

Exploring Generational Perceptions Toward Sustainable Agricultural Foods & Products

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Introduction/Need for Research

Consumers are trending toward buying more sustainable products. Since the onset of the COVID-19 pandemic, products marketed as sustainable have increased in market share in the consumer market (Kronthal-Sacco & Whelan, 2022). This market growth may be explained by the growing need for consumers to want to purchase products due to their impact on society and the environment (IFIC, 2022). Similarly, the USDA is committed to improving the economic, social, and environmental impacts of the agricultural industry. In line with the USDA's approach, many organizations in the agricultural industry are creating strategic goals and programs focused on sustainability efforts, like the many climate-smart partnerships through the USDA and Cotton 2040 (USDA, 2023; Forum for the Future, n.d.). Additionally, some agricultural commodities, such as dairy and cotton, have already begun marketing their products as sustainable to consumers (Kronthal-Sacco & Whelan, 2022). However, within the agricultural industry, limited research has explored how the public perceives sustainability. In alignment with Priority 1 (Enns et al., 2016), public and policymaker understanding of agriculture and natural resources, the purpose of this study was to examine the public's perception of sustainable products and sustainable food products and how it varies by generation. The results of this study aim to better inform communication about agricultural sustainability to targeted audiences.

Conceptual Framework

Social marketing is a framework to better inform communication to influence behavior and attitude change toward controversial topics (Warner & Murphrey, 2015). A key component of social marketing is substantial audience analysis to appeal to the audience's values and likelihood of changing their behavior (Lee & Kotler, 2011). By using audience segmentation, splitting the audience into groups based on similar characteristics, the most important groups within an audience can be identified (Lee & Kotler, 2011; McKenzie-Mohr et al., 2012). Scholars have explored how generations perceive genetic modification (GM) science and found communication preferences varied among the generations (Beattie et al., 2019). Additionally, differences between the perceptions of Millennials and Generation X'ers have been found when researching food safety at farmer's markets (Yu, et al., 2017). The Pew Research Center has defined the current generations as the following: Silent Generation, born 1928-1945; Baby Boomers, born 1946-1964; Generation X, born 1965-1980; Millennials, born 1981-1996; and Gen. Z, born 1997-2005 (Parker & Igielnik, 2020). Typically, Millennials and Gen. Z are more concerned about environmental sustainability and demand more sustainable retail products (Tyson et al., 2021; Oesterreicher, et al., 2018).

Methods

The purpose of this study was to explore the how Americans' attitudes toward sustainable products and sustainable food products varied by generation. A total of 1,441 useable responses to a Qualtrics questionnaire were collected in October 2022. Qualtrics, a third-party company, was consulted to gather a non-probability sample of U.S. residents 18-years or older. Non-probability opt-in sampling is a technique that allows groups of people to sign up to participate in Internet studies and are recruited to participate in study based on specific characteristics (Lamm & Lamm, 2019). We recruited U.S. residents who matched U.S. census characteristics for age, gender, regionality, and race to participate in the study. The respondents were asked questions,

adapted from Burnier et al., 2021, regarding their attitude toward sustainable products ($\alpha = .85$) and sustainable food products ($\alpha = .88$). These questions were measured on a 5-point, Likert scale (1 = *Strongly Disagree*, 5 = *Strongly Agree*). The attitude toward sustainable products items included statements such as “I do not buy a product when I know the possible damage they can cause to the environment.” The attitude toward sustainable food products included statements items such as “I prefer foods that are produced respecting the environment.” Respondents were asked to enter the age in years, which was converted into a categorical classification based on their respective generations (Parker & Igielnik, 2020). Data were analyzed via one-way ANOVA in SPSS Version 29 following Field’s (2018) guidelines for statistical procedures.

Results

As seen in Table 1, we did not find significant main effects for generation type on attitude toward sustainable products, $F(4,1422) = 1.35, p = .25$. However, we did find significant main effects for generation type on attitude toward sustainable food products, $F(4,1422) = 4.02, p < .001, \eta^2 = .011$. Bonferroni post hoc comparisons revealed the attitude toward sustainable food products was only statistically different for the Millennial generation in comparison to the Baby Boomer generation, $p < .001$.

One Way Analysis of Variance between Attitude by Generation Type (N = 1,441)

	Gen Z.		Millennial		Gen X.		Baby Boomer		Silent		F	p	η^2
	M	SD	M	SD	M	SD	M	SD	M	SD			
Products	3.44	.91	3.53	.93	3.45	.95	3.39	.96	3.40	.96	1.35	.25	.004
Food	3.46	.88	3.56	.89	3.43	.93	3.32	.93	3.33	.92	4.02	.003*	.011

Conclusions

Communicators should consider generational differences when forming messaging around sustainable goods to better understand their target audience and their likelihood to change behavior. Our results indicated communicators should focus their communications efforts about sustainable foods toward Millennials. Millennials’ concern for sustainability and the environment supported prior research on perceptions of the beef industry (Oesterreicher, et al., 2018). When communicating about sustainable products, communicators should know that if they are segmenting their audience based on generation, there is more variance among the generations about sustainable foods than sustainable products. Oesterreicher, et al.’s 2018 findings that Millennials tend to have negative perceptions of the beef industry’s environmental impact and that foods are more likely to be agriculturally produced may explain the difference between perceptions of sustainable products and foods.

Implications/Recommendations/Impact on Profession

Audience segmentation is a critical tool in communicating. Researchers in agricultural communications use audience segmentation in their research efforts, especially for public audiences. In terms of consumer attitudes toward sustainability, future research should explore consumers’ likelihood of purchasing sustainable foods and products with different labels and verbiage. Future research should consider producer perceptions, including barriers to adoption, effectiveness of incentive programs, and return on investment of sustainable farming practices.

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