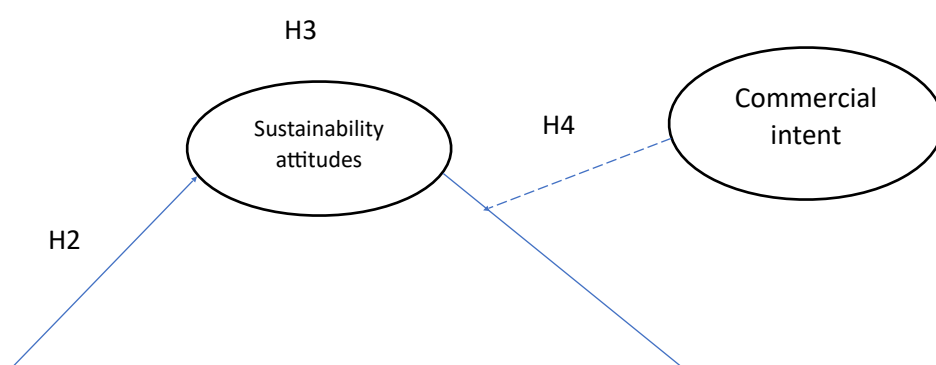
Older users have been left out of many studies concerning social media and studies set in the online context (Vincent, 2023). This is even though we live in an ageing population which means that older users will only rise in quantity and they are a valuable market segment to focus on as they have a high disposable income (Lissitsa & Kol, 2016) and seem to enjoy spending time online (Security, 2022). Research on sustainability behaviour of older people is inconclusive with some studies showing that those above a certain age level care more about sustainable living (Department for Energy Security and Net Zero, 2023) whilst others conclude that younger consumers are in fact the ones that are willing to spend more on sustainable products (Tait et al., 2020; Yamane & Kaneko, 2021).

The current research is unique in that we are using a sample of 310 social media users over the age of 55 years and measuring what leads to engagement of such users with sustainability messaging. We find a negative relationship between sustainability mindset and sustainability eWOM, meaning those who know about sustainability (have a sustainable mindset) are less likely participate in sharing sustainability efforts of businesses. This might have several reasons. One of the reasons might be that they are critical towards businesses sharing their endeavours online. However, this relationship is changed for those respondents who have positive sustainability attitudes. In our study sustainability attitudes were measured as being willing to make sacrifices for the good of our planet.

We find that a sustainability mindset increases the willingness to make sacrifices, which in turn enhances their eWOM. One could conclude that a positive attitude towards sustainability in the form of being willing to make sacrifices is necessary to engage older users in the sustainability conversation online. There could be different explanations for this. Having a positive attitude entails the willingness to make sacrifices which includes a level of acting on someone's mindset. This could therefore translate into a willingness to participate in eWOM and share sustainability efforts from businesses. This relationship for those willing to make sacrifices is even stronger when they are engaging online in a commercial context. This could mean that those older users who engage in commercial contexts are more likely to contribute to eWOM around sustainability. This might be explained by the fact that those users who are engaging in a commercial context on social media channels are more likely to be willing to take part in activities rather than using the web passively.

Figures and tables

Figure 1: Theoretical model



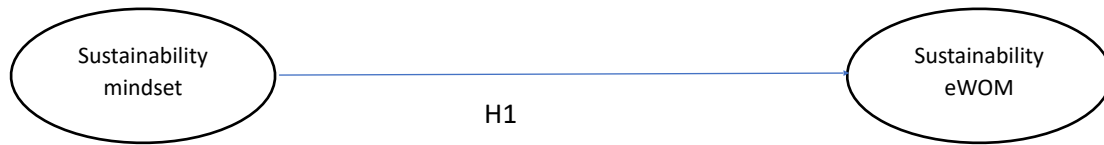
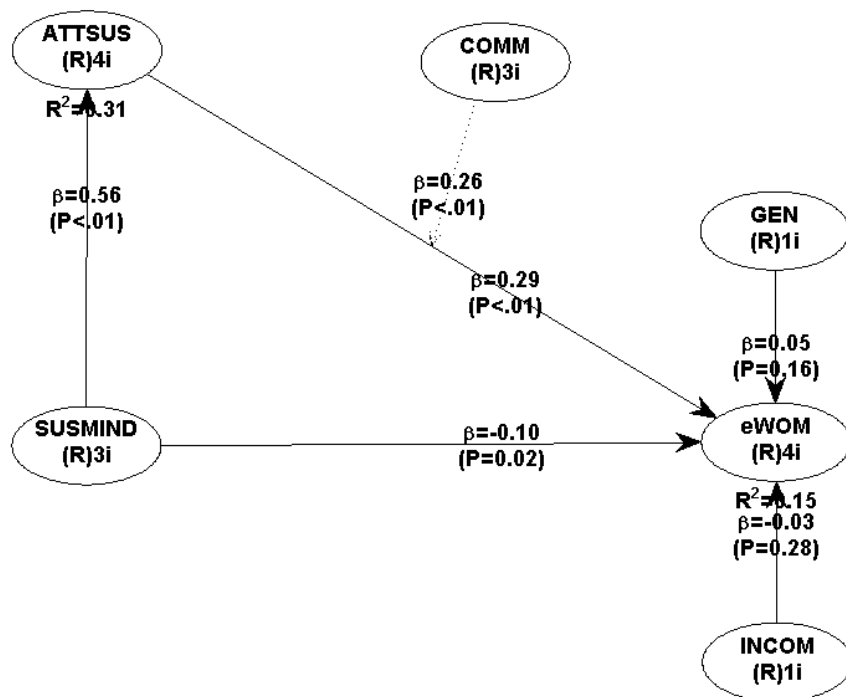


Table 1: CR, α , AVE, and VIF

	eWOM	COMM	SUSMIND	ATTSUS	GEN	INCOM
CR	0.969	0.923	0.931	0.914	Single Item	Single Item
α	0.957	0.874	0.889	0.874	Single Item	Single Item
AVE	0.885	0.799	0.818	0.726	Single Item	Single Item
VIF	1.666	1.748	1.482	1.795	1.040	1.032

Figure 2 Measurement model depicting the results of the hypothesised relationships



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