Framing Green: Leveraging Cultural Consumer Values in Sustainable Food Advertising

Student Name: Francesca Occhionero
Student Number: 611867

Supervisor: Dr. Anne-Marie van Prooijen

Master Media Studies - Media & Business
Erasmus School of History, Culture and Communication
Erasmus University Rotterdam

Master's Thesis
June 2025.

Word Count: 18,357

Framing Green: Leveraging Cultural Consumer Values in Sustainable Food Advertising

ABSTRACT

The growing urgency to address the current environmental crisis, accompanied by its significant social and economic impacts, demands new and innovative strategies to encourage individuals to adopt sustainable habits. Due to its universal necessity and position as one of the largest contributors to environmental degradation, the food industry offers a significant potential for change and targeted intervention. While past research has extensively studied how demographic variables influence sustainable behaviour, little attention has been paid to the role of underlying cultural values. Drawing on the Schwartz theory of basic human values, the present study investigated how advertising frames that emphasise specific values affect purchase intention for sustainable food products. This theory identifies two pairs of dichotomous value dimensions: self-enhancement versus self-transcendence, referring to whether goals focus primarily on the self or others, and conservation versus openness to change, regarding whether an individual prioritises stability or novelty. Using an unifactorial between-groups design, 235 responses were collected from participants from 35 countries through an online experimental questionnaire. Through random assignment, each participant was exposed to one of the four advertisements framed around one of the value dimensions, or the control. The outcome variables were product attitude and purchase intention. Results, however, indicate that there was no significant difference in purchase intention across experimental groups. When examining the direct effects of values, endorsement of self-enhancement and conservation values was unexpectedly positively associated with the outcome variables. For the former, this finding strongly deviates from previous literature which has frequently tied self-transcendence to sustainable behaviour. Further analyses indicate that value congruence, the alignment between participants endorsed values and those framed in the advertisement did not significantly affect purchase intention. Overall, the findings challenge assumptions related to Schwartz's value theory, framing theory, and value congruence, therewith providing novel practical and theoretical implications. Notably, the results suggest shifting target audiences from those motivated by concern for others, the environment, or openness to change, toward those driven by self-improvement, status signalling, and a desire for stability. Moreover, it suggests that value-based framing may be detrimental to the cause, possibly due to psychological mechanisms that make such frames appear broad, prescriptive, irrelevant, or exaggerated. Instead, it introduces the idea that advertisements framed without value-linked messages may be more effective. This suggests future research is needed to create effective tailored messages, potentially by combining values with demographic factors. Overall, these findings highlight the complexity of sustainable consumption and consumer decision-making, emphasising the need to consider a number of alternative variables in this phenomenon.

KEYWORDS: *Sustainable Food Advertising, Schwartz Value Theory, Framing, Cultural Consumer Values, Green Marketing*

Table of Contents

1. Introduction

1.1 Overview

Global agriculture industries serve as vital lifelines for the world population by providing both sustenance and livelihood (de Sousa et al., 2024, pp. 2, 5). However, the current framework of the food sector, regarding both production and consumption practices, poses serious risks to the environment, related to climate change, water pollution and biodiversity loss (Reisch et al., 2013, p. 7). The agricultural industry accounts for 26% of mankind's greenhouse gas emissions and uses 70% of global freshwater withdrawals (Ritchie et al., 2022, para. 6). With the world population expected to surpass well above 9 billion by 2050, meeting the long-term demands for food is a growing challenge that requires attention from both the public and private sectors (de Sousa et al., 2024, p. 1; Monterrosa et al., 2020, p. 59; Weisstein et al., 2023, p. 1611).

One way to address these social and ecological concerns is by encouraging consumers to adopt sustainably produced products (Assan, 2023, pp. 3, 7; Reisch et al., 2013, pp. 7–8). The demand for environmentally conscious and ethical products is increasing, with a current market value of around 340 billion euros that is expected to double in the next decade (Business Research Insights, 2025, Figure 1; Weisstein et al., 2023, p. 1611). However, there is simultaneously a great deal of resistance from customers that varies across cultures and subcultures (Thøgersen, 2010, p. 173). As more and more companies of various industries are jumping on the environmental bandwagon, it has become difficult for brands to stand out and connect with consumers meaningfully (Zhang et al., 2024, p. 1).

Understanding sustainable behaviours as deeply rooted in personal factors and belief systems is necessary to examine how consumers make everyday choices, such as buying food products (Assan, 2023, pp. 1–3; Chekima et al., 2015, p. 210; Kim et al., 2022, p. 1563). Research has investigated how demographic variables influence green consumption, creating a persona of the typical sustainable consumer: young, female, highly educated, and high-income (Enriquez & Archila-Godinez, 2022, pp. 3698–3699; Johnston et al., 2023, p. 1279). However, little attention has been given to the role of culture, which reflects personal values, social norms, and traditions (Assan, 2023, p. 1,2; Thøgersen, 2010, pp. 171–172). Within the realm of consumption and advertising, culture also explains individual's motivations, decision-making processes and response to marketing messages, as they are tied to beliefs on community, individuality, and tradition (Johnston et al., 2023, p. 1287; Kusá et al., 2021, p. 7; Thøgersen, 2010, p. 171).

Using Schwartz's theory of basic human values, we view culture as a multidimensional concept that explains differences in consumer's motivational goals (Sagiv & Schwartz, 2022, p. 520). This study considers how values are both internal drivers, but also external tools used in communication, specifically through message framing in advertisements that appeal to certain values (Cairns, 2019, Table 1; Cheng et al., 2011, p. 50; Tanford et al., 2020, pp. 1764–1767). Thus, this thesis aims to answer the research question: *To what extent do cultural framing strategies based on Schwartz's value dimensions influence consumer attitudes and purchase intention towards sustainable food products?* This is investigated through an online experimental survey in which the framing of an advertisement for a sustainable food product is manipulated based on Schwartz's cultural dimensions, to examine its effect on the outcome variables. To further understand the role that values play in consumer decision making, this study also explores the sub-question: *To what extent do consumers' values, as defined by Schwartz's theory of basic human values, influence product attitude and purchase intention towards sustainable food products?*

1.2 Societal Relevance

The societal relevance of this research lies in its potential to address environmental and social equity challenges around the globe. Since the 1992 UN Conference on Environment and Development, sustainability has been an international political objective, however, over thirty years later, it remains unachieved, with the situation even worsening (von Meyer-Höfer et al., 2014, p. 1082; Thøgersen, 2010, p. 171). While more brands are agreeing to the need to contribute to environmental efforts (Lin, 2021, p. 1219), there is a lack of actionable recommendations on how to achieve these goals while balancing business objectives.

From a global health perspective, researchers estimate that if the world's food consumption habits continue as they currently are, nearly 10% of the global population will experience hunger by 2030 (Reisch et al., 2013, p. 7). At the same time, Western countries are experiencing a surge in obesity and cardiovascular disease, partly related to the consumption of meat and highly processed foods, whose production is resource-intensive (de Boer et al., 2013, p. 1; de Sousa et al., 2024, p. 3; Reisch et al., 2013, p. 7). The differences between issues in Global North and Global South shows the imbalance in food equity and points to the need for solutions that addresses the diverse needs of people around the world.

The strain on agricultural systems could lead to resource issues in the future, which is compounded by the progressively increasing population. Thus, there are concerns about food

security for coming generations, particularly in emerging countries (de Sousa et al., 2024, p.2; Majeed et al., 2022, p. 2). Monterrosa et al. (2020, p. 59) state that a large shift in the world's current dietary patterns can only be realised through actions from both governments as well as private institutions, such as commercial brands (Monterrosa et al., 2020, p. 59; Weisstein et al., 2023, p. 1611). Both governments and scientists agree on the need to present consumers with compelling information to adopt sustainable products, (Kusá et al., 2021, p.2; Majeed et al, 2022, p. 2) a central aim of this research.

Furthermore, Cheng et al. (2011, p. 49) point to the "knowledge-action gap," wherein despite being aware climate change, many individuals still do not carry out sustainable behaviours in their daily lives. This suggests that the issue does not lie in amount or accessibility of information, but may be more specific, regarding its tone and content (Cheng et al., 2011, p. 49). Much of current sustainable food advertising incorporates buzzwords, eco-labels, a luxurious aesthetic and moral messages (Amatulli et al., 2017, p. 1111; Horani, 2020, p. 1; Pancer et al., 2017, p. 162; Thøgersen, 2023, p. 180; Troudi & Bouyoucef, 2019, p. 5). These elements potentially alienate individuals that do not fall under the schema of the green consumer, outlined above, that most sustainable brands currently target (Horani et al., 2020, p. 11; Thøgersen, 2023, p. 180). By collecting insights from participants from a wide range of demographics with differing value hierarchies, more people can be encouraged to adopt sustainable habits.

1.3 Academic Relevance

Existing literature on food consumption has primarily investigated the individual factors surrounding consumer's sustainable behaviours, such as willingness to pay or nutritional preferences, while cultural influences are often overlooked, leaving a research gap that this study aims to fill (Johnston et al., 2023, p. 1277; Thøgersen, 2010, pp. 171–172). The limited research on this topic often draws upon Hofstede's cultural dimensions (Chekima et al., 2015, p. 212; Matharu et al., 2023, p. 21). Apart from the limitations of the framework, including its reliance on dated data and the tendency to categorise countries in an overly generalised way, no conclusive evidence has been found to link green consumption to one specific trait (Lacko et al., 2023, pp. 229–231; Rahmann et al., 2021, p. 999).

Numerous studies have instead pointed to the effectiveness of Schwartz's theory in analysing behaviour (Mubako et al., 2011, p. 161; Puska, 2018, p. 208), yet its application in the context of sustainable food is still limited. Adopting this framework instead of the widely used Hofstede model allows us to broaden knowledge, as sustainability and consumption are

not just influenced by collective social norms but are also linked to personal values (Falke et al., 2021, p. 899). Since the large majority of studies on this topic have been conducted in Western contexts, there is concern about potential regional and cultural biases. Studies on specific Asian or African countries, for example, tend to overgeneralise consumption patterns, by treating those populations as homogenous and assuming their choices are determined by financial constraints and social pressures (Banerjee, 2008, pp. 373–376; Chekima et al., 2016, p. 217; Troudi & Bouyoucef, 2019, pp. 16–17). This approach overlooks self-determination and individual agency and fails to recognise that members of these countries are likewise influenced by personal motivations, which explains the existence of nuances within national populations (Badaan & Choucair, 2022, p. 238). In this study, we adopt a more open approach, by avoiding the common practice of existing research to group people by country (Spini, 2003, p. 20). As opposed to using outdated and rigid cultural classification systems, this allows us to account for individual variations and the dynamic nature of societies (Badaan & Choucair, 2022, p. 244).

Regarding framing theory, while its persuasive effects have been widely examined, Cheng et al. (2011, p. 44) highlight a surprising lack of research on its application in social marketing. Given framing's role in shaping moral, emotional and behavioural responses (Amatulli et al., 2017, p. 1113; Chang, 2008, pp. 39–41), it presents an opportunity in communicating value-laden topics like the climate crisis. Overall, this topic combines theories and literature in the fields of psychology, cultural studies and marketing. Looking beyond the different strategies present in advertisements, this study also considers cognitive and cultural factors involved in its reception, which together leads to the creation of interdisciplinary conclusions.

1.4 Structure

Before commencing the analysis, Chapter 2 will introduce the theoretical framework. Firstly, we discuss the factors surrounding sustainable food consumption and its messaging. Next, we outline framing theory and its influence on audience perceptions of (green) advertisements. Central to this research is Schwartz's theory of basic human values, which will be explored in relation to cultural classification, behavioural impact and marketing implications. Lastly, the value congruence theory will be explained, tying the two theories together. Chapter 3 describes the the methodology, touching upon the design of the experimental survey, the measurement instruments, data collection procedures, and the study's validity and reliability. Next, Chapter 4 presents the results of the statistical analyses

and briefly interprets them in relation to the hypotheses. Lastly, Chapter 5 provides a discussion of the findings to answer the research question, concluding the paper with practical and theoretical implications, limitations and directions for future research.

2. Theoretical framework

2.1 Sustainable food consumption

The term "sustainability" has previously been defined in a myriad of ways. The World Commission on Environment and Development (1987) describes it as a "level and pattern of consumption, which meets the needs of the present without compromising the ability of future generations to meet their own needs" (as cited in Rathee & Milfield, 2024, p. 8). This extends its definition beyond ecological stability, taking into account the need for a balance between environmental demands, social justice and economic development, which van Gorp and van der Goot (2012, p. 128) classify as the triple bottom-line of "people, profit, and planet". The sustainable agriculture sector aims to incorporate these ideals in the production and distribution of food (Reisch et al., 2013, pp. 7–8; Tsai et al., 2020, p. 2), through measures that reduce greenhouse gas emissions, chemical inputs and usage of resources such as water, land, and energy (Assan, 2023, p. 3, 7). For consumers, this translates to the purchase of plant-based, seasonal, local, and organically produced goods (Monterrosa et al., 2020, p. 62; Vermeir et al. 2020, p. 2).

Numerous factors have been found to be involved in an individual's adoption of sustainable diets. While nutritional choices are fundamentally dictated by biology, they are also strongly embedded in sociocultural structures, making them particularly resistant to change (Monterrosa et al., 2020, p. 62; Vermeir et al., 2020, p. 1). Monterrosa et al. (2020, p. 61) outline several contextual influences on sustainable diets, including price, accessibility, and knowledge of environmental concerns (see also Reisch et al., 2013, p. 10). Food patterns are engrained in longstanding norms and traditions that are transmitted across generations and strengthened in socialisation institutions such as families, schools, and peer networks (Enriquez & Archila-Godinez, 2022, p. 3700; Monterrosa et al., 2020, p. 60; Sharma, 2009, p. 788; Vermeir et al., 2020, p. 1). Hence, food consumption is not merely functional, but also cultural and symbolic (Vermeir et al., 2020, p. 2). Narrowing this down, sustainability carries different meanings across cultural contexts. For example, in Western countries, the "slow food movement" is adopted by a consumer class that prioritises health over convenience, seeks high-quality food, and is supported by the economic means often required to purchase these premium products (Monterrosa, 2020, p. 68; Reisch et al., 2013, p. 10). Oppositely, in the Global South, sustainability is frequently tied to a larger discussion on food sovereignty and human rights (Monterrosa, 2020, p. 68).

Distinctions in societies' values play a role in the adoption of sustainable food products. With respects to product choices, values shape ideas of what is desirable, and thus serve as a basis for purchase behaviour, a conviction held by both theorists and marketing practitioners (Doran, 2009, p. 550; Monterrosa, 2020, p. 67). From a goal-directed perspective, the purchase of sustainable goods can address multiple needs based on different values, for example, contributing to environmental causes, providing sensory pleasure, or communicating social status (Vermeir et al., 2020, p. 2).

Acknowledging culture as a determinant of sustainable choices positions consumers not only as passive recipients of information but as active co-creators of meaning (Solér, 2012, p. 297). The constructionist perspective posits that individuals actively define, interpret and negotiate their environment. Consequently, marketing emerges as a powerful source of information that impacts how sustainability is understood and made relevant (Cairns, 2019, p. 193; Monterrosa, 2020, p. 60; Vermeir et al. 2020, p. 2). Advertisements act as "information brokers" (Reisch et al., 2013, p. 11), influencing how consumers perceive sustainability and learn to express it through consumption. Green marketing refers to communication efforts designed to position a brand as environmentally responsible, for example, by highlighting their sustainable practices on product packaging or advertisements (Kusá et al., 2021, p. 3). These strategies have been shown to improve product image, perceived value, and its competitive advantage (Amatulli et al., 2017, p. 1126; Kusá et al., 2021, p. 3; Troudi & Boyoucef, 2020, p. 2). By touching on the cultural values that underlie food behaviours, in the past, marketing practices have contributed to changes in dietary norms and in food category preference at population level (Cairns, 2019, p. 193; Chekima et al., 2024, p. 210). An example are the values of modernity and efficiency being used to market fast food during its rise in the United States in the 1950s (Ritzer, 2001, p. 371). However, efforts to promote the consumption of certain food categories compete with cognitive barriers, that may be mitigated by how a message is communicated (Chekima et al., 2024, pp. 211–213; Cheng et al., 2013, p. 53; Vermeir et al. 2020, p. 2), as will be discussed in the following section.

2.2 Framing

Framing theory, as proposed by Entman (1993, p. 51, 2007, p. 163) posits that the way information is presented (or "framed") influences how people perceive and respond to it. It refers to the selection of and emphasis on certain aspects of a message, delivered in a way that promotes a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation (Amatulli et al., 2017, p. 1113; Chong & Druckman, 2007, p. 109;

Entman, 1993, p. 52; 2007, p. 163; Gamson & Modigliani, 1989, p. 2). In the context of advertising, the strategic framing of a commercial message aims to persuade audiences to regard it as personally relevant and convincing (Chong & Druckman, 2007, p. 109; Jeong & Lee, 2021, p. 251 Martinez-Levy, et al. p. 53; van der Goot & de Groot, 2012, p. 130). This is achieved through different tools, including language, visuals, symbols, and narratives (Tanford et al., 2020, p. 1767; van Gorp & Van der Goot, 2021, p. 144), which creates an emotional resonance that then guides consumer perception and behaviour (Entman, 2007, p. 170; Tanford et al., 2020, p. 1763).

Various sources, including scientists, news media, and marketers have attempted to communicate climate change in ways that encourage audiences to act (Howarth & Morse-Jones, 2019, pp. 65–67; van Gorp & Van der Goot, 2012, p. 144; Vu et al., 2020, p. 93). Due to its abstract nature, framing sustainability has proven to be challenging for brands, leading to a variety of communication approaches with differing effectiveness (Kapoor et al. 2020, p. 950). Advertisements increasingly employ psychological framing, which ties messages to consumer motivations, desires, and values (Chang, 2008, pp. 26, 39–41). Similarly, narrative-based communication, which refers to the presentation of information through relatable stories instead of abstract data, reduces psychological distance and facilitates audiences to personally connect with the issue, has shown potential for increased engagement (Brosch, 2021, p. 17).

Every culture has a collection of symbols, meanings, and assumptions that its members use to organise and interpret information, known as a schema (Boutyline & Soter, 2021, p. 728; van der Goot & de Groot, 2012, p. 130). These internalised mental frameworks help individuals make sense of their environment, infer meaning, and navigate decision-making (Boutyline & Soter, 2021, p. 729; DiMaggio, 1997, p. 269). When framing a message, advertisers try to connect the product with themes in the shared understanding of a group, including values (van der Goot & de Groot, 2012, p. 130). These strategies work by "making certain available beliefs accessible, or making beliefs applicable or 'strong' in people's evaluations" (Chong & Druckman, 2007, p. 111). One attempt at cultural framing is localisation, a communication strategy that adapts a message to fit the culture of a target audience, through language, the use of local endorsers, and an alignment with cultural values and social norms (Suci et al., 2022, p. 6016). By connecting messages to familiar schemas, localisation increases relatability and eases cognitive processing (Suci et al., 2022, p. 6017). This allows brands to showcase culturally relevant ideas, beliefs, and emotions and resonate

with consumers on a deeper level, more so than by merely presenting the functional attributes of the product (Cwalina et al. 2015, p. 262; Griskevicus et al. 2010, p. 389).

2.3 Schwartz's theory of basic human values

2.3.1 Structure and content

In 1992, Schwartz developed the theory of basic human values, proposing ten values fundamental to decision-making across cultures. Here, values are defined as "concepts or beliefs, pertaining to desirable end states, which transcend specific situations, guide selection or evaluation of behaviour and events, and are ordered by relative importance" (Schwartz & Bilsky, 1987, p. 551). Schwartz (2006, pp. 162–163) posits six main features of values. Firstly, values are inextricably linked to emotions, and influence feelings when they are activated. Secondly, they represent desirable goals that motivate behaviour. Third, unlike norms or attitudes, values are consistent across various situations and environments. A fourth feature is that they serve as guiding standards, influencing individuals' evaluation of people, objects, and behaviours. As a fifth point, the values are present in all people, however, each person has a unique hierarchy of importance. Lastly, the interaction of opposing and complimentary values guides decision-making.

The values: universalism, benevolence, tradition, conformity, security, power, achievement, hedonism, stimulation, and self-direction form a circular structure that explains their relationship with one another, presented in Figure 1. The motivational goals of each value are outlined in Table 1. These values are grouped into two higher-order dimensions: self-enhancement versus self-transcendence, reflecting whether individuals strive for either personal success or the welfare of others, and conservation versus openness to change, which touches on individuals' prioritisation of stability and tradition versus independence and innovation (Schwartz, 2006, p. 166). Compatible values, standing close by in the circle, possess a motivation and can be pursued with the same behaviour (Seppälä et al., 2012, p. 139). For example, values of self-direction and stimulation are compatible since they are both linked to the underlying motivation for change (Seppälä et al., 2012, p. 139). Oppositely, power has a conflicting relationship with self-transcendence values, as pursuing personal wealth and dominance over others often neglects the greater good. Though opposing values can be activated in different contexts, it is impossible to pursue them at the same time, with the same behaviour (Schwartz, 2012, p. 8).

Hedonism, unlike other values, is associated with two dimensions, self-enhancement and openness to change, at the same time (Bilsky & Schwartz, 1994, p. 167; Schwartz et al., 2013, p. 905). However, its links to these dimensions are overall weaker than the other values in these dimensions (Bilsky & Schwartz, 1994, p. 170). Hedonism correlates weakly with achievement, a core aspect of self-enhancement (Bilsky & Schwartz, 1994, p. 170). Due to its connection to seeking sensory pleasure, it has been shown to be better aligned with openness to change in most societies (Schwartz et al., 2013, p. 905). When relating this to consumption choices, hedonism-focussed consumers aim to fulfil immediate gratification rather than focussing on the long-term ethical considerations (Schwartz et al., 2013, p. 903). Within literature, there is no evidence suggesting that hedonism is associated with ethical product preference (Doran, 2009, p. 588).

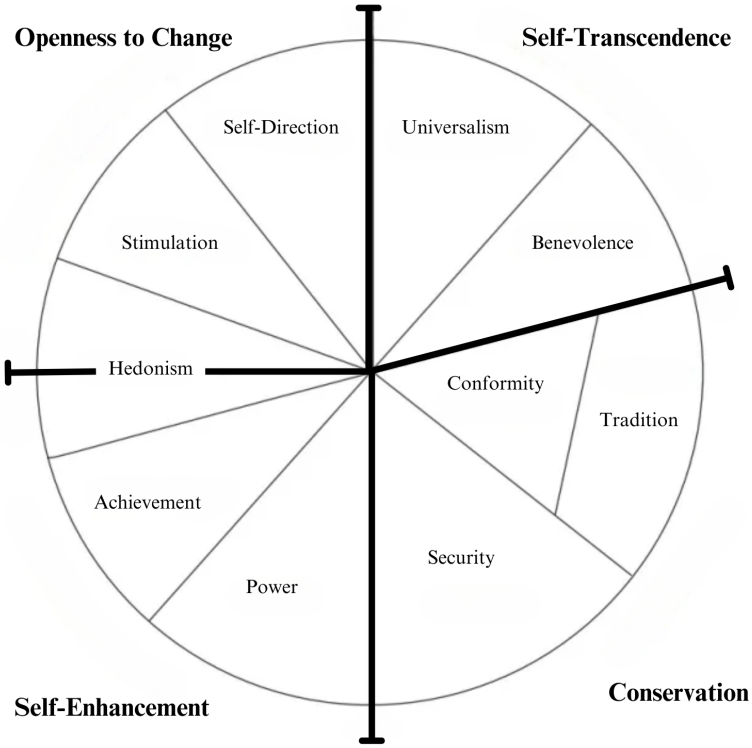


Figure 1. Theoretical model of the Schwartz's theory of basic human values. Adapted from Schwartz (1992, p. 14).

Personality traits differ from values in that they refer to patterns of behaviour, thoughts, or feelings whereas values are centred around what people strive for and their ideas of what is considered good or bad (Bilksy & Schwartz, 1994, p. 165). To exemplify, a person may have an innovative personality, however, for them, innovativeness may not be a life goal

(Seppälä et al., 2012, p. 139). These values serve as criteria that guide what people categorise as "good or bad, justified or illegitimate, worth doing or avoiding" (Schwartz, 2006, p. 163).

Table 1
Schwartz's values and their motivational drivers

Value	Motivational goal
Self-direction	Independent thought, action, and freedom. Creating and exploring.
Stimulation	Excitement, novelty, challenge, and variety.
Hedonism	Personal pleasure and gratification.
Achievement	Success and personal accomplishment, demonstrating competence.
Power	Social status, prestige, control, dominance, and influence over people and events.
Security	Safety, stability, and order.
Conformity	Enforcement of social norms and rules, restraint of actions that harm others or disrupt social order.
Tradition	Preservation and respect of cultural or religious customs and traditions.
Benevolence	Welfare of personal network.
Universalism	To seek understanding, tolerance, equality, and welfare for all people and nature.

Note: (Schwartz, 1994, p. 24; Schwartz, 2010, pp. 65–67)

2.3.2 Values as a classification of culture

Schwartz (2012, p. 3) found that most of the values are universal across countries, meaning, that while the level of importance varies, they are present in some form in all societies. The phylogenetic perspective explains that the consistency of value hierarchies a culture can be attributed to the fact individuals try to align their behaviour to support the

societies success and ensure their own survival within it (Sagiv et al., 2017, p. 635). Through the process of social coordination across centuries, values become representations of socially desirable goals embedded in broader meaning systems shared by a group (Sagiv & Schwartz, 2022, p. 519, 528). These values are then transmitted across generations which reinforces cultural continuity (Monterrosa et al., 2020, p. 60; Sharma, 2010, p. 788; Vermeir et al., 2020, p. 1).

Moreover, patterns in value hierarchies can also be explained by the fact that shared values create a sense of identity and belonging (Choo et al., 2022, p. 1053). The social identity theory, developed by Tajfel and Turner (1979, p. 57) posits that individuals behave according to group goals, rather than individual ones, since carrying out such behaviours improve one's position within a group (see also Seppälä et al., 2012, p. 140). Moreover, Schwartz (2006, pp. 153, 157) explains that values are shaped in response to social movements and historical events within a given geographical location. Empirical research further supports this by showing broad cross-cultural agreement on the most important values (Monterrosa et al., 2020, p. 67; Schwartz, 2006, p. 155).

At the same time, it is essential to recognise the heterogeneity of cultures (Verain et al., 2015, p. 376). Due to differences in personal experiences and personality, individuals of the same society may hold very different values (Schwartz, 2006, p. 153). Variation in national values can also be attributed to subcultures and demographic groups, where factors such as lived experiences and socioeconomic status play a role (Choo et al., 2022, p. 1056; Chow & Amir, 2006, p. 302; Griskevicius et al., 2010, p. 400). For example, studies have suggested that women, in comparison to men, prioritise benevolence more and power less (Sagiv & Schwartz, 2022, p. 527). Similarly, a correlation between age and endorsed conservation values can be observed (Sagiv & Schwartz, 2022, p. 527).

2.3.3 Values and behaviour

Previous research has highlighted the notion that values are guiding principles for individuals, that influence the attractiveness of behaviours by defining what is considered rewarding or threatening (Poier et al., 2022, p. 911; Sagiv & Schwartz, 2022, p. 520, 538). Values thus influence behaviour by motivating people to pursue goals aligned with their values, or oppositely, become obstacles when behaviours conflict with held values (Poier et al., 2022, p. 911; Schwartz, 2016, p. 72). For example, individuals pursue hedonism by undertaking enjoyable activities, or exercise security by avoiding risky situations (Bardi & Schwartz, 2003, p. 1208). These are examples of so-called value-expressive behaviours,

behaviours particularly compatible with and representative of one value (Schwartz, 2016, p. 72). Sagiv and Schwartz (2022, p. 520) state that the more important a value is to someone, the more likely it is to motivate action. Behaviours can manifest both consciously and unconsciously (Bardi & Schwartz, 2003, p. 1209; Schwartz, 2016, p. 72). To lead to a behaviour, the outcome of an action must have a positive value for an individual (Vermeir et al. 2020, p. 3). To exemplify, someone who does not care about sustainability is unlikely to reduce their meat consumption for environmental reasons (Vermeir et al. 2020, p. 3).

The value-behaviour linkage can further be explained by the fact that high-priority values are part of one's identity and self-concept. When individuals see an opportunity to express their values and reach their goals, an automatic response ensues (Sagiv & Roccas, 2021, p. 295; Schwartz, 2016, p. 72). To animate a consistent identity, individuals attempt to align their behaviour with their values and opt for products that reinforce this (Bardi & Schwartz, 2003, p. 1209; Poier et al., 2022, p. 910).

Sagiv and Roccas (2021, p. 301) propose three principles that determine how values influence behaviour: interpretation, accessibility and control. Firstly, interpretation explains that the way individuals understand their values, based on cultural context and personal experiences, influences how these values are behaviourally expressed (Sagiv & Roccas, 2021, p. 304). For instance, rescuing maltreated animals may be an expression of self-transcendence in some cultures but not in others (Sagiv & Schwartz, 2022, p. 538). Similarly, sustainable food consumption carries different value associations across cultural contexts, as explained in Section 2.1 (Monterrosa, 2020, p. 68). Secondly, accessibility, understood as the potential of activating concepts in knowledge structures, highlights that in order to influence behaviour, values must be available and activated (Sagiv & Roccas, 2021, pp. 301–303). More important values are more accessible and activated more often (Schwartz, 2016, p. 71). Reflecting on one's values also increases accessibility (Sagiv & Roccas, 2021, p. 303). Within the context of advertising, priming values by touching upon them in a message, has been found to increase the accessibility of values, and therewith influence purchase behaviour (Sagiv & Schwartz, 2022, p. 538). Lastly, control serves as a key moderator in the value-behaviour-relationship. It refers to an individual's ability to act on their values within the constraints of their cultural environment (Sagiv & Roccas, 2021, p. 307).

Notably, attitudes can mediate the relationship between values and behaviour (Raza & Farrukh, 2023, p. 3325). Evaluative constructs just like values, attitudes are mental and emotional evaluations of objects or actions, reflected in how positively or negatively a person perceives them (Raza & Farrukh, 2023, p. 3325). This translates to behaviour in that a

positive attitude towards an action predicts the likelihood of that action (Raza & Farrukh, 2023, p. 3325; Sagiv & Roccas, 2021, p. 296). Understanding this interaction is important in examining consumer decision-making as in the context of purchase behaviour, external factors such as price or accessibility interfere with value-driven attitudes (Reisch et al., 2013, p. 10).

2.3.4 Higher-order value dimensions

Within the theory of basic human values, self-enhancement and self-transcendence are two opposing value orientations, pertaining to how individuals prioritise themselves versus others. Self-enhancement-oriented individuals place importance on having power, achievement, and status (Minton et al., 2020, p. 172; Table 1, Sagiv & Schwartz, 2022, p. 523). Behaviours found to be associated with this dimension revolve around personal gain and self-interest (Bilsky & Schwartz, 1994, p. 168; Griskevicius et al 2010, p. 401; Sagiv & Schwartz, 2022, pp. 533–534; Sagiv & Roccas, 2021, p. 298). Oppositely, self-transcendent individuals concentrate on the well-being of others, and their behaviours are guided by empathy, fairness, and other ethical considerations (Mubako et al., 2021, p. 171). Specifically, this translates into prosocial behaviour, cooperation, and acts of everyday kindness, for close, as well as distant others (Sagiv et al., 2017, p. 634; Sagiv & Roccas, 2021, p. 298; Zelenski & Desrochers, 2021, p. 32).

Numerous literature has pointed to the tendency for individuals high in self-transcendence to exhibit pro-environmental behaviours (Chow & Amir, 2006, p. 310; Puska, 2018, p, 208; Olsen & Tuu, 2021, p. 471; Vermeir et al., 2020, p. 4; Zelenski & Derochers, 2021, p. 32). Relating this to the domain of sustainable food: animal ethics, global hunger, non-violence, and environmental concern have been identified as top motivators for a sustainable diet (Lindeman and Sirelius, 2001, p. 177; Olsen & Tuu, 2021, p. 472), priorities which overlap with self-transcendence. Conceptually, environmentalism itself is a component of universalism, a value in the self-transcendence dimension (Sagiv & Schwartz, 2021, p. 523; Schwartz, 2012, p. 7; 2006, p. 147). One example of this association is provided by de Boer et al. (2013, p. 7), who found that among Dutch consumers, higher endorsement of nature-related values was associated with lower meat consumption, as well as a higher willingness to adopt meat-free meals in their diet. Moreover, strong feelings of awe towards nature were linked to environmental policy support and buying environmentally friendly goods (Zelenski & Desrochers, 2021, p. 32). Drawing on consumers' morality, Doran (2009, p. 552) proposes that ethical advertisement messages are received most positively by those

who value self-transcendence, as they become assured that purchasing the product supports the welfare of others.

Alternatively, Doran (2009, p. 553) explains that self-enhancement values conflict with ethical consumption, as they typically do not present personal benefits for influence, wealth, or authority. Past research has linked self-enhancement-oriented individuals with self-interested or socially damaging behaviours, including aggression (Griskevicius et al 2010, p. 401), tax evasion (Hlastec et al., 2023, p. 3), materialistic tendencies (Yue et al., 2024, p. 844), and non-compliance with public health measures during the COVID-19 pandemic (Zell & Sedikides, 2024, p. 95). Relating this to the topic at hand, research has found that self-interested orientations are negatively related to sustainable behaviours (de Groot & Steg, 2010, p. 368). Whereas individuals with self-transcendence values genuinely seek to support the environment, Puska (2018, p. 212) explains that in certain cases, individuals high in self-enhancement engage in sustainable behaviour due to the "going green to be seen" effect. Although theoretically juxtaposing, some individuals may adopt sustainability as a form of self-enhancement, attempting to gain social recognition (de Matos et al., 2024, pp. 501–502; Puska, 2018, p. 212; Yan et al., 2021, p. 4). Sustainable food choices may address egoistic needs, such as a preference for healthier, fresher, and better-tasting products (Azzurra et al., 2019, p. 98).

H1a: Higher levels of endorsing self-transcendence values are associated with more positive attitude toward the sustainable product.

H2a: Higher levels of endorsing self-transcendence values are associated with higher purchase intention for the sustainable product.

The second dichotomous classification of Schwartz's theory relates to openness to change versus conservation values, referring to whether individuals hold onto traditional and stable beliefs and behaviours, or are flexible to new ones (Sagiv & Schwartz, 2022, p. 522; Schwartz, 2007, p. 166; Seppälä et al., 2012, p. 139). Individuals high in conservation seek to maintain the status quo and resist performing change-oriented behaviours, even when they recognise the potential benefits (Seppälä et al., 2012, p. 140). Their actions reflect the norms and traditions present in a society (Seppälä et al., 2012, p. 139). Tradition, conformity and security are expressed through inhibitedness in social settings for fear that their behaviour may be socially disruptive (Bilsky & Schwartz, 1994, pp. 170–171; Sagiv & Schwartz, 2022,

p. 523), avoiding injury and other risks (Bilsky & Schwartz, 1994, p. 171), voting for moderate or conservative parties (Amit et al., 2010, p. 931; Sagiv & Schwartz, 2022, p. 535), and carrying on traditional customs (Sagiv et al., 2017, p. 631; Seppälä et al., 2012, p. 139).

In their investigation of change-oriented behaviour in the workplace, Seppälä et al. (2012, p. 140) highlight that employees who value openness to change are more easily motivated to engage in behaviours that drive large-scale institutional transformation, as long as it is not forced upon them. Moreover, they are also motivated by self-direction, which connects to independent thought and action (Schwartz, 2007, p. 166; Schwartz et al., 2013, p. 905). While literature linking these two dimensions to sustainable behaviour is sparse, studies suggest that individuals high in openness to change are more likely to adopt innovative consumption practices, such as new food trends (Schwartz, 2007, p. 166; Seppälä et al., 2012, p. 139). For green products, a category that requires individuals to change their current consumption habits towards sustainable alternatives, it is important to note that conservation values are linked to a resistance to what is new and different (Schwartz et al., 2013, p. 907). Unlike conservation-oriented individuals, those who are open to change frequently engage in activism and aim to change society for the better, which introduces a connection to environmentally conscious products (Seppälä et al., 2012, p. 139).

H1b: Higher levels of endorsing openness to change values are associated with more positive attitude toward the sustainable product.

H2b: Higher levels of endorsing openness to change values are associated with higher purchase intentions for the sustainable product.

2.3.5 Value framing

Evidence from the fields of psychology and sociology suggests that framing sustainability through self-transcendent values may be more effective than through self-enhancement values (Schoolman, 2019, p. 668; Trudel et al., 2019, p. 39). Firstly, research has indicated that people's consumption behaviours are often motivated by a desire to feel like they are contributing to a positive cause (Trudel et al., 2019, p. 39). Relating back to the theory of basic human values, a self-transcendent message, that is, one that prioritises concern for others, the environment, and future generations (Schwartz, 2012, p. 7), enables individuals to engage in the phenomenon of "feeling good by doing good" (Titova & Sheldon, 2022, p. 341). Trudel et al. (2019, p. 39) highlights that purchasing an ethically

labelled product allows individuals to confirm their positive moral identity and communicate it to others. As such, self-transcendent messages can satisfy both collective and personal motivations, as they highlight helping others and the planet, and also personal ones, by allowing the consumer to feel purposeful and morally fulfilled (Schoolman, 2019, p. 668). Moreover, messages that highlight care activate emotional responses like moral responsibility and empathy (Gregory-Smith et al., 2013, p. 1203; van Gorp & van der Goot, 2012, p. 144). Low and Davenport (2007, p. 336) identify human, animal, and environmental welfare as key concerns for ethical consumers, which can be activated by messaging congruent to the self-transcendence dimension. These frames emotionally engage consumers and strengthen their connection to the message, which increases its persuasiveness (Wang & Chou, 2020, p. 24; Yang & Yen, 2018, pp. 273–274; Kato, 2023, p. 1). Maio et al. (2009, p. 271) provide evidence for this. In their experiment, participants primed with self-transcendent values spent twice as much time volunteering in the experiment than those primed with self-enhancement values.

Moreover, according to the structure of the theory of basic human values, self-transcendent messages are more naturally aligned with products that highlight sustainability, which makes them easier for consumers to cognitively process. When the advertisement and the product are closely related, consumers experience a higher cognitive fluency, and ease of understanding the product's purpose, positioning and unique selling proposition (Chang, 2018, p. 125; Rossolatos, 2012, p. 68). To exemplify, while luxury products, due to their connection to prestige and status, might be more effectively marketed using self-enhancement values, sustainable products logically and emotionally fit with messages about care, responsibility, and collective well-being (Vanhamme et al., 2012, p. 262).

Lastly, messaging based on self-transcendence, particularly appeals related to altruism, may also enhance brand image (Lu et al., 2021, p. 4). Brands that align themselves with values like empathy, social responsibility, and environmental protection are perceived as trustworthy and grounded (Kato, 2023, p. 3; Lu et al., 2021, p. 4). Such an image increases customer respect and also allows brands to differentiate themselves in an increasingly value-driven market (Kato, 2023, p. 2). Overall, self-transcendent values, though not always prioritised in purchase decisions, are intrinsic to everyone and can be primed through message framing (Macdonald, 2023, p. 517).

H3a: Exposure to advertisements framed using self-transcendence values leads to higher purchase intention than exposure to self-enhancement framed advertisements.

H3b: Exposure to advertisements framed using self-transcendence values leads to higher purchase intention than exposure to a neutral control advertisement.

H4a: Exposure to advertisements framed using self-transcendence values leads to more favourable attitudes toward the product than exposure to self-enhancement framed advertisements.

H4b: Exposure to advertisements framed using self-transcendence values leads to more favourable attitudes toward the product than exposure to a neutral control advertisement.

When looking at the dimension of conservation versus openness to change, the widely adopted and often successful "progress frame" draws on scientific advancement and technological innovation, describing environmental action as something necessary for societal development (van Gorp & van der Goot, 2012, p. 140). Similarly to self-transcendence, there is a greater perceived fit between openness to change messaging and sustainable products, as they are associated with future-oriented appeals (van Gorp & van der Goot, 2012, p. 141). Conservation-framed advertisements, on the other hand, may cause psychological friction when attempting to convince consumers to engage with unfamiliar product options. Additionally, due to the action-oriented nature of the openness to change dimension (Schwartz et al., 2013, p. 904), framing strategies with these values are able to promote calls to action which lead consumers to engage with a product (Zhang et al., 2012, p. 9). Lastly, values surrounding openness to change generate more positive physiological responses, such as excitement and curiosity (Schwartz, 2007, p. 54; Seppälä et al., 2012, p. 139). These positive emotions carry onto the product or brand, enhancing the consumer's perception and likelihood to choose it (Chowdhury et al., 2025, p. 502).

H3c: Exposure to advertisements framed using openness to change values leads to higher purchase intention than exposure to conservation framed advertisements.

H3d: Exposure to advertisements framed using openness to change values leads to higher purchase intention than exposure to a neutral control advertisement.

H4c: Exposure to advertisements framed using openness to change values leads to more favourable attitudes toward the product than exposure to conservation framed advertisements.

H4d: Exposure to advertisements framed using openness to change values leads to more favourable attitudes toward the product than exposure to a neutral control advertisement.

H5: Attitude toward the product mediates the relationship between advertising framing based on Schwartz cultural dimensions and purchase intention.

2.4 Value congruence

In order to strengthen brand-consumer relations, segmented framing strategies based on target audiences have been created to increase campaign success (Cheng et al. 2011, p. 49). Typically, these messages are segmented according to factors like consumer knowledge, life-stage, gender and needs of the intended clientele (Cheng et al., 2011, p. 48). However, companies have started setting a focus embodying the value priorities of its consumers (Michel et al., 2022, p. 301). This strategy resulted from the consideration that consumers evaluate products beyond just their functional attributes and also take the brand's underlying associations into consideration (Poier et al., 2022, p. 919). Research has indicated that consumers prefer brands aligning with their personal values, and those that represent values of their desired selves (Michel et al., 2022, p. 301; Poier et al., 2022, p. 919). This can partly be explained through the schema congruity theory, proposed by Mandler (1982, as cited in Suci et al., 2022, p. 6017), which suggests that when a message aligns with a consumer's pre-existing mental frameworks, it requires lower cognitive processing, making the experience with the ad more pleasant for the viewer. The familiarity of a value-congruent advertisement reduces the uncertainty around a new product (Jeong & Lee, p. 249).

Additional support for the role of value congruence comes from self-referencing theory, which explains that viewers interpret information from an ad by connecting it to their own identity (Suci et al., 2022, p. 6017). Research has indicated that self-referencing makes consumers more likely to connect with the message, increasing the involvement with an ad (Cheng et al., 2011, p. 58; Florence et al., 2021, p. 633). This creates trust and emotional closeness with the brand (Vanhamme et al., 2012, p. 262). The positive emotional effect of value congruence is compounded by an understanding that one's values shared by others and institutions (Burchell et al., 2013, pp. 1–3). This gives consumers social validation, which

makes them feel socially supported when evaluating a marketing message (Burchell et al., 2013, p. 2).

Value congruence directly relates to Schwartz's theory of basic human values as it is postulated that individuals aim to behave in a way that aligns with their own values (Minton et al., 2020, p. 169; Schwartz, 2006, pp. 162–163). Unlike religion, which provides a concrete set of directives through scripture, culture is more nuanced in explaining why consumers make ethical choices (Minton et al., 2020, p. 169). Consumers perceive stimuli positively when their beliefs are reinforced and negatively when they encounter incompatible values which they find controversial (Alhouti et al., 2015, p. 77). Taken together, these theories and findings support the moderating role of value congruence in advertising effectiveness, both on a cognitive and emotional level.

2.4.1 Value congruence according to Schwartz's higher-order dimensions

Relating these perspectives to the theory of basic human values, individuals who exhibit self-transcendence values are more likely to respond to advertisements that communicate their societal impact (Minton et al., 2020, p. 182). For consumers who value environmental goals, priming those environmental values, that is, making them easier to retrieve from memory, may increase salience and thus influence decision-making (Fazio, 2001, pp. 115–116; Vermeir et al., 2020, p. 4; Wheeler et al., 2005, p. 245). The activation of values is followed by goal-directed cognitive and behavioural processes, particularly when the values are personally relevant (Fazio, 2001, p. 129; Vermeir et al. 2020, p. 4). In a study by Monier-Dilhan and Bergès (2016, pp. 535–536), it was found that consumers most involved in environmentally responsible food purchases are more strongly motivated by the communicated collective benefits of a product, such as social and environmental wellbeing, than by personal benefits, such as quality.

On the other hand, for individuals high in self-enhancement, upward mobility is a strong motivator for their purchase behaviours (Chow & Amir, 2006, p. 310; Olsen et al., 2016, p. 303). Products that focus on the consumer as an individual, rather than as a group, are most effective amongst those who seek self-enhancement through their purchases (Doran, 2009, p. 553). For marketing practitioners, this means that in order to attract self-enhancement-oriented individuals, advertisements should emphasise a product's ability to improve personal reputation and image (Doran, 2009, p. 553). As highlighted by Gregory and Di Leo (2003, p. 1266), personal involvement increases when individuals become aware of the consequences of their sustainable or unsustainable behaviours. By making them conscious

of the potential personal benefits they might be looking for, for example, creating an image of a successful person, sustainable action becomes more desirable (Vermeir et al. 2020, p. 6). Overall, one way to encourage self-transcendent consumers may be to reframe sustainability in terms of egoistic or hedonic concerns, rather than altruistic or biospheric values, to which they do not resonate (Brosch & Steg, 2021, p. 1699).

Individuals who hold conservation in high importance reject organisations and ideas which they deem as progressive (Sagiv & Roccas, 2021, p. 300; Olsen et al. 2016, p. 308), which, due to current political frameworks across the globe, may include the sustainability movement (Stoddart et al., 2025). Instead, they purchase from brands that are congruent with traditions and showcase heritage (Chow & Amir, 2006, p. 310). Oppositely, individuals who score high in openness to change look for characteristics such as novelty and variety in products in order to attain affective pleasure arousal (Jacobs & Sopiah, 2023, p. 3; Olsen et al., 2016, p. 304). Positioning sustainability as a forward-looking endeavour boosts motivation for individuals who value autonomy and new experiences (van Gorp & van der Goot, 2012, p. 141), which is why they respond positively to progressive, modern products (Doran, 2009, p. 553).

H6: The effect of the values framed in the advertisement on product attitude is moderated by endorsed values: Stronger congruence between participants endorsed values and the values framed in the advertisement will lead to more positive attitudes.

H7: The effect of the values framed in the advertisement on purchase intention is moderated by endorsed values: Stronger congruence between participants endorsed values and the values framed in the advertisement will lead to higher purchase intention.

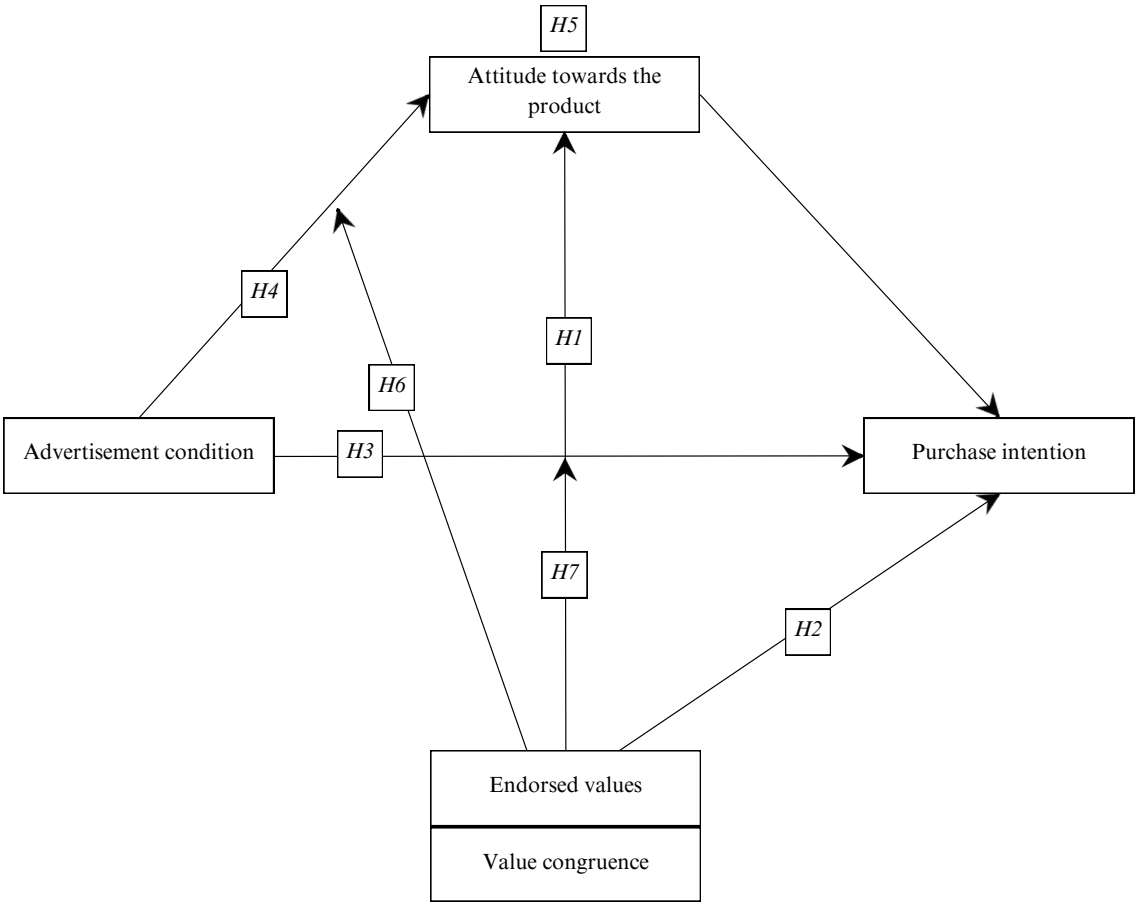


Figure 2. Proposed Theoretical Model.

3. Method

3.1 Justification of research method

In this thesis, a quantitative framework, specifically an online experiment, was employed. This method was chosen for its ability to test empirical evidence about causal relationships and control for the effects of confounding variables (Neuman, 2014, pp. 282, 283; Piercey, 2022, p. 183). Drawing from existing literature on the different theories outlined previously, an experiment allows us to deductively test hypotheses on large amounts of data (Basias & Pollalis, 2018, p. 92; Bowling, 2005a, p. 190). The structured and systematic nature of quantitative research, supported by standardised instruments and procedures decreases the possibility of researcher bias and subjective interpretation (Basias & Pollalis, 2018, Table 1). Additionally, its ability for statistical rigour allows for data-driven decision-making (Basias & Pollalis, 2018, p. 92; Neuman, 2014, p. 310).

Surveys can collect diverse data, including attitudes, behaviours, and demographic information (Bowling, 2005a, p. 190). Using validated scales, concepts can be measured with simple items that are easily assessed (Basias & Pollalis, 2018, p. 93; McInroy, 2016, p.86). An online experimental survey was specifically selected as it allowed dissemination to a large geographic area (van Selm & Jankowski, 2006, p. 438), which adds to the generalisability and external validity of the findings (Bowling, 2005a, p. 191; Lacko et al., 2022, p. 230). The distribution advantages of online surveys further include cost, speed, automatic response recording, and dissemination into online spaces where the target audience is present (Bornemann & Hattula, 2022, pp. 20–21; Evans & Mathur, 2006, pp. 198–200; Fielding et al., 2017, p. 3–4). In terms of format, online surveys provide interface features like skip logic, which improves respondents experience and the relevance of collected data (Fielding et al., 2017, p. 3–4). By offering convenience and a high level of anonymity, online surveys tend to achieve high response rates (Evans & Mathur, 2006, p. 198–200; van Selm & Jankowski, 2006, p. 438).

3.2 Research design

To investigate the hypotheses, participants underwent a unifactorial, between-groups experiment with five conditions, four corresponding to Schwartz's higher-order value dimensions and one control condition, to examine the causal effect on attitude towards the product and purchase intention (Neuman, 2014, p. 288). Subjecting participants to the experiment only once allows us to isolate the effects of framing and avoid issues like

learning, fatigue, or carry-over effects that occur in within-subject designs (Neuman, 2014, p. 288). This design mitigates the influence of demand characteristics, which occurs when individuals may change their responses in order to match the perceived expectations of the researcher once they understand the study's aim (Charness et al., 2012, p. 2; Neuman, 2014, p. 303). Participants were randomly assigned to one of the experimental conditions. Random assignment, and tests of its success, increase confidence that the groups do not differ systematically and thus reduce alternative explanations for observed effects (Alferes, 2012, p. 8; Borneman & Hatulla, 2022, p. 25; Neuman, 2014, p. 288). Additionally, it ensures that researcher's desires to confirm a hypothesis do not influence the selection process (Neuman, 2014, p. 288).

Following the suggestions by Neuman (2014, p. 303), participants were informed that the study explored perceptions of a new cereal brand, without mentioning cultural values or sustainability, in order to prevent priming and response bias. The survey was disseminated in English, as it is the most widely-spoken language across different cultural contexts and is widely used in scientific research (Harzing et al., 2005, p. 214–215). To ensure consistency in data collection, it was not translated into other languages (Harzing et al., 2005, p. 215). This presents a possible limitation, as perhaps respondents whose mother tongue is not English may have interpreted the advertisement and subsequent questions differently (Harzing et al., 2005, p. 222). To account for this, simple language was used, and the survey was pretested on individuals with differing English proficiency.

To avoid missing data and minimise non-response, questions required a mandatory response, except for demographic data (Bowling, 2005a, p. 211; Sischka et al., 2022, p. 406). While this may raise ethical concerns, such as the potential for coercion or invasion of privacy (Sischka et al., 2022, p. 406), these were mitigated by the fact that the questionnaire did not include sensitive questions. Additionally, the response options were designed to be non-discrete, ensuring that participants' responses were not forced into inappropriate categories (Bowling, 2005b, p. 395).

3.3 Stimulus

In each condition, participants viewed an advertisement consisting of a standardised image accompanied by two sentences reflecting the values within that dimension. The text was approximately of equal length across the conditions to avoid differences in time or cognitive effort required to view the advertisement. A fifth condition served as the control, where participants saw only the image without any text. Since exposure requires active

attention to a message (Rathee & Milfield, 2024, p. 22), care was taken to design stimuli that encouraged participants to focus on the textual framing. Informed by academic recommendations, a simple background visual was chosen to minimise distraction (Geuens & De Pelsmacker, 2017, p. 85). The image comprised a green background, and in the forefront, a table, with a cereal bowl and a cereal box. Moreover, earthy colours, natural materials, an eco-certification label and explicit terms such as "organic" and "plastic-free" were used to communicate the environmental focus of the product (Azzurra et al., 2019, p. 97; Pancer et al., 2017, p. 162). These elements were also selected because they mirror common green advertising strategies, making the experiment as close to a real-life scenario as possible (Pancer et al., 2017, p. 162).

A fictitious brand (Earthly Delights) was chosen as it controls for brand preconceptions and past consumer experience (Dutta-Powell et al., 2023, p. 890). Cereal was selected as the product due to its widespread familiarity and neutral emotional attachment (Gama et al., 2024, p. 104). Moreover, choosing a low-involvement product allows researchers to test consumer decision-making in a quick, low-deliberation circumstance (Jiang et al., 2024, p. 4). Using a product from a non-controversial industry eliminates the influence of pre-existing scepticism toward the industry itself (Rathee & Milfield, 2024, p. 15). The omission of price information on the advertisement was intentional, for one, because it could have influenced purchase intention based on participants financial situation (Assan, 2023, p. 12; Bandaan & Choucair, 2023, p. 233; Kusá et al., 2021, p. 6), which was not controlled for, and secondly, because a standardised price and currency could not be created for the nationally diverse sample.

Each advertisement message was created to reflect the motivational goals of its respective value dimension through a breakfast-related slogan. The self-enhancement frame centred around personal benefits by appealing to ambition and individual success (i.e., "Win at breakfast, win at life. Choose a cereal that's ambitious, just like you. Success starts with how you fuel your mornings—the best invest in themselves."), while the self-transcendence frame highlighted care for the environment and others (e.g., "Every bite is a step toward a greener world. Start your day with kindness and compassion — for the planet, and the future of everyone who calls it home."). The openness to change frame emphasised innovation and action (e.g., "Join the forward-driven food revolution. Reimagine your breakfast, reimagine our planet's future. A new way to create change."), while conservation communicated stability, tradition, and protection (e.g., "Preserve the simple joys of life—like a traditional breakfast—and the planet that makes them possible. For a secure and lasting future."). These

messages were conveyed with simple language in a large, easy-to-read font, to minimise the chance that participants misunderstood or did not read the message (Bornemann & Hattula, 2022, p.10; Geuens & De Pelsmacker, 2017, p. 85). Moreover, sustainable food messaging often overlaps with other perceived benefits, such as health (Monterrosa, 2020, p. 68). In order to keep the focus on the sustainable aspect of the cereal, words such as "future," "earth," "world," or "planet" were used (Pancer et al., 2017, p. 162) while excluding mentions of health benefits.

3.4 Procedure

Prior to the dissemination of the experimental survey, a pilot test was conducted on a subset of the population ($N = 7$). This followed the pretesting interview framework proposed by Buschle et al. (2021, p. 823) which states that a qualitative, rather than quantitative approach is effective in ensuring the questionnaire was clearly understood by respondents (Bornemann & Hatulla, 2022, p. 28). Specifically, participants were asked to comment on how well they understood questions, whether the response options were appropriate, the overall ease of completion, and emotions experienced while participating in the study (Appendix C). This helped identify issues that could influence the quality of the data (Bornemann & Hatulla, 2022, p. 28; Buschle et al., 2021, pp. 823–825; Neuman, 2014, p. 304). In line with research recommendations, participants for the pretest were selected to represent the total sampling frame, meaning including varying genders, age groups (22-55), cultural backgrounds (German, Italian, Brazilian), and levels of English proficiency. The main changes this resulted in concerned the interface. To avoid bias, participants in the pilot test were instructed not to complete the final version of the survey, since they had already been debriefed on the study's aims and different manipulations.

The survey began with an introductory message that presnted information on the study's purpose, inclusion criteria, estimated duration, and academic context. Ethical information about data handling, anonymity, and voluntary participation was also included, as well as contact information of the researcher and data protection officer of the representative institution. In accordance with the ethical guidelines of Erasmus University Rotterdam, participants were required to complete an eight-point consent checklist prior to participation.

In the first part of the survey, participant's baseline attitude towards the product category were measured. Participants endorsed values were then probed. This was done prior to the experimental manipulation, to ensure that participant's answers were not influenced by

the stimulus. This timing also aligns with findings that values are more likely to influence behaviour when they are made salient through self-reflection (Sagiv & Roccas, 2021, p. 303). Reflection allows a participant's most important values to be activated (Sagiv & Roccas, 2021, p. 303), which strengthens the cause-and-effect relationship of values on behaviour. Though values become activated by their self-reporting, all participants engage in the same reflection process, meaning that any influence is systematic and controlled.

After being exposed to one of the advertisements, a manipulation check was included. For this and subsequent sections, participants were allowed to return to the advertisement, ensuring they had the opportunity to review information before having to provide a response. The inclusion of a back button supports informed participation by reducing potential misunderstandings or misremembering of the content (Hays et al., 2010, p. 1181). Following this, the dependent variables attitude and purchase intention, as well as the second control variable, whether participants actively make food choices based on sustainability, were probed, fulfilling the condition of temporal precedence necessary for establishing causality (Neuman, 2014, p. 282). At the end of the survey, participants were asked demographic variables, specifically, age, gender, and nationality. While this information was not analysed, it was used to create a description of the sample. Unlike other items in the experiment, demographic variables did not require a response, ensuring participant comfort (Bowling, 2005b, pp. 395, 409). Income and educational level were not assessed, as some may consider this information to be sensitive or confidential (Matthews & Ross, 2010, p. 208). Once their responses were collected, participants were debriefed in accordance with ethical guidelines. They were also provided with the researcher's email, in case they had any questions, and were provided a space to submit feedback if they wanted to.

An online experiment raises concerns that participants may not fully engage with the manipulation since they are not in a controlled environment (Evans & Mathur, 2006, pp. 203, 206). To mitigate this, an attention check in the form of an instructed response item was included (Fiedler et al., 2021, p. 821; Gummer et al., 2021, p. 240). To further address potential disengagement and reduce drop-out rates, motivational messages such as "You're almost there!" were used to encourage participants to complete the questionnaire (Sakshaug & Crawford, 2010, p. 58). The full experimental questionnaire is visible in Appendix B.

3.5 Sampling

To gather respondents, a non-probability sampling method, specifically convenience and snowball sampling was employed. The link to the survey was distributed via the

researcher's personal network and on social media platforms like Facebook and Instagram, and participants were asked to share it with others. This method was chosen due to its efficiency in accessing a diverse sample within a limited time frame and budget (Berndt, 2020, p. 226; Rahmann, 2023, p. 48). However, it is important to note that the non-probabilistic sampling technique does not allow us to infer findings onto a larger population, since not all consumers have an equal chance to participate (Vehovar et al., 2017, p. 329). To mitigate this issue, Vehovar et al., (2017, p. 328) propose creating sampling seeds to increase diversity. Specifically, the questionnaire was posted on social media groups pertaining to sustainable food practices, as well as in two companies, in the Netherlands and in the Philippines. While non-probability sampling limits generalisability, it is appropriate for exploratory research or for studying broad trends (Berndt, 2020, pp. 225–226). Rahmann (2023, p. 49) explains that non-probability sampling works best with very diverse samples, which is ensured in this study due to the broad age range and the inclusion of participants from various countries (see sample description below).

The proposed sampling frame consists of at least 196 participants aged 18 and above, with the expectation that they have sufficient English proficiency to understand the survey. These two broad criteria were set to allow for a diverse and inclusive respondent group that reflects the general consumer population as much as possible. The age requirement ensures participants are able to provide informed consent and is appropriate given that cereal is widely consumed across adult age groups (Dean et al., 2008, p. 5). No restrictions were set on gender and nationality, as a diverse sample allows findings to be generalised across demographic groups (Manyanga et al., 2022, pp. 13–14). Coverage bias remains a concern, as not every subpopulation, for example older generations, is proportionately represented in digital media (Lehdonvirta et al., 2020, p. 137). To address this, researchers distributed the survey to individuals over the age of 65 in person (n = 4), improving representativeness.

The suggested sample size was determined through the use of G-Power, a widely used tool in quantitative research. The analysis was based on a desired power of 0.80, an alpha level of .05, and an expected medium effect size (Cohen's d = 0.25)(Cohen, 1988, p. 29). The results indicated that a total sample of 196 participants would be required to detect the expected effect and reduce the chance of a Type II error (Cohen, 1988, p. 23). Moreover, the final sample size exceeds the requirements of the Erasmus University, which stipulate a minimum of 30 participants per experimental group (Janssen & Verboord, 2024, p. 13).

Responses were gathered in a two-and-a-half-week period, from April 9 to 27, 2025. From the initial 296 responses collected, after applying the data cleaning criteria, 235 valid

responses were retained. Incomplete responses (n = 29), as well as those who were directed to the end of the questionnaire because they did not agree to the ethical guidelines, were removed (n = 22). Moreover, the final sample excludes respondents with aberrant response times (Hong et al., 2023, p. 12), that is, those who completed the survey in under one minute (n = 1), as such a short duration suggests they likely did not read the instructions or survey items carefully. Similarly, it was ensured that responses taking longer than fifteen minutes were not included, as this may indicate distractions or a lack of engagement during completion. Participants below 18 were also excluded, since they could not legally provide informed consent (n = 1). Additional post hoc exclusion criteria included failed attention checks (n = 8).

Among the valid responses, 67.7% of participants identified as female, 31.1% as male, one respondent identified as non-binary, and two respondents preferred not to disclose their gender. The participants stemmed from at least 35 countries, the most frequently represented nationalities being Filipino (31.1%), German (17.0%), Italian (9.8%), Dutch (7.7%), and Indian (5.5%). The age range spanned from 18 to 75 (M = 30.86, SD = 13.82). The wide range of nationalities among respondents was an advantage of this sample, given the fact that we are exploring cultural values. Moreover, with the average age being above 30, this study stands out from many marketing studies that mostly rely on university students (Chatterjee et al. 2020, p. 746; Chowdhury et al., 2025, p. 507; Cwalina et al., 2025, p. 268; Yue et al., 2023, p. 825), who due to their current life stage, may prioritise certain values over others (Falke et al., 2022, p. 911; Gouveia et al., 2015, p. 1276). However, it is important to note that gender distribution is somewhat skewed towards females.

3.6 Operationalisation

In this experiment, measurement tools were selected to be as brief as possible, in order to minimise respondent fatigue (Fass-Holmes, 2022, p. 57). Simultaneously, the instruments were chosen for their strong validity, as they are peer-reviewed and widely used in social science research. Unless specified otherwise, all items were probed using a five-point Liker scale, ranging from "*strongly disagree"* to "*strongly agree*." The five-point format was selected as it is one of the most commonly used in social science research, and is considered to provide an appropriate balance between statistical sensitivity and simplicity of completion (Kusmaryono et al., 2022, p. 630). Scales with an odd number or response options are argued to be more effective in terms of reliability and validity coefficients (Kusmaryono et al., 2022, p. 625). The inclusion of a midpoint avoids forcing respondents

into choosing a direction when their genuine attitude may be neutral (Bowling, 2005b, p. 410). Moreover, this approach reduces positivity bias, which occurs when respondents tend opt for more favourable responses (Bowling, 2005b, p. 410). Overall, the use of a standardised and easily interpretable format supports both data quality by reducing response errors and respondent experience, by minimising respondent burden (Bowling, 2005b, p. 410).

3.6.1 Main theoretical concepts

Endorsed values

Values were examined using Lindemann and Verkasalo's (2005) Schwartz Short Values Survey (SSVS). This adaptation simplifies Schwartz's original 57-item survey by presenting participants with the names of the 10 universal value types and representative words from Schwartz's (2012, p. 4–7) definitions, in parentheses, For example: *SELF-DIRECTION (creativity, freedom, curiosity, independence)*. These abbreviated descriptors aimed to provide participants with a clear understanding of each value while reducing cognitive load and survey completion time (Bowling et al., 2023, p. 325; Lindeman & Verkasalo, 2005, p. 170). The number of descriptive terms per value was standardised to 4-5, ensuring an equal and manageable level of detail across items, reducing potential response biases caused by item length (Bowling et al., 2023, p. 338). Previous research has indicated that this adapted scale has strong validity and shows a high degree of similarity when comparing responses with Schwartz's original scale (Lindeman & Verkasalo, 2005, p. 177).

Participants were asked to indicate how important each value is as a guiding principle in their life, with response options ranging from "*not important"* to "*very important*". The scale originally included the option "*opposed to my values*" which was removed, since the focus was on examining endorsement, rather than rejection of values. Moreover, in his cross-cultural examination, Schwartz (2012, p. 3) found that all values are universally held across individuals, but only differ in their relative importance, therefore, an "opposed" response is both rare and conceptually inconsistent with the theory, and therefore unlikely to yield meaningful data. A confirmatory factor analysis was conducted to assess the underlying structure of the scale. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .73, indicating a moderate suitability for factor analysis (Pallant, 2020, p. 267). Bartlett's test of sphericity was significant, χ^2 (45) = 555.54, $p < .001$, supporting the factorability of the correlation matrix (Pallant, 2020, p. 267). The model explained 31.2% of the total variance. However, when the factor analysis was constrained to extract four factors (Table 2),

supposedly corresponding to the four value dimensions, a conceptual complication emerged. As described in Section 2.3.1, the value of hedonism overlaps with two dimensions: openness to change, and self-enhancement. This resulted in an inconclusive structure as there was no clear separation between the theoretically opposing dimensions of self-enhancement and self-transcendence, since hedonism appeared as its own factor. As such, the Chronbach's alpha values for those factors are low (Pallant, 2020, p. 25). Notably, some alignment with Schwartz's value theory was still visible. Specifically, values from the conservation and openness to change dimensions (excluding hedonism), loaded correctly onto their respective factors. Self-transcendent values loaded negatively onto the second factor, while self-enhancement values loaded positively. This suggests the presence of a bipolar structure of the items, reflecting Schwartz's higher-order value dimensions.

Table 2

Factor loadings, explained variance, and reliability of the four factors for the Schwartz short values survey

Item	Conservation	Self-transcendence vs self-enhancement	Openness to change	Hedonism
Tradition	.90			
Conformity	.87			
Security	.67			
Benevolence		-.45		
Universalism		-.69		
Achievement		.60		
Power		.58		
Self-direction			.90	
Stimulation			.63	
Hedonism				.98
R^2	.31	.16	.13	.8
α	.76	.45	.49	

To address this, a second factor analysis was conducted specifying five factors to extract (Table 3). As such, the KMO value was .73 and the Bartlett's test for sphericity was significant, χ^2 (45) = 555.54, $p < .001$, indicating that the data is appropriate for factor analysis (Pallant, 2020, p. 267). 31.2% of the variance was explained by the model. For subsequent analyses, scores for each of the higher-order dimensions are calculated by averaging the ratings of each of the values within that dimension, while hedonism stands as its own dimension.

Table 3

Factor loadings, explained variance, and reliability of the five factors for the Schwartz short values survey

Item	Conservation	Self-enhance-ment	Self-transcen-dence	Hedonism	Openness to change
Power		.86			
Achievement		.83			
Hedonism				.92	
Stimulation					-.88
Self-direction					-.57
Universalism					
Benevolence			.84		
Tradition	.90		.69		
Conformity	.83				
Security	.56				
R^2	.31	.15	.13	.08	.08
α	.76	.67	.60		.49

Attitudes towards the product

This variable was assessed using Spears and Singh's (2004, p. 9) five item subscale. This scale uses semantic differential pairs (bad/good, unfavourable/favourable, unappealing/appealing), to capture a participant's affective responses. No items were excluded. However, in this study, only the positive statements were presented in the survey, and participants rated their agreement on a Likert scale. This change was made to streamline the response process, reduce confusion, and ensure consistency of format with other scales of the survey. As postulated by the authors, all items loaded onto a single factor. The KMO

value was .90, while the Bartlett's test for sphericity was significant, χ^2 (10) = 775.27, p < .001. Overall, this variable explained 74.9% of the variance.

Table 4

Factor loadings, explained variance, and reliability found for the scale 'Product attitude'

Item	Product attitude
I find this product appealing	.88
I find this product good	.87
I find this product pleasant	.86
I find this product favourable	.86
I find this product likeable	.86
R^2	.75
α	.92

Purchase intention

Also drawing from Spears and Singh (2004, p. 9), purchase intention was measured using their scale of four items. The factor analysis revealed a unidimensional solution. The KMO value was .86, and the Bartlett's test for sphericity was significant, χ^2 (45) = 888.55, p < .001. 85.7% of the variance was explained by this scale.

Table 5

Factor loadings, explained variance, and reliability found for the scale 'Purchase intention'

Item	Purchase intention
Definitely intend to buy the product	.94
Definitely buy the product	.93
Definitely be interested to buy the product	.93
Probably buy the product	.91
R^2	.86
α	.94

3.6.2 Control variables

To account for possible confounding impacts, two control variables were included in the survey. These were selected based on their potential to influence the outcome variables regardless of the exposure or held values (Piercey, 2023, p. 183). Both were assessed with a single item to reduce participant fatigue (Fass-Holmes, 2022, p. 57).

Attitude towards cereal as a product category. The first control variable was measured with an item adapted from Rozin et al. (1996, p. 89): "I find [cereal] appealing." It was included as pre-existing dislike for cereal will likely decrease purchase intention for the advertised product (Posavac et al., 2014, p. 843).

Sustainable purchase tendency. Prior research has indicated that individuals with strong sustainable consumption habits are more likely to hold positive attitudes and higher purchase intentions toward green products (Ali et al., 2022, p. 23334; Tavitiyaman et al., 2024, p. 3148). As such, sustainable purchase tendency was assessed with the item: "I actively make food choices that support sustainability".

3.6.3 Manipulation check

To examine whether the frames created for the study were perceived as intended and were strong enough to be picked up by respondents, manipulation checks were included (Fiedler et al., 2021, p. 818; Kane & Barabas, 2019, p. 234). This is necessary to verify that a change in the outcome can be attributed to the experimental condition (Fiedler et al., 2021, p.

818). These further facilitate scientific quality control by encouraging participants to pay attention to the advertisement slogan, in order to answer the manipulation check (Fiedler et al., 2021, p. 816; Gummer et al., 2021, p. 239).

Participants were asked to rate, on a Likert scale, how well the advertisement conveyed the intended message associated with each value frame. Specifically, they evaluated the extent to which the ad suggested that eating the cereal would "contribute to my personal success and self-improvement" (self-enhancement), "help make the world a better place and promote kindness towards others" (self-transcendence), "lead to change" (openness to change), or "promote a stable future" (conservation). Unlike scales used to test variables, the wording of these items was created to focus participants attention on the conveyed message, rather than on their own personal values and beliefs.

3.7 Validity and reliability

In the context of quantitative research, reliability refers to the consistency of a measurement instrument across time and different conditions, that is, to what extent the instrument yields consistent and replicable results (Harries & Kostopolou, 2005, p. 344; Creswell & Creswell, 2018, p. 250). This study ensures reliability through the use of validated scales that are frequently employed in cultural and marketing research (Bornemann & Hatulla, 2022, p. 29). As mentioned previously, all scales were subjected to a factor analysis, in which the KMO measure ranged from .73 to .90, indicating that the data were suitable for a factor analysis (Yang & Chai, 2022, p. 10). All items loaded strongly onto their intended factors, with loadings between .57 and .94, supporting construct reliability (Cohen, 1988, pp. 79–81; Pallant, 2020, p. 202). Additionally, to measure internal consistency, the Cronbach's alpha was calculated for each multi-item scale (Pallant, 2020, p. 25). These analyses showed that with exception to the openness to change dimension from the SSVS, all scales and subscales achieved values above the commonly accepted threshold of .60, which allows us to infer that all items of a scale measured the same underlying construct (Bowling, 2005b, p. 379).

Moreover, actions were taken to standardise the survey experience, for example, using simple language and avoiding complex, double-barreled or leading questions (Erčulj & Šulc, 2024, p. 191–193). Additionally, participants received the same survey across different devices, and the interface was pretested, reducing the probability of mode effects (Börkan, 2010, p. 371–372).

As previously mentioned, internal validity was ensured by addressing common threats, including selection bias, maturation, and demand characteristics. Moreover, since the experiment was relatively short in length, the risk of participants being fatigued or distracted was minimised (Neuman, 2014, p. 288). To reduce participant's ability to understand the purpose of the study and alter their responses in accordance to this, only mild deception was employed in the introductory message. Elements such as manipulation and attention checks contribute to validity as they verify whether participants processed the framing as intended and eliminate low-quality responses, respectively (Fiedler et al., 2021, p. 818, 821).

Validity was also strengthened through a rigorous data cleaning process, outlined in Section 5.3, ensuring data quality and integrity of results (Hong et al., 2023, p. 14). Moreover, to ensure that the same participant did not take the survey multiple times, care was taken to check that the same IP address was not present more than once. An exception to this were researcher-administered surveys wherein a device was shared in public spaces or social settings. To safeguard privacy, IP addresses were immediately deleted from the dataset. Furthermore, populational validity, which refers to the extent to which the sample reflects the wider population, is established as the respondents represent a wide range of demographics and overlap with the product's larger consumer group (Neuman, 2014, p. 306). While a non-probabilistic sampling method undermines populational validity and generalisability, efforts were made to maximise diversity, by sharing the survey across different online and offline channels.

4. Results

4.1 Preliminary analyses

4.1.1 Random assignment to conditions

To mitigate possible effects of a non-random sampling method, tests were conducted to ensure that participants were randomly distributed to the experimental conditions (Alferes, 2012, p. 8; Borneman & Hatulla, 2022, p. 25; Neuman, 2014, p. 288). Chi-squared tests revealed no significant differences in gender, $\chi 2$ (8, $N = 233$) = 10.58, $p = .227$, or nationality, $\chi 2$ (132, $N = 231$) = 116.11, $p = .836$, across experimental conditions. Similarly, one-way ANOVA tests were conducted which showed no difference between experimental conditions in age, $F(4, 222) = 0.68$, $p = .604$, partial $\eta 2 = .01$, preference for cereal, $F(4, 230) = 0.59$, $p = .669$, partial $\eta 2 = .01$ or the degree to which participants consider sustainability in food choices $F(4, 230) = 0.24$, $p = .913$, partial $\eta 2 = .00$. These analyses indicate that groups were comparable at baseline, meaning these variables did not need to be controlled in subsequent analyses (Lacko et al., 2023, p. 230).

4.1.2 Manipulation check

Four one-way ANOVAs were administered to assess whether participants perceived the intended value framing of an advertisement as intended, based on the experimental manipulation (Kotzian et al., 2020, p. 475). The first ANOVA tested the effect of the experimental conditions on perceptions of self-transcendent values. The corresponding statement "This ad suggests that eating this cereal makes the world a better place for others" was used to assess this. Results indicated a significant effect, F (4, 230) = 11.17, $p < .001$, partial $\eta 2 = .16$. Tukey post hoc comparisons revealed that the statement was perceived to be more strongly associated with self-transcendent values by those in the self-transcendence condition ($M = 3.98$, $SD = 0.91$), compared to the self-enhancement condition ($M = 2.69$, $SD = 1.23$), $p < .001$, and the control condition ($M = 3.20$, $SD = 1.11$), $p = .004$. Additionally, participants exposed to the self-enhancement frame, the opposing dimension of self-transcendence, perceived the statement as reflecting self-transcendent values significantly less than those in the openness to change ($M = 3.80$, $SD = 1.01$), $p < .001$ and conservation conditions ($M = 3.51$, $SD = 1.00$), $p = .002$.

The second statement ("This ad suggests that eating this cereal contributes to my personal success") which targeted the comprehension of self-enhancement value-based framing also showed significant differences across groups F (4, 230) = 6.77, $p < .001$, partial

η2 = .11. In examining the post-hoc tests, it was revealed that the self-enhancement group (*M* = 3.53, *SD* = 1.45) scored significantly higher than all other groups: self-transcendence (*M* = 2.67, *SD* = 1.19), *p* = .006, openness to change (*M* = 2.67, *SD* = 1.17), *p* = .007, conservation (*M* = 2.40, *SD* = 1.07), *p* < .001, and control (*M* = 2.43, *SD* = 1.07), *p* < .001.

Significant differences were also found in the manipulation check for the third statement ("The ad suggests that choosing this cereal is a step towards change") *F* (4, 230) = 3.20, *p* = .014, partial η2 = .05, testing whether participants correctly perceived the openness to change values in the openness to change framed advertisement. However, Tukey post-hoc tests revealed no significant pairwise differences between conditions.

Finally, the manipulation check testing the fourth statement, testing whether participants perceived conservation framing as intended, ("The ad suggests that this cereal promotes a secure future") was not significant *F* (4, 230) = 1.53, *p* = .194, partial η2 = .03. Overall, it can be concluded that the various treatments were only partially effective. That is, participants successfully recognised the self-transcendence and self-enhancement frames, while the frames for openness to change and conservation were not perceived as intended.

4.1.3 Correlations among key and control variables

To examine the relationships between the variables tested in the survey, a zero-order correlation was conducted (Pallant, 2020, p. 194; Sischka et al., 2022, p. 418). Since no variables had a correlation of *r* =.90 or higher, we can conclude that multicollinearity was not present (Pallant, 2020, p. 222). Moreover, this matrix confirmed conceptual links between the main variables, for example, there was a strong relationship between product attitude and purchase intention (Schober et al., 2018, p. 1765), as presumed in Section 2.3.3. Similarly, the correlations between opposing value dimensions can be interpreted as weak (Schober et al., 2018, p. 1765), confirming the structure of Schwartz's theory.

Table 6

Means, standard deviations, and zero-order correlations between variables

Measure	*M*	*SD*	1	2	3	4	5	6	7	8
1. Cereal preference	3.84	1.05	-							
2. Endorsed conservation	3.87	0.81	-.01	-						
3. Endorsed openness to change	4.08	0.64	.02	.23**	-					
4. Endorsed self-transcendence	4.41	0.63	.21	.37**	.03	-				
5. Endorsed self-enhancement	3.64	0.81	.50	.17**	.31**	.26**	-			
6. Endorsed hedonism	3.82	0.96	.06	.17**	.31**	.21**	.26**	-		
7. Sustainability choice	3.64	1.03	-.02	.30**	.16**	.35**	.07	.35**	-	
8. Attitude	3.60	0.83	.37**	.32*	.10	.11	.26**	.15*	.25**	-
9. Purchase intention	3.07	1.08	.19**	.31**	.13*	.16*	.27**	.14*	.35**	.78**

Note: * p <.050, ** p < .001

4.2 The direct effects of endorsed values

To test whether participants endorsed values influenced affective and behavioural outcomes related to the product, a multiple linear regression was conducted with the endorsement of each of the five value dimensions (four higher-order dimensions, and hedonism) as independent variables, and attitude towards the product as the dependent variable (H1) (Pallant, 2020, p. 218). The model proved to be significant F (5,229) = 6.94, p < .001, R^2 = .13. Endorsement of conservation values, b = .26, p < .001, and self-enhancement values, b = 0.17, p = .017, emerged as significant positive predictors of attitude toward the sustainable product.

The same model was tested using product attitude as the dependent variable (H2). The model was also significant F (5, 229) = 7.08, $p < .001$, $R^2 = .13$. Consistent with the purchase intention model, endorsement of conservation values, $b = 0.23$, $p = .002$, and self-enhancement values, $b = 0.18$, $p = .009$, significantly and positively predicted purchase intention for sustainable products. These findings contradict the predictions made in H1, (Higher levels of endorsing (a) self-transcendence values and (b) openness to change are associated with more positive attitudes toward the sustainable product), and H2 (Higher levels of endorsing (a) self-transcendence values and (b) openness to change are associated with higher purchase intentions for the sustainable product), thus leading to their rejection.

4.3 The direct effects of framing

To test whether advertising framing influenced affective and behavioural responses to the product, a one-way ANOVA was conducted, first with purchase intention as the dependent variable, and the treatment conditions as fixed factors, to test mean differences across groups (Pallant, 2020, p. 264; Sawyer, 2013, p. 27). This analysis compares responses across all experimental groups which allows us to test whether value-based framing (specifically the self-transcendence and openness to change conditions) would lead to higher purchase intention (H3) and more positive attitudes (H4) than the frames from opposing dimensions and the control manipulation. The analysis found that there was no significant difference in purchase intention across the four conditions, $p = .50$. Similarly, when attitude was used as the dependent variable, no significant effect of exposure was visible, $p = .23$. As such, advertising framing had no effect on either purchase intention or attitude, thus, we reject H3 and H4.

4.4 The mediating role of product attitude

Since the two outcome variables in thus study, attitude towards the product and purchase intention were strongly correlated (as shown in Section 4.1.3), a mediation analysis was conducted to see whether any indirect effects in the relationship between framing, product attitude and purchase intention were present (H5) (Preacher & Hayes, 2004, p. 717; Sürücü et al., 2023, p. 155). This was done using Hayes' PROCESS macro for SPSS (Model 4), with purchase intention as the dependent variable, advertising framing as the independent variable, and product attitude as the mediator. As the independent variable was categorical, it was treated as the multicategorical predictor through dummy coding. This ensured that the control condition served as the reference group, upon which the other experimental groups

were compared. Following standard practice, the analysis employed 5,000 bootstrap samples and a 95% confidence interval (Hesterberg, 2011, p. 497, 517; Pallant, 2020, p. 352).

The overall model was not significant, $p = .23$, although the exposure to the self-enhancement frame showed a marginally significant negative effect on product attitude, $b = -0.33$, $p = .051$, as did exposure to the conservation frame, $b = -0.33$, $p = .059$. Purchase intention was significantly positively predicted by product attitude, $b = 1.03$, $p < .001$. Of the dummy-coded frame variables, only the self-enhancement frame significantly increased purchase intention compared to the reference category, $b = 0.31$, $p = .031$. Next, the indirect effects of the framing conditions on purchase intention through product attitude were examined. A significant indirect effect was found for the self-enhancement frame, $b = -0.34$, 95% CI = [-0.67, -0.02], and for the conservation frame, $b = -0.34$, 95% CI = [-0.64, -0.03], indicating that these frames indirectly reduced purchase intention via their negative influence on product attitude.

According to Hayes (2022, pp. 203–206, 565–567), even though the overall model is non-significant, mediation can be established due to the significance of indirect paths. These findings thus indicate the presence of mediation, providing support for H5.

4.5 The role of value congruence

To test whether endorsed values moderated the relationship between exposure conditions and attitude towards the product (H6), four separate moderation analyses were conducted, one for each of Schwartz's value dimensions. These analyses were conducted using Model 1 in Hayes' PROCESS macro for SPSS (Hayes, 2022, p. 281; Sürücü et al., 2023, p. 193). In each model, the independent variable was a dummy-coded indicator of exposure to a value-framed advertisement (1 = exposed, 0 = not exposed), and the moderator was the participant's endorsement of the corresponding value.

The first analysis assessed whether endorsement of conservation values moderated the effect of exposure to a conservation-framed advertisement on product attitudes. The overall model was statistically significant, $F(3, 231) = 8.93$, $p < .001$, $R^2 = .10$. A significant main effect was found for conservation value endorsement, $b = 0.30$, $p < .001$, 95% CI [0.15, 0.44], indicating that greater endorsement of conservation values was associated with more positive product attitudes. However, neither the main effect of exposure to the conservation-framed advertisement, $p = .473$, nor the interaction effect, $p = .491$, was significant. For openness to change, the model was not statistically significant, $p = .250$. There were no significant main effects of neither exposure to the openness to change-framed advertisement, $p = .900$, nor

openness to change value endorsement, $p = .366$. The interaction effect was also not significant, $p = .190$.

The model assessing self-transcendence also failed to reach significance, $p = .300$. Neither the main effect of exposure, $p = .310$, nor the effect of self-transcendence value endorsement, $p = .130$, was significant. The interaction was also non-significant, $p = .946$. In contrast, the self-enhancement model was statistically significant, F (3, 231) = 7.26, $p = .001$, $R^2 = .09$. A significant main effect was found for self-enhancement value endorsement, $b = 0.28$, $p = .003$, 95% CI [0.13, 0.43], indicating that higher endorsement was associated with more positive product attitudes. Additionally, a significant main effect was observed for exposure to the self-enhancement-framed advertisement, $b = -0.30$, $p = .030$, 95% CI [-0.56, -0.03], suggesting that exposure to this frame was associated with lower product attitudes overall. However, the interaction between the self-enhancement exposure and self-enhancement endorsement was not significant, $p = .665$. Since none of the moderation analyses showed a significant interaction effect, we reject H6 (The effect of the values framed in the advertisement on product attitude is moderated by endorsed values: Stronger congruence between participants endorsed values and the values framed in the advertisement will lead to more positive attitudes).

The same moderation models were repeated with purchase intention as the dependent variable (H7). The model testing conservation was statistically significant, F (3, 231) = 9.18, $p < .001$, $R^2 = .11$. A significant main effect was observed for conservation value endorsement, $b = 0.37$, $p = .001$, 95% CI [0.18, 0.55], indicating that higher endorsement predicted greater purchase intention. However, neither the main effect of exposure, $p = .299$, nor the interaction effect, $p = .364$, was significant. Regarding openness to change, the model was not statistically significant, $p = .132$. No significant main effects were found for either exposure to the openness to change-framed advertisement, $p = .312$, or endorsement of openness to change values, $p = .111$, and the interaction effect was also not significant, $p = .469$.

The self-transcendence model did not reach significance, $p = .076$. No significant main effects were found for exposure, $p = .341$, or value endorsement, $p = .061$, and the interaction was not significant, $p = .489$. The final model with self-enhancement as the independent variable was statistically significant, F (3, 231) = 7.01, $p = .002$, $R^2 = .09$. A significant main effect was found for self-enhancement value endorsement, $b = 0.33$, $p = .001$, 95% CI [0.13, 0.52], indicating a positive relationship with purchase intention.

However, the main effect of exposure was not significant, $p = .266$, and the interaction effect was also non-significant, $p = .489$.

None of the moderation models showed a significant interaction between advertisement framing and endorsed values on purchase intention. Therefore, value congruence did not increase purchase intention, leading us to reject H7 (The effect of the values framed in the advertisement on purchase intention is moderated by endorsed values: Stronger congruence between participants endorsed values and the values framed in the advertisement will lead to higher purchase intention).

Having examined the results of Hypotheses 1 through 7, several statistical considerations must be addressed. While no significant differences were found between exposure conditions the ANOVA, the mediation and moderation analyses showed that exposure to the self-enhancement frame was associated with lower product attitude. This discrepancy may be explained by the fact that these analyses use different model structures and assumptions (Pallant, 2020, p. 264; Sawyer, 2013, p. 28; Sürücü et al., 2023, pp. 155, 193). While ANOVAs aim to detect overall group mean differences, the PROCESS model uses a regression-based analyses that can incorporate covariates (Hayes, 2022, p. 281; Pallant, 2020, p. 264; Sürücü et al., 2023, pp. 155, 193). As such, this structural flexibility may produce different outcomes. In the interest of methodological caution, the discussion and conclusion take a conservative approach by prioritising the non-significant ANOVA results (Sawyer, 2013, p. 29).

4.6 Additional analyses

As H3, H4, H6 and H7 did not yield any significant results, additional tests were run to gain deeper understandings of the data.

4.6.1 The effect of values on sustainability preference

To better understand the unexpected result in H1 and H2, where values influenced product attitude and purchase intention for sustainable food products oppositely than anticipated, that is, endorsement of self-enhancement and conservation values were found to be positive predictors of the outcome variables, we examined the relationship between participant's endorsed values and their self-reported support for sustainability in food choices. A multiple linear regression was conducted with the five endorsed value dimensions as the independent variable, and self-reported sustainable food choice (measured by a single item representing the control variable) as the dependent variable (Pallant, 2020, p. 218–219;

Sürücü et al., 2023, p. 103). The overall model was significant, F (5, 229) = 8.92, p < .001, R^2 = .16. Specifically, endorsement of conservation values, b = 0.20, p = .005, and self-transcendence values, b = 0.27, p < .001, significantly and positively predicted sustainability-oriented food choices. For the latter, this aligns closely with the prediction made in H1a (Higher levels of endorsing self-transcendence values are associated with more positive attitudes toward the sustainable product).

4.6.2 The effect of advertisement messaging

To further examine why endorsement of self-transcendent values did not translate into more positive product attitudes, a moderation analyses was conducted using Hayes' (2022) PROCESS macro (Model 1). This tested whether exposure to a self-enhancement value frame moderated the relationship between endorsement of self-transcendent values and product attitude. Based on literature outlined on value congruence, it would be likely that participants who endorse self-transcendent values strongly would have responded less positively to the product because they were exposed to an advertisement framed in opposition to their values. However, the model was not significant, p = .096.

5. Discussion and Conclusion

Considering the growing environmental challenges facing the planet and the relatively limited success of past climate change communication efforts, there is an urgency to understand how to convey green messages effectively (Cheng et al., 2011, p. 58; Griskevicius et al., 2010, p. 393). While numerous research has been conducted to identify factors that strengthen purchase intention toward sustainable products, such as consumer knowledge, the use of eco-labels, advertisement scepticism, and trust in brands (Chatterjee et al., 2022, p. 737; de Matos et al., 2024, p. 498; Dutta-Powell et al., 2023, p. 882; Kusá et al., 2021, p. 1; Loebnitz & Grunert, 2021, p. 309; Troudi & Boyoucef, 2019, p. 1), this thesis explored underexamined aspects of this communication challenge. It investigated how cultural values and message framing strategies based on these values influence purchase intentions and product attitude, as well as how these two factors interact. By analysing the data collected through an experimental questionnaire, results offer support that framing is not influential in determining a change in the outcome variables however, endorsed values are. While sustainable consumption, characterised by the involvement of numerous factors and resistance to change, presents challenges for brand's communication efforts (Assan, 2023, p. 1; Chatterjee et al., 2020, p. 740; Vermeir et al., 2020, p. 1), this research uncovered several effects with practical and theoretical implications.

5.1 The effects of framing

In addressing the central research question, the absence of significant differences in product attitude or purchase intention across participants exposed to differently framed advertisements bring up several discussions and opportunities for future research. For one, it raises questions on the potential impact of ad scepticism, an increasingly common phenomenon in which consumers react negatively to messages that they perceive as overly persuasive or with a clear manipulative intent (Loebnitz & Grunert, 2021, p. 320 Obermiller & Spangenberg, 1998, p. 158; Yang & Hsu, 2017, p. 453). As previously mentioned, this is especially relevant in green marketing, where consumers are cautious about the potential for greenwashing (Khan et al., 2022, p. 9; Matthes & Wonneberger, 2014, p. 116; Volschenk et al., 2022, p. 1). Relating this to the advertisements in this study, value-based frames may have come across as prescriptive, irrelevant, or exaggerated (Virdi, 2024, p. 253). Past research has identified that the alignment between product and message is an influential factor (Cwalina et al., 2025, p. 274–275; Šerić et al., 2024, p. 1262). As such, framing a

cereal product as a means to become a more successful person or change the trajectory of the climate crisis may have seemed far-fetched, unrealistic and disconnected from the product itself.

The focus of the self-transcendence and conservation frames being on altruism, and collective good, could also lead to message fatigue. Such notions are often used in cause-related marketing, thus, consumers may perceive them as clichéd or emotionally manipulative (Tanner et al., 2021, p. 1332; Timmons & Byrne, 2018, p. 943). In this study, participants may have experienced fatigue from yet another message trying to convince them to act in an environmentally friendly way, especially if the message was not perceived as fresh, urgent, or consequential to their daily life.

In examining why exposure to the frames had no effect the outcome variables, it is essential to consider the extent to which each dimension was realised in the advertisement. While the study aimed to standardise background visuals and packaging to isolate message effects, this may have hindered the ability to fully create and communicate each value dimension. For instance, the self-transcendence message could have been more impactful if it were supported by imagery of concepts related to the dimension, such as nature or community. By the same token, the self-enhancement frame may have benefited from visual stimuli such as aspirational figures or symbols of achievement. Moreover, openness to change encompasses the values of creativity and novelty, which may have been better expressed through novel design elements like distinctive fonts and unconventional visuals (Farace et al., 2019, p. 5; Günay, 2024, p. 1446; Elliott & Truman, 2024, p. 1). The possibility that the frames were not communicated strongly and fully is compounded by the fact that the openness to change and conservation manipulations were unsuccessful, based on the manipulation checks.

5.2 The effects of culture

This study revealed that among all value dimensions, the endorsement of conservation values was the strongest positive predictor of both purchase intention and attitude toward the product. This contradicts expectations, as it was hypothesised that the progressive nature of sustainable products would clash with conservation values, as indicated by prior research (Olsen et al., p. 308; Sagiv & Roccas, 2021, p. 300; Schwartz, 2007, p. 166; Seppälä et al., 2012, p. 140). However, we note conceptual explanations that can account for this outcome. Beyond environmental concerns, which are becoming increasingly tangible to consumers around the globe (de Sousa et al., 2024, p. 2; Lee & Romero, 2023, p. 42), this research was

conducted in a period of uncertainty, not only regarding the environment, but also economically and politically, which may affect consumer needs and preferences (Liao et al., 2025, p. 1787; World Economic Forum, 2025, para. 1–6). As such, it is plausible that individuals who endorse conservation values may support sustainability initiatives due to their perceived potential to stabilise certain aspects of life (Schwartz, 2012, p. 6). Moreover, consumer trust plays a significant role in purchase intention, particularly for sustainable products (Khan et al., 2022, p. 9; Matthes & Wonneberger, 2014, p. 116; Volschenk et al., 2022, p. 1). Research has indicated that individuals high in conservation values show higher levels of trust in institutions (Devos et al., 2002, p. 492; Morselli et al., 2012, p. 56). Relating this to corporations, studies have provided support for the influence of dispositional trust on trust in companies (Ingenhoff & Sommer, 2010, p. 340). A further justification may be that religiosity, shown to be linked to the endorsement of conservation values (Sagiv et al., 2017, p. 636), has indicated a positive influence on sustainable behaviour, through its beliefs on care for others and responsibility for future generations (Minton et al., 2020, p. 168). Moreover, drawing on the fact that sustainable consumption has become a social norm, conservation-oriented individuals may adopt it to follow established norms (Schwartz, 2012, p. 6). However, this explanation may be less influential, considering that participants were assured that responses would remain anonymous, minimising social desirability effects.

One of the main findings of this research was that individuals oriented towards self-enhancement were also more likely to show purchase intention to the sustainable product, which stands in contrast to most previous research. A potential explanation for this is the "going green to be seen" phenomenon (Puska, 2018, p. 212) discussed in Section 2.3.4. While self-enhancement values may conflict with pro-social behaviours at face value, they may align with sustainability when green products are perceived as high-status, innovative and of high quality (Griskevicius et al., 2010, p. 393; Kim et al., 2022, p. 1564). This alignment deserves further attention, given that neither the product nor its packaging conveyed luxury. Future research should investigate how self-enhancing sustainability works in the context of conventional products. Notably, the link between endorsement of self-enhancement values and sustainable consumption behaviour did not manifest in the responses to the control variable for pre-existing sustainable consumption "I actively make food choices that support sustainability," which suggests the possibility that the appeal may have been tied to other aspects of the advertisement. One possible perceived benefit of sustainable products is related to health, for example, through associations of the product being chemical-free (Dorce et al., 2021, p. 2), supported by the "organic" label on the packaging on the stimulus.

This may appeal to self-enhancing individuals as a means of personal improvement (Zell et al., 2022, pp. 583, 586), which aligns with the idea that such individuals product choices are driven by self-gain (Williams et al., 2024, pp. 1764–1765).

Another unexpected finding was the lack of significant effect of self-transcendence values on sustainable purchase intention, as it likewise diverges from numerous research that found a positive relationship between the two variables (Chow & Amir, 2006, p. 310; Puska, 2018, p, 208; Olsen & Tuu, 2021, p. 471; Vermeir et al., 2020, p. 4; Zelenski & Derochers, 2021, p. 32). The ceiling effect could be one possible explanation for this, which is observed when an increase in the independent variable no longer has an effect on a dependent variable (Cramer & Howitt, 2004, p. 21). That is, individuals high in self-transcendence may already hold high sustainability attitudes, making them less responsive to additional persuasion through advertisements. This would explain Paço and Reis' (2012, p. 159) finding that "consumers who are more environmentally concerned do not consider green advertising convincing". Moreover, these individuals may have greater knowledge about sustainability and already engage in behaviours which they consider more impactful (Ahmad et al., 2020, p. 203). For example, they may prioritise activism or sustainable travel options over consumer choices. As postulated by Schwartz et al. (2013, p. 903–905) self-transcendence oriented individuals have a lower concern for social approval or material success. As such, they may be less influenced by advertising efforts, even those focussed on sustainability.

A similar, non-significant finding was found among participants who endorse openness to change values. Though they may seek stimulation, innovation and novelty, it is possible that the product did not present a strong transformative potential to resonate with this group. Furthermore, the ubiquity of sustainability messaging in today's food market may reduce the perceived uniqueness or disruptive appeal of such products (Kwon et al., 2023, p. 99). Overall, these findings suggest that being future-oriented or holding values related to environmental concern does not automatically translate into purchase intention for all sustainable products. The product's characteristics and how it is presented still play a deciding role in decision-making.

Taking the effects of framing and culture together, another notable finding emerged as although self-enhancement was a positive predictor of product attitude and purchase intention, when participants who scored high in these values were exposed to the self-enhancement frame, it did not positively influence either outcome. An explanation of this may be that although individuals aspire for personal success and ambition, these may be values that are held implicitly (Kusá et al., 2021, p. 7; Schwartz et al., 2013, p. 911). This

touches on the relationship between an individual's endorsed values and their desired selves (Michel et al., 2022, p. 301; Poier et al., 2022, p. 919). Participants who endorse self-enhancement values may be reluctant to agree with an advertisement that strongly conveys these values, as admitting this would decrease their social desirability, a common concern amongst such individuals (Doran, 2008, p. 553).

5.3 Theoretical implications

A central theoretical implication of this study lies in the insignificance of the hypotheses testing the effects of framing. While framing theory is well-established and has been applied frequently in advertising research since its publication in the early 90s, the findings of this thesis question its relevance in today's media landscape. The algorithmic targeting and use of multiple channels that is present nowadays (Gao et al., 2023, p. 1–3; Nan et al., 2024, p. 24; Nguyen et al., 2022, p. 221) may play a stronger role in influencing advertising effectiveness, than mere framing. Thus, it suggests a potential need to reassess and reconceptualise how framing applies to modern marketing contexts.

Moreover, the findings, particularly those related to the influence of values on behaviour, challenge existing assumptions about the Schwartz theory of basic human values. Specifically, the results stand in opposition to expectations based on the self-enhancement versus self-transcendence dimension, by showing that values related to the former were more effective for predicting sustainable behaviour. This questions widely held assumptions that endorsement of self-transcendence values translates into ethical behaviour, while self-enhancement values are associated with unethical behaviour.

5.4 Practical implications

This study aimed to provide implications for marketing professionals, specifically those responsible for promoting sustainable products. The finding that no value-framed advertisement particularly led to a change in purchase intention or product attitude points out that brands need to consider a variety of variables, including trust, product fit, moral fatigue, and reactance (Chang, 2018, p. 125; Chatterjee et al., 2022, p. 738; Rossolatos, 2012, p. 68; Tanner et al., 2021, p. 1332; Timmons & Byrne, 2018, p. 943). Due to the frequency of moral messaging in today's environmental communication (Amatulli et al., 2017, p. 1114; Vanhamme et al., 2012, pp. 260–262; van Gorp & van der Goot, 2012, p. 132), consumers may become desensitised to these appeals. Beyond this, they may employ a defensive response whereby they reject messages perceived as manipulating their moral actions.

Overall, this leads to a negative emotional state at the time of advertisement exposure, which may influence a consumer's associations with the product (Chowdhury et al., 2025, p. 502). Governments and NGOs could also benefit from a more cautious approach when using moral or value-based frames, as they might backfire and create resistance against the otherwise genuine cause.

Although there were no significant findings regarding the effect of value congruence, a plethora of research continues to highlight the significance of personalisation in advertising (Cairns, 2019, p. 203; Gao et al., 2023, p. 10; Nan et al., 2024, p. 24). This points to the need for a more specific approach to congruence, potentially encompassing a combination of values, demographics, and aesthetic preferences to make messages more appealing. Although certain messages may have aligned with participants values, this does not necessarily mean they will perceive the message as personally relevant and consequential. Values represent people's desirable end states (Schwartz & Bilsky, 1987, p. 551), not necessarily their needs. Personalisation should thus extend mere value alignment, entailing also audience interests, preferences, needs and wants (Gao et al., 2023, p. 2). As such, the lack of effectiveness of the frames adopted in this study indicate that broad messages like those adopted in the frames are ineffective in engaging consumers.

While results revealed that framing did not significantly affect purchase intention, limiting practical insights on how to effectively design sustainability messages, this study does offer takeaways on which audiences can be targeted. The finding that self-enhancement and conservation values positively predicted sustainable purchase intention points to a rethinking of target segments. For example, while green products frequently cater to younger consumers (Majhi, 2020, p. 1; Verma, 2016, p. 275), who typically endorse openness to change values, brands could shift their targeting towards older demographics, who tend to value conservation more strongly (Sagiv & Schwartz, 2022, p. 527). In other words, sustainable campaigns should not only target "green" audiences but could focus on audience groups previously overlooked.

5.5 Limitations

As this research heavily drew upon the theory of basic human values, the limitations related to the inherent nature of the theory, its measurement and applicability must be discussed. Due to the cross-cultural focus of this study, as well as the nationally diverse sample, it is important to note that the framework was developed and has thus far primarily been tested in Western countries, which may have influenced this study. The applicability to

non-Western cultures is less established, which may have shaped how value dimensions and their examples were interpreted by participants (Schwartz, 2006, p. 144). By definition, all values are desirable (Bardi & Schwartz, 2003, p. 1210; Sagiv & Schwartz, 2022, p. 520), which may lead to similar responses in participants when rating their importance. As Sagiv and Roccas (2021, p. 296) found, most people rate all values as at least "somewhat important," with many being rated as "very important." This is mirrored in the data collected, as even the lowest rated value, power, received a score above the midpoint of the Likert scale (M = 3.25, SD = .98). Limited variability in value ratings may reduce the ability to detect differences between groups.

Limitations related to the product chosen for the advertisement must also be addressed. Firstly, cereal may not have been compelling enough to drive strong interest or differentiation from other breakfast products. Moreover, cereal and breakfast products are categories that have strong brand loyalty due to the routine nature of their purchase and consumption (Shum, 2004, p. 264). Without price discounts, advertisement may have been ineffective in creating behavioural change (Shum, 2004, pp. 261–263). Moreover, cereal's link to sustainability may not be equally perceived amongst all participants, differing with their knowledge of sustainability and familiarity with food production processes (Fardet, 2014, p. 542). This may have impacts on purchase intention of the product, as a perceived weak alignment between the product and sustainability may foster concerns of greenwashing (Gleim et al., 2023, p. 1). Moreover, the advertisement was only shown once, which may limit its effectiveness, as well as the applicability to real-world marketing contexts, since nowadays consumers are repeatedly exposed to varied messages across multiple platforms, known as omnichannel marketing (Nguyen et al., 2022, p. 221).

One methodological concern is raised by the non-significance of several manipulation checks, specifically, those testing whether conservation and openness to change values were appropriately communicated, which may explain the lack of significant framing effects. Lastly, due to the non-probabilistic sampling method used, a demographic skew was visible in the sample. While respondents represented a large number of nationalities (N = 35), a substantial portion came from the Philippines, and the gender distribution leaned heavily female. Additionally, income and education levels were not assessed, meaning that further demographic skew may have been present. Future research employing probability sampling would improve representation.

5.6 Suggestions for future research

While this study provides new insights into the relationship between personal values and sustainable purchase intentions, there are several avenues for future research that could expand knowledge further. Further investigation is needed to explain the finding that self-enhancement, not self-transcendent values lead to sustainable purchase behaviours, potentially by examining psychological mechanisms and individual motivations, such as how health concerns, social status, or conformity play a role (Azzurra et al., 2019, p. 98; Puska, 2018, p. 212). Expanding upon culture, it may be beneficial to investigate how social environments influence the consumption of green products, and how this is understood through the theory of basic human values. For example, in some societies, the idea of sustainability is linked to wealth and health, representing the self-enhancement dimension, whereas in others, it is seen as a collective duty, closely resembling the self-transcendence dimension (Azzurra et al., 2019, p. 98; Monterrosa et al., 2020, p. 63; Puska, 2018, p. 212; Yan et al., 2021, p. 4). Exploring the underlying motivations for product choice may explain this phenomenon beyond the assumption that sustainable behaviour stems from altruistic values, which is critical in designing more targeted and psychologically resonant advertisements (Doran, 2008, pp. 549–550).

Moreover, research may also investigate how product involvement influences the effectiveness of value-framing. While this study focussed on a low-involvement product, a high-involvement product may produce different emotional responses and be subject to different cognitive processing (Chatterjee et al. 2022, p. 744; Petty et al., 1983, p. 135). Consumers often make automatic decisions when choosing everyday items, and thus, may not spend much effort reflecting on sustainability messages (Chatterjee et al. 2022, p. 753–755). Oppositely, high-involvement products create higher personal investment and more deliberate decision-making (Chatterjee et al. 2022, p. 745; Petty et al. 1993, p. 138).

To improve the practical applicability that most experiments in marketing research lack, future studies could aim to mirror real-life marketing environments, for example, through expanded behavioural data collection, such as simulated purchase tasks, eye-tracking, or click-through rates (Malodia et al., 2023, pp. 1940–1941). To resemble modern marketing strategies, these studies could also include multi-touchpoint exposure or contextual embedding, such as placing ads within realistic digital feeds or using mobile interfaces (Nan et al., 2024, p. 29). Moreover, as was evident in this study, the standardisation of visual manipulations created several limitations. As such, when striving for real-life applicability,

future research could pay attention to visual coherence and aesthetics, alongside framing, for example, by introducing additional manipulations that fulfil the preferences of audiences (Farace et al., 2019, p. 5). Alternatively, research could include qualitative methods, such as consumer focus-groups, to gain information on emotional responses to the advertisements and consumer's decision-making process (Basias & Pollalis, 2018, p. 98). The expansion of methodologies used could increase ecological validity, as it contributes to understandings on both spontaneous and deliberate decision making in real life settings (Chatterjee et al. 2022, pp. 744–745; Loebnitz & Grunert, 2020, p. 312).

Overall, this study points to the complexity of consumer behaviour, particularly related to sustainable products. It demonstrates that expected effects from well-established and widely used frameworks such as framing theory and the theory of basic human values do not consistently influence behaviour as predicted. The findings of this study recommend a re-evaluation of green marketing strategies, particularly related to a shift in the target audience, as well as a reconsideration of value-based messages in product advertisements.

References

Ahmad, W., Kim, W. G., Anwer, Z., & Zhuang, W. (2020). Schwartz personal values, theory of planned behavior and environmental consciousness: How tourists' visiting intentions towards eco-friendly destinations are shaped? *Journal of Business Research*, *110*, 228–236. https://doi.org/10.1016/j.jbusres.2020.01.040

Alferes, V. R. (2012). *Methods of randomization in experimental design*. SAGE.

Alhouti, S., Musgrove, C. F., Butler, T. D., & D'Souza, G. (2015). Consumer reactions to retailer's religious affiliation: Roles of belief congruence, religiosity, and cue strength. *The Journal of Marketing Theory and Practice*, *23*(1), 75–93. https://doi.org/10.1080/10696679.2015.980176

Ali, M., Ullah, S., Ahmad, M. S., Cheok, M. Y., & Alenezi, H. (2022). Assessing the impact of green consumption behavior and green purchase intention among millennials toward sustainable environment. *Environmental Science and Pollution Research*, *30*(9), 23335–23347. https://doi.org/10.1007/s11356-022-23811-1

Amatulli, C., De Angelis, M., Peluso, A. M., Soscia, I., & Guido, G. (2017). The effect of negative message framing on green consumption: An investigation of the role of shame. *Journal of Business Ethics*, *157*(4), 1111–1132. https://doi.org/10.1007/s10551-017-3644-x

Amit, A., Roccas, S., & Meidan, M. (2009). A group just like me: The moderating role of conservation values on social projection. *European Journal of Social Psychology*, *40*(6), 931–945. https://doi.org/10.1002/ejsp.658

Assan, N. (2023). Socio-cultural, economic, and environmental implications for innovation in sustainable food in Africa. *Frontiers in Sustainable Food Systems*, *7*, Article 1192422. https://doi.org/10.3389/fsufs.2023.1192422

Azzurra, A., Massimiliano, A., & Angela, M. (2019). Measuring sustainable food consumption: A case study on organic food. *Sustainable Production and Consumption*, *17*, 95–107. https://doi.org/10.1016/j.spc.2018.09.007

Babbie, E. R. (2017). *The basics of social research* (7th ed.). Cengage Learning.

Badaan, V., & Choucair, F. (2022). Toward culturally sensitive development paradigms: New shifts, limitations, and the role of (cross-) cultural psychology. *Journal of Cross-Cultural Psychology*, *54*(2), 232–248. https://doi.org/10.1177/00220221211073671

Banerjee, S. (2008). Dimensions of Indian culture, core cultural values and marketing implications. *Cross Cultural Management: An International Journal*, *15*(4), 367–378. https://doi.org/10.1108/13527600810914157

Bardi, A., & Schwartz, S. H. (2003). Values and behavior: Strength and structure of relations. *Personality and Social Psychology Bulletin*, *29*(10), 1207–1220. https://doi.org/10.1177/0146167203254602

Basias, J., & Pollalis, Y. (2018). Quantitative and qualitative research in business & technology: Justifying a suitable research methodology. *Review of Integrative Business and Economics Research*, *7*(1), 91–105. https://www.proquest.com/docview/1969776018?sourcetype=Scholarly%20Journals

Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, *36*(2), 224–226. https://doi.org/10.1177/0890334420906850

Bilsky, W., & Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, *8*(3), 163–181. https://doi.org/10.1002/per.2410080303

Börkan, B. (2009). The mode effect in mixed-mode surveys. *Social Science Computer Review*, *28*(3), 371–380. https://doi.org/10.1177/0894439309350698

Bornemann, T., & Hatulla, S. (2022). Experiments in market research. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of market research*. (pp. 3–36). Springer. https://doi.org/10.1007/978-3-319-57413-4_2

Boutyline, A., & Soter, L. K. (2021). Cultural schemas: What they are, how to find them, and what to do once you've caught one. *American Sociological Review*, *86*(4), 728–758. https://doi.org/10.1177/00031224211024525

Bowling, A. (2005a). Quantitative social science: The survey. In A. Bowling, & S. Ebrahim (Eds.), *Handbook of health research methods*. (pp. 190–214). Open University Press.

Bowling, A. (2005b). Techniques of questionnaire design. In A. Bowling, & S. Ebrahim (Eds.), *Handbook of health research methods*. (pp. 394–427). Open University Press.

Bowling, N. A., Huang, J. L., Brower, C. K., & Bragg, C. B. (2023). The quick and the careless: The construct validity of page time as a measure of insufficient effort responding to surveys. *Organizational Research Methods*, *26*(2), 323–352. https://doi.org/10.1177/10944281211056520

Brosch, T. (2021). Affect and emotions as drivers of climate change perception and action: A review. *Current Opinion in Behavioral Sciences*, *42*, 15–21. https://doi.org/10.1016/j.cobeha.2021.02.001

Brosch, T., & Steg, L. (2021). Leveraging emotion for sustainable action. *One Earth*, *4*(12), 1693–1703. https://doi.org/10.1016/j.oneear.2021.11.006

Burchell, K., Rettie, R., & Patel, K. (2012). Marketing social norms: Social marketing and the 'social norm approach.' *Journal of Consumer Behaviour*, *12*(1), 1–9. https://doi.org/10.1002/cb.1395

Buschle, C., Reiter, H., & Bethmann, A. (2021). The qualitative pretest interview for questionnaire development: Outline of programme and practice. *Quality & Quantity*, *56*(2), 823–842. https://doi.org/10.1007/s11135-021-01156-0

Business Research Insights. (2021, June 9). *Sustainable products market size, share, growth, and industry analysis*. https://www.businessresearchinsights.com/market-reports/sustainable-products-market-117731

Cairns, G. (2019). A critical review of evidence on the sociocultural impacts of food marketing and policy implications. *Appetite*, *136*, 193–207. https://doi.org/10.1016/j.appet.2019.02.002

Chang, C. (2008). Ad framing effects for consumption products: An affect priming process. *Psychology and Marketing*, *25*(1), 24–46. https://doi.org/10.1002/mar.20199

Chang, Y. (2018). Perceived message consistency: Explicating how brand messages being processed across multiple online media. *Computers in Human Behavior*, *85*, 125–134. https://doi.org/10.1016/j.chb.2018.03.038

Charness, G., Gneezy, U., & Kuhn, M. (2012). Experimental methods: Between-subject and within-subject design. *Journal of Economic Behavior & Organization, 81*(1), 1–8. https://doi.org/10.1016/j.jebo.2011.08.009

Chatterjee, S., Sreen, N., Rana, J., Dhir, A., & Sadarangani, P. H. (2021). Impact of ethical certifications and product involvement on consumers decision to purchase ethical products at price premiums in an emerging market context. *International Review on Public and Nonprofit Marketing*, *19*(4), 737–762. https://doi.org/10.1007/s12208-021-00288-1

Chekima, B., Chekima, S., Wafa, S. a. W. S. K., Igau, O. A., & Sondoh, S. L. (2015). Sustainable consumption: The effects of knowledge, cultural values, environmental advertising, and demographics. *International Journal of Sustainable Development & World Ecology*, *23*(2), 210–220. https://doi.org/10.1080/13504509.2015.1114043

Cheng, T., Woon, D. K., & Lynes, J. K. (2011). The use of message framing in the promotion of environmentally sustainable behaviors. *Social Marketing Quarterly*, *17*(2), 48–62. https://doi.org/10.1080/15245004.2011.570859

Chong, D., & Druckman, J. N. (2007). Framing theory. *Annual Review of Political Science*, *10*(1), 103–126. https://doi.org/10.1146/annurev.polisci.10.072805.103054

Choo, H. J., Lee, H. K., & Xie, J. (2022). Consumers' cultural identity under glocalization: Vietnamese consumers' global and national identities and their cross-cultural consumption. *Asia Pacific Journal of Marketing and Logistics*, *35*(5), 1052–1074. https://doi.org/10.1108/apjml-10-2021-0740

Chow, S., & Amir, S. (2006). The universality of values: Implications for global advertising strategy. *Journal of Advertising Research*, *46*(3), 301–314. https://doi.org/10.2501/s0021849906060302

Chowdhury, T. G., Khare, A., & Coulter, R. A. (2025). Spillover effects of sensory stimulation. *European Journal of Marketing*. *59*(3), 501–527. https://doi.org/10.1108/ejm-12-2022-0863

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd ed.). Routledge.

Cramer, D., & Howitt, D. (2004). *The SAGE dictionary of statistics: A practical resource for students in the social sciences*. SAGE Publications.

Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches*. SAGE Publications.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.

Cwalina, W., Drzewiecka, M., & Newman, T. P. (2024). Who vs. what? Consistency of a politician's brand in shaping voters' preferences. *International Journal of Market Research*, *67*(2–3), 261–281. https://doi.org/10.1177/14707853241304341

Dean, M., Raats, M.M., & Shepherd, R. (2008). Consumers and functional cereal products. In B.R. Hamaker (Ed.), *Technology of functional cereal products* (pp. 3-22). Woodhead Publishing Limited.

De Boer, J., Schösler, H., & Boersema, J. J. (2013). Climate change and meat eating: An inconvenient couple? *Journal of Environmental Psychology*, *33*, 1–8. https://doi.org/10.1016/j.jenvp.2012.09.001

De Groot, J. I., & Steg, L. (2010). Relationships between value orientations, self-determined motivational types and pro-environmental behavioural intentions. *Journal of Environmental Psychology*, *30*(4), 368–378. https://doi.org/10.1016/j.jenvp.2010.04.002

De Matos, C. A., Dalmoro, M., & De Barcellos, M. D. (2024). How pro-environmental consumption behaviour affects subjective wellbeing: The role of self-enhancement, ways of shopping and locavorism. *British Food Journal 127*(2), 496–518. https://doi.org/10.1108/bfj-06-2024-0629

De Sousa, R., Bragança, L., Da Silva, M. V., & Oliveira, R. S. (2024). Challenges and solutions for sustainable food systems: The potential of home hydroponics. *Sustainability*, *16*(2), Article 817. https://doi.org/10.3390/su16020817

Devos, T., Spini, D., & Schwartz, S. H. (2002). Conflicts among human values and trust in institutions. *British Journal of Social Psychology*, *41*(4), 481–494. https://doi.org/10.1348/014466602321149849

DiMaggio, P. (1997). Culture and cognition. *Annual Review of Sociology*, *23*(1), 263–287. https://doi.org/10.1146/annurev.soc.23.1.263

Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, *28*(3), 307–319. https://doi.org/10.2307/3172866

Doran, C. J. (2009). The role of personal values in fair trade consumption. *Journal of Business Ethics*, *84*(4), 549–563. https://doi.org/10.1007/s10551-008-9724-1

Dorce, L. C., Da Silva, M. C., Mauad, J. R. C., De Faria Domingues, C. H., & Borges, J. A. R. (2021). Extending the theory of planned behavior to understand consumer purchase behavior for organic vegetables in Brazil: The role of perceived health benefits, perceived sustainability benefits and perceived price. *Food Quality and Preference*, *91*, Article 104191. https://doi.org/10.1016/j.foodqual.2021.104191

Dutta-Powell, R., Rhee, J. J., & Wodak, S. (2023). Two interventions for mitigating the harms of greenwashing on consumer perceptions. *Business Strategy and the Environment*, *33*(2), 882–903. https://doi.org/10.1002/bse.3520

Elliott, C. D., & Truman, E. (2024). Food marketing on digital platforms: What do teens see? *Public Health Nutrition*, *27*(1), Article e48. https://doi.org/10.1017/s1368980024000235

Enriquez, J. P., & Archila-Godinez, J. C. (2021). Social and cultural influences on food choices: A review. *Critical Reviews in Food Science and Nutrition*, *62*(13), 3698–3704. https://doi.org/10.1080/10408398.2020.1870434

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, *43*(4), 51–58. https://doi.org/10.1111/j.1460-2466.1993.tb01304.x

Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of Communication*, *57*(1), 163–173. https://doi.org/10.1111/j.1460-2466.2006.00336.x

Erčulj, V., & Šulc, A. (2024). Swayed by leading questions. *Quality & Quantity*, *59*, 191–209. https://doi.org/10.1007/s11135-024-01934-6

Evans, J. R., & Mathur, A. (2005). The value of online surveys. *Internet Research*, *15*(2), 195–219. https://doi.org/10.1108/10662240510590360

Falke, A., Schröder, N., & Hofmann, C. (2021). The influence of values in sustainable consumption among millennials. *Journal of Business Economics*, *92*(6), 899–928. https://doi.org/10.1007/s11573-021-01072-7

Farace, S., Roggeveen, A., Ordenes, F. V., De Ruyter, K., Wetzels, M., & Grewal, D. (2019). Patterns in motion: How visual patterns in ads affect product evaluations. *Journal of Advertising*, *49*(1), 3–17. https://doi.org/10.1080/00913367.2019.1652120

Fardet, A. (2014). How can both the health potential and sustainability of cereal products be improved? A French perspective. *Journal of Cereal Science*, *60*(3), 540–548. https://doi.org/10.1016/j.jcs.2014.07.013

Fass-Holmes, B. (2022). Survey fatigue: What is its role in undergraduates' survey participation and response rates? *Journal of Interdisciplinary Studies in Education*, *11*(1), 56–73. https://ojed.org/jise

Fazio, R. H. (2001). On the automatic activation of associated evaluations: An overview. *Cognition & Emotion*, *15*(2), 115–141. https://doi.org/10.1080/0269993004200024

Fiedler, K., McCaughey, L., & Prager, J. (2021). Quo vadis, methodology? The key role of manipulation checks for validity control and quality of science. *Perspectives on Psychological Science*, *16*(4), 816–826. https://doi.org/10.1177/1745691620970602

Fielding, N. G., Lee, R. M., & Blank, G. (2008). *The SAGE Handbook of Online Research Methods*. SAGE Publications.

Florence, E. S., Fleischmann, D., Mulcahy, R., & Wynder, M. (2022). Message framing effects on sustainable consumer behaviour: A systematic review and future research directions for social marketing. *Journal of Social Marketing*, *12*(4), 623–652. https://doi.org/10.1108/JSOCM-09-2021-0221

Gama, A. P., Maliro, M., & Matumba, L. (2024). Exploring the potential of transitioning Malawians from corn to quinoa-based thick porridge (nsima): Insights from sensory and emotions profiles. *Journal of the Science of Food and Agriculture*, *104*(15), 9524–9530. https://doi.org/10.1002/jsfa.13775

Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, *95*(1), 1–37. https://doi.org/10.1086/229213

Gao, B., Wang, Y., Xie, H., Hu, Y., & Hu, Y. (2023). Artificial intelligence in advertising: Advancements, challenges, and ethical considerations in targeting, personalization, content creation, and ad optimization. *SAGE Open*, *13*(4) 1–20. https://doi.org/10.1177/21582440231210759

Geuens, M., & De Pelsmacker, P. (2017). Planning and conducting experimental advertising research and questionnaire design. *Journal of Advertising*, *46*(1), 83–100. https://doi.org/10.1080/00913367.2016.1225233

Gleim, M. R., McCullough, H., Sreen, N., & Pant, L. G. (2022). Is doing right all that matters in sustainability marketing? The role of fit in sustainable marketing strategies. *Journal of Retailing and Consumer Services*, *70*, Article 103124. https://doi.org/10.1016/j.jretconser.2022.103124

Gouveia, V. V., Vione, K. C., Milfont, T. L., & Fischer, R. (2015). Patterns of value change during the life span. *Personality and Social Psychology Bulletin*, *41*(9), 1276–1290. https://doi.org/10.1177/0146167215594189

Gregory, G. D., & Di Leo, M. (2003). Repeated behavior and environmental psychology: The role of personal involvement and habit formation in explaining water consumption. *Journal of Applied Social Psychology*, *33*(6), 1261–1296. https://doi.org/10.1111/j.1559-1816.2003.tb01949.x

Gregory-Smith, D., Smith, A., & Winklhofer, H. (2013). Emotions and dissonance in 'ethical' consumption choices. *Journal of Marketing Management*, *29*(11–12), 1201–1223. https://doi.org/10.1080/0267257x.2013.796320

Griskevicius, V., Tybur, J. M., & Van Den Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, *98*(3), 392–404. https://doi.org/10.1037/a0017346

Gummer, T., Roßmann, J., & Silber, H. (2018). Using instructed response items as attention checks in web surveys: Properties and implementation. *Sociological Methods & Research*, *50*(1), 238–264. https://doi.org/10.1177/0049124118769083

Günay, M. (2024). The impact of typography in graphic design. *International Journal of Eurasia Social Sciences, 15*(57), 1226–1464. https://doi.org/10.35826/ijoess.4519

Harries, C., & Kostopoulou, O. (2005). Psychological approaches to measuring and modelling clinical decision-making. In A. Bowling, & S. Ebrahim (Eds.), *Handbook of health research methods.* (pp. 331–361). Open University Press.

Harzing, A. (2005). Does the use of English-language questionnaires in cross-national research obscure national differences? *International Journal of Cross Cultural Management*, *5*(2), 213–224. https://doi.org/10.1177/1470595805054494

Hayes, A. F. (2020). *Introduction to mediation, moderation, and conditional process analysis* (3rd ed.). Guilford Press.

Hays, R. D., Bode, R., Rothrock, N., Riley, W., Cella, D., & Gershon, R. (2010). The impact of next and back buttons on time to complete and measurement reliability in computer-based surveys. *Quality of Life Research*, *19*(8), 1181–1184. https://doi.org/10.1007/s11136-010-9682-9

Hesterberg, T. (2011). Bootstrap. *Wiley Interdisciplinary Reviews Computational Statistics*, *3*(6), 497–526. https://doi.org/10.1002/wics.182

Hlastec, A., Mumel, D., & Hauptman, L. (2023). Is there a relationship between self-enhancement, conservation and personal tax culture? *Sustainability*, *15*(7), Article 5797. https://doi.org/10.3390/su15075797

Hong, M., Carter, M., Kim, C., & Cheng, Y. (2023). Data exclusion in policy survey and questionnaire data: Aberrant responses and missingness. *Policy Insights from the Behavioral and Brain Sciences*, *10*(1), 11–17. https://doi.org/10.1177/23727322221144650

Horani, L. F. (2020). Identification of target customers for sustainable design. *Journal of Cleaner Production*, *274*, Article 123102. https://doi.org/10.1016/j.jclepro.2020.123102

Howarth, C., & Morse-Jones, S. (2019) The importance of communication, collaboration and co-production. In C. Howarth (Ed.), *Resilience to climate change* (pp. 65–86). Palgrave Pivot. https://doi.org/10.1007/978-3-319-94691-7_4

Ingenhoff, D., & Sommer, K. (2010). Trust in companies and in CEOs: A comparative study of the main influences. *Journal of Business Ethics*, *95*(3), 339–355. https://doi.org/10.1007/s10551-010-0363-y

Jacobs, R., & Sopiah, N. (2023). A systematic review of organizational culture literature: Lessons from the past and avenues for future research. *Asian Journal of Economics and Business Management*, *2*(2), 278–282. https://doi.org/10.53402/ajebm.v2i2.341

Janssen, S., & Verboord, M. (2024). *Methodological Guidelines Thesis Research* (10th ed.). Erasmus School of History, Culture and Communication. https://my.eur.nl/en/eshcc/media-communication/master-media-studies/guides-and-resources/methods-guidelines?check_logged_in=1

Jeong, S., & Lee, J. (2021). Effects of cultural background on consumer perception and acceptability of foods and drinks: A review of latest cross-cultural studies. *Current Opinion in Food Science*, *42*, 248–256. https://doi.org/10.1016/j.cofs.2021.07.004

Jiang, K., Zheng, J., & Luo, S. (2023). Green power of virtual influencer: The role of virtual influencer image, emotional appeal, and product involvement. *Journal of Retailing and Consumer Services*, *77*, Article 103660. https://doi.org/10.1016/j.jretconser.2023.103660

Johnston, N. E., Jai, T., Phelan, K. V., & Velikova, N. (2023). Supporting sustainable marketing programs: Exploring relationships between cultural values, green attitudes and intent. *Social Responsibility Journal*, *19*(7), 1276–1296. https://doi.org/10.1108/srj-10-2020-0405

Kane, J. V., & Barabas, J. (2018). No harm in checking: Using factual manipulation checks to assess attentiveness in experiments. *American Journal of Political Science*, *63*(1), 234–249. https://doi.org/10.1111/ajps.12396

Kapoor, P. S., Balaji, & Jiang, Y. (2021). Effectiveness of sustainability communication on social media: Role of message appeal and message source. *International Journal of Contemporary Hospitality Management*, *33*(3), 949–972. https://doi.org/10.1108/ijchm-09-2020-0974

Kato, T. (2023). Influence of empathy for advertising models on purchase intention: Comparison between celebrity models and unknown models. *Cogent Social Sciences*, *9*(1), Article 2234145. https://doi.org/10.1080/23311886.2023.2234145

Khan, K. U., Atlas, F., Arshad, M. Z., Akhtar, S., & Khan, F. (2022). Signaling green: Impact of green product attributes on consumers trust and the mediating role of green marketing. *Frontiers in Psychology*, *13*, Article 790272. https://doi.org/10.3389/fpsyg.2022.790272

Kim, J., Park, J., & Septianto, F. (2022). The impact of socioeconomic status on preferences for sustainable luxury brands. *Psychology and Marketing*, *39*(8), 1563–1578. https://doi.org/10.1002/mar.21671

Kotzian, P., Stoeber, T., Hoos, F., & Weissenberger, B. E. (2020). To be or not to be in the sample? On using manipulation checks in experimental accounting research.

Accounting Research Journal, *33*(3), 469–482. https://doi.org/10.1108/arj-06-2019-0128

Kusá, A., Urmínová, M., Darázs, T., & Šalgovičová, J. (2021). Testing of standardized advertising slogans within the marketing communication of sustainable and local foods in order to reveal consumer preferences. *Frontiers in Sustainable Food Systems*, *5*, Article 703223. https://doi.org/10.3389/fsufs.2021.703223

Kusmaryono, I., Wijayanti, D., & Maharani, H. R. (2022). Number of response options, reliability, validity, and potential bias in the use of the Likert scale education and social science research: A literature review. *International Journal of Educational Methodology*, *8*(4), 625–637. https://doi.org/10.12973/ijem.8.4.625

Kwon, K., Lee, J., Wang, C., & Diwanji, V. S. (2023). From green advertising to greenwashing: Content analysis of global corporations' green advertising on social media. *International Journal of Advertising*, *43*(1), 97–124. https://doi.org/10.1080/02650487.2023.2208489

Lacko, D., Čeněk, J., Točík, J., Avsec, A., Đorđević, V., Genc, A., Haka, F., Šakotić-Kurbalija, J., Mohorić, T., Neziri, I., & Subotić, S. (2022). The necessity of testing measurement invariance in cross-cultural research: Potential bias in cross-cultural comparisons with individualism– collectivism self-report scales. *Cross-Cultural Research*, *56*(2–3), 228–267. https://doi.org/10.1177/10693971211068971

Lee, H., & Romero, J. (2023). *Climate change 2023: Synthesis report*. IPCC. https://doi.org/10.59327/ipcc/ar6-9789291691647

Lehdonvirta, V., Oksanen, A., Räsänen, P., & Blank, G. (2020). Social media, web, and panel surveys: Using non-probability samples in social and policy research. *Policy & Internet*, *13*(1), 134–155. https://doi.org/10.1002/poi3.238

Liao, J., Zhan, Y., & Liu, K. (2024). Customer stability, environmental uncertainty and the cost of debt. *Management Decision, 63*(5), 1787–1812. https://doi.org/10.1108/md-07-2023-1268

Lin, Y. (2021). Moderating reference group and message framing influences on sustainable surplus food consumption advertising appeals. *Journal of Marketing Management*, *38*(11–12), 1218–1244. https://doi.org/10.1080/0267257x.2021.2012231

Lindeman, M., & Sirelius, M. (2001). Food choice ideologies: The modern manifestations of normative and humanist views of the world. *Appetite*, *37*(3), 175–184. https://doi.org/10.1006/appe.2001.0437

Lindeman, M., & Verkasalo, M. (2005). Measuring values with the short Schwartz's value survey. *Journal of Personality Assessment*, *85*(2), 170–178. https://doi.org/10.1207/s15327752jpa8502_09

Loebnitz, N., & Grunert, K. G. (2021). Let us be realistic: The impact of perceived brand authenticity and advertising image on consumers' purchase intentions of food brands. *International Journal of Consumer Studies*, *46*(1), 309–323. https://doi.org/10.1111/ijcs.12679

Low, W., & Davenport, E. (2007). To boldly go… exploring ethical spaces to re-politicise ethical consumption and fair trade. *Journal of Consumer Behaviour*, *6*(5), 336–348. https://doi.org/10.1002/cb.226

Lu, Y., Liu, Y., Tao, L., & Ye, S. (2021). Cuteness or coolness: How does different anthropomorphic brand image accelerate consumers' willingness to buy green products? *Frontiers in Psychology*, *12*, Article 599385. https://doi.org/10.3389/fpsyg.2021.599385

Macdonald, D. (2023). Core values and priming effects in electoral campaigns. *Political Psychology*, *44*(3), 515–530. https://doi.org/10.1111/pops.12870

Maio, G. R., Pakizeh, A., Cheung, W., & Rees, K. J. (2009). Changing, priming, and acting on values: Effects via motivational relations in a circular model. *Journal of Personality and Social Psychology*, *97*(4), 699–715. https://doi.org/10.1037/a0016420

Majeed, M. U., Aslam, S., Murtaza, S. A., Attila, S., & Molnár, E. (2022). Green marketing approaches and their impact on green purchase intentions: Mediating role of green brand image and consumer beliefs towards the environment. *Sustainability*, *14*(18), Article 11703. https://doi.org/10.3390/su141811703

Majhi, R. (2020). Behavior and perception of younger generation towards green products. *Journal of Public Affairs*, *22*(1), Article e2288. https://doi.org/10.1002/pa.2288

Malodia, S., Dhir, A., Hasni, M. J. S., & Srivastava, S. (2023). Field experiments in marketing research: A systematic methodological review. *European Journal of Marketing*, *57*(7), 1939–1965. https://doi.org/10.1108/ejm-03-2022-0240

Manyanga, W., Makanyeza, C., & Muranda, Z. (2022). The effect of customer experience, customer satisfaction and word of mouth intention on customer loyalty: The moderating role of consumer demographics. *Cogent Business & Management*, *9*(1) Article 2082015. https://doi.org/10.1080/23311975.2022.2082015

Martinez-Levy, A. C., Rossi, D., Cartocci, G., Mancini, M., Di Flumeri, G., Trettel, A., Babiloni, F., & Cherubino, P. (2021). Message framing, non-conscious perception and

effectiveness in non-profit advertising. *International Review on Public and Nonprofit Marketing*, *19*(1), 53–75. https://doi.org/10.1007/s12208-021-00289-0

Matharu, G. K., Von Der Heidt, T., Sorwar, G., & Sivapalan, A. (2023). The moderating role of Hofstede's cultural dimensions on consumer purchasing of organic food. *Journal of International Consumer Marketing*, *36*(1), 21–40. https://doi.org/10.1080/08961530.2023.2176396

Matthes, J., & Wonneberger, A. (2014). The skeptical green consumer revisited: Testing the relationship between green consumerism and skepticism toward advertising. *Journal of Advertising*, *43*(2), 115–127. https://doi.org/10.1080/00913367.2013.834804

Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the social sciences*. Pearson Education.

McInroy, L. (2016). Pitfalls, potentials, and ethics of online survey research: LGBTQ and other marginalized and hard-to-access youths. *Social Work Research, 40*(2), 83– 94. https://doi.org/10.1093/swr/svw005

Michel, G., Torelli, C. J., Fleck, N., & Hubert, B. (2022). Self-brand values congruity and incongruity: Their impacts on self-expansion and consumers' responses to brands. *Journal of Business Research*, *142*, 301–316. https://doi.org/10.1016/j.jbusres.2021.12.032

Minton, E. A., Tan, S. J., Tambyah, S. K., & Liu, R. L. (2020). Drivers of sustainability and consumer well-being: An ethically-based examination of religious and cultural values. *Journal of Business Ethics*, *175*(1), 167–190. https://doi.org/10.1007/s10551-020-04674-3

Monier-Dilhan, S., & Bergès, F. (2016). Consumers' motivations driving organic demand: Between self-interest and sustainability. *Agricultural and Resource Economics Review*, *45*(3), 522–538. https://doi.org/10.1017/age.2016.6

Monterrosa, E. C., Frongillo, E. A., Drewnowski, A., De Pee, S., & Vandevijvere, S. (2020). Sociocultural influences on food choices and implications for sustainable healthy diets. *Food and Nutrition Bulletin*, *41*(2), 59–73. https://doi.org/10.1177/0379572120975874

Morselli, D., Spini, D., & Devos, T. (2012). Human values and trust in institutions across countries: A multilevel test of Schwartz's hypothesis of structural equivalence. *Survey Research Methods*, *6*(1), 49–60. https://doi.org/10.18148/srm/2012.v6i1.5090

Mubako, G., Bagchi, K., Udo, G., & Marinovic, M. (2020). Personal values and ethical behavior in accounting students. *Journal of Business Ethics*, *174*(1), 161–176. https://doi.org/10.1007/s10551-020-04606-1

Nan, Z., Yuping, C., & Kongjue, Z. (2024). The future of marketing analytics: Trends and emerging technologies. *International Journal of Advances in Business and Management Research*, *1*(3), 23–32. https://doi.org/10.62674/ijabmr.2024.v1i03.003

Neuman, W. L. (2014). *Social research methods: Qualitative and quantitative approaches.* Pearson.

Nguyen, A., McClelland, R., Thuan, N. H., & Hoang, T. G. (2022). Omnichannel marketing: Structured review, synthesis, and future directions. *The International Review of Retail Distribution and Consumer Research*, *32*(3), 221–265. https://doi.org/10.1080/09593969.2022.2034125

Obermiller, C., & Spangenberg, E. R. (1998). Development of a scale to measure consumer skepticism toward advertising. *Journal of Consumer Psychology*, *7*(2), 159–186. https://doi.org/10.1207/s15327663jcp0702_03

Olsen, J., Atkin, T., & Thach, L. (2016, February). Marketing by what matters: Using Schwartz's theory of basic values to identify wine consumer segments. In *Wine Business Research That Matters: Proceedings of the 9th Academy of Wine Business Research Conference* (pp. 301-312).

Olsen, S. O., & Tuu, H. H. (2021). The relationships between core values, food-specific future time perspective and sustainable food consumption. *Sustainable Production and Consumption*, *26*, 469–479. https://doi.org/10.1016/j.spc.2020.12.019

Paço, A. M. F. D., & Reis, R. (2012). Factors affecting skepticism toward green advertising. *Journal of Advertising*, *41*(4), 147–155. https://doi.org/10.1080/00913367.2012.10672463

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*. McGraw-Hill Education.

Pancer, E., McShane, L., & Noseworthy, T. J. (2017). Isolated environmental cues and product efficacy penalties: The color green and eco-labels. *Journal of Business Ethics*, *143*(1), 159–177. https://doi.org/10.1007/s10551-015-2764-4

Petty, R. E., Schumann, J. T. C. a. D., Cacioppo, J. T., & Schuman, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research*, *10*(2), 135–146. https://www.jstor.org/stable/2488919

Piercey, M. D. (2022). “Throw it in as a covariate?” Common problems using measured control variables in experimental research. *Auditing a Journal of Practice & Theory*, *42*(2), 183–205. https://doi.org/10.2308/ajpt-2020-011

Poier, S., Nikodemska-Wołowik, A. M., & Suchanek, M. (2022). How higher-order personal values affect the purchase of electricity storage: Evidence from the German photovoltaic market. *Journal of Consumer Behaviour*, *21*(4), 909–926. https://doi.org/10.1002/cb.2048

Posavac, S. S., Sanbonmatsu, D. M., Seo, J. Y., & Iacobucci, D. (2014). How attitudes toward product categories drive individual brand attitudes and choice. *Psychology and Marketing*, *31*(10), 843–852. https://doi.org/10.1002/mar.20738

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods Instruments, & Computers*, *36*(4), 717–731. https://doi.org/10.3758/bf03206553

Puska, P. (2018). Does organic food consumption signal prosociality?: An application of Schwartz’s value theory. *Journal of Food Products Marketing*, *25*(2), 207–231. https://doi.org/10.1080/10454446.2018.1522286

Rahmann, G., Azim, K., Brányiková, I., Chander, M., David, W., Erisman, J. W., Grimm, D., Hammermeister, A., Ji, L., Kuenz, A., Løes, A., Wan-Mohtar, W. a. a. Q. I., Neuhoff, D., Niassy, S., Olowe, V., Schoeber, M., Shade, J., Ullmann, J., & Van Huis, A. (2021). Innovative, sustainable, and circular agricultural systems for the future. *Organic Agriculture*, *11*(2), 179–185. https://doi.org/10.1007/s13165-021-00356-0

Rathee, S., & Milfeld, T. (2024). Sustainability advertising: Literature review and framework for future research. *International Journal of Advertising*, *43*(1), 7–35. https://doi.org/10.1080/02650487.2023.2175300

Raza, A., & Farrukh, M. (2023). Going green: An application of personal value theory to understand consumers visiting intention toward green hotels in Pakistan. *International Journal of Contemporary Hospitality Management*, *35*(9), 3322–3343. https://doi.org/10.1108/ijchm-05-2022-0602

Reisch, L., Eberle, U., & Lorek, S. (2013). Sustainable food consumption: An overview of contemporary issues and policies. *Sustainability Science Practice and Policy*, *9*(2), 7–25. https://doi.org/10.1080/15487733.2013.11908111

Ritchie, H., Rosado, P., & Roser, M. (2022, December 2). *Environmental impacts of food production*. Our World in Data. https://ourworldindata.org/environmental-impacts-of-food

Ritzer, G. (2016). The McDonaldization of society. In E. Mofield, & T. Stambaugh (Eds.), *In the mind's eye*. (pp. 143–154). Routledge. https://doi.org/10.4324/9781003235750

Rossolatos, G. (2012). *Towards a semiotics of brand equity: Brand coherence and communicative consistency through structuralist operations and rhetorical transformations*. Semiotic Publications.

Rozin, P. (1996). The socio-cultural context of eating and food choice. In H.I. Meiselman, & H.J.H. MacFie (Eds.), *Food choice, acceptance and consumption.* (pp. 83–104). Springer. https://doi.org/10.1007/978-1-4613-1221-5_2

Sagiv, L., & Roccas, S. (2021). How do values affect behavior? Let me count the ways. *Personality and Social Psychology Review*, *25*(4), 295–316. https://doi.org/10.1177/888682311015975

Sagiv, L., Roccas, S., Cieciuch, J., & Schwartz, S. H. (2017). Personal values in human life. *Nature Human Behaviour*, *1*(9), 630–639. https://doi.org/10.1038/s41562-017-0185-3

Sagiv, L., & Schwartz, S. H. (2022). Personal values across cultures. *Annual Review of Psychology*, *73*(1), 517–546. https://doi.org/10.1146/annurev-psych-020821-125100

Sakshaug, J., & Crawford, S. (2010). The impact of textual messages of encouragement on web survey breakoffs: An experiment. *International Journal of Internet Science*, *4*(1), 50–60. https://www.research.manchester.ac.uk/portal/en/publications/the-impact-of-textual-messages-of-encouragement-on-web-survey-breakoffs-an-experiment(ab980012-1a59-4db1-a6f3-4a71f6ca02c0).html

Sawyer, S. F. (2013). Analysis of variance: The fundamental concepts. *Journal of Manual & Manipulative Therapy*, *17*(2), 27–38. https://doi.org/10.1179/jmt.2009.17.2.27e

Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, *126*(5), 1763–1768. https://doi.org/10.1213/ane.0000000000002864

Schoolman, E. D. (2019). Doing right and feeling good: Ethical food and the shopping experience. *Sociological Perspectives*, *62*(5), 668–690. https://doi.org/10.1177/0731121419855980

Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, *50*(4), 19–45. https://doi.org/10.1111/j.1540-4560.1994.tb01196.x

Schwartz, S. H. (2006). Value orientations: Measurement, antecedents and consequences across nations. In R. Jowell (Ed.), *Measuring attitudes cross-nationally: Lessons from the European Social Survey* (pp. 161–194). Sage Publications.

Schwartz, S. H. (2007). Cultural and individual value correlates of capitalism: A comparative analysis. *Psychological Inquiry*, *18*(1), 52–57. https://doi.org/10.1080/10478400701388963

Schwartz, S. H. (2012). An overview of the Schwartz Theory of basic values. *Online Readings in Psychology and Culture*, *2*(1), Article 11. https://doi.org/10.9707/2307-0919.1116

Schwartz, S. H. (2016). Basic individual values: Sources and consequences. In T. Brosch, & D. Sander (Eds.), *Handbook of value: Perspectives from economics, neuroscience, philosophy, psychology and sociology* (pp. 63–84). Oxford University Press.

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, *53*(3), 550–562. https://doi.org/10.1037/0022-3514.53.3.550

Schwartz, S. H., Caprara, G. V., Vecchione, M., Bain, P., Bianchi, G., Caprara, M. G., Cieciuch, J., Kirmanoglu, H., Baslevent, C., Lönnqvist, J., Mamali, C., Manzi, J., Pavlopoulos, V., Posnova, T., Schoen, H., Silvester, J., Tabernero, C., Torres, C., Verkasalo, M., . . . Zaleski, Z. (2013). Basic personal values underlie and give coherence to political values: A cross national study in 15 countries. *Political Behavior*, *36*(4), 899–930. https://doi.org/10.1007/s11109-013-9255-z

Seppälä, T., Lipponen, J., Bardi, A., & Pirttilä-Backman, A. (2012). Change-oriented organizational citizenship behaviour: An interactive product of openness to change values, work unit identification, and sense of power. *Journal of Occupational and Organizational Psychology*, *85*(1), 136–155. https://doi.org/10.1111/j.2044-8325.2010.02010.x

Šerić, M., Došen, Đ. O., & Mikulić, J. (2024). Bonding with the destination brand during crisis: The role of message consistency. *Journal of Hospitality and Tourism Insights, 8*(4), 1250–1267. https://doi.org/10.1108/jhti-05-2024-0416

Sharma, P. (2009). Measuring personal cultural orientations: Scale development and validation. *Journal of the Academy of Marketing Science*, *38*(6), 787–806. https://doi.org/10.1007/s11747-009-0184-7

Sharma, R., & Jha, M. (2017). Values influencing sustainable consumption behaviour: Exploring the contextual relationship. *Journal of Business Research*, *76*, 77–88. https://doi.org/10.1016/j.jbusres.2017.03.010

Shum, M. (2004). Does advertising overcome brand loyalty? Evidence from the breakfast-cereals market. *Journal of Economics & Management Strategy*, *13*(2), 241–272. https://doi.org/10.1111/j.1530-9134.2004.00010.x

Sischka, P. E., Décieux, J. P., Mergener, A., Neufang, K. M., & Schmidt, A. F. (2020). The impact of forced answering and reactance on answering behavior in online surveys. *Social Science Computer Review*, *40*(2), 405–425. https://doi.org/10.1177/0894439320907067

Solér, C. (2012). Conceptualizing sustainably produced food for promotional purposes: A sustainable marketing approach. *Sustainability*, *4*(3), 294–340. https://doi.org/10.3390/su4030294

Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, *26*(2), 53–66. https://doi.org/10.1080/10641734.2004.10505164

Spini, D. (2003). Measurement equivalence of 10 value types from the Schwartz Value Survey across 21 countries. *Journal of Cross-Cultural Psychology*, *34*(1), 3–23. https://doi.org/10.1177/0022022102239152

Steenkamp, J. E. M. (2001). The role of national culture in international marketing research. *International Marketing Review*, *18*(1), 30–44. https://doi.org/10.1108/02651330110381970

Stoddart, M. C., Lahsen, M., Ylä-Anttila, T., & Swarnakar, P. (2025) Environmental issues, climate change, and progressive politics. In A. Mattoni (Ed.), *Handbook of progressive politics* (pp. 313–334). Edward Elgar Publishing. https://doi.org/10.4337/9781800880641.00028

Suci, A., Wang, H., & Doong, H. (2022). Promoting a heritage product to domestic youth markets: Should it be localized? *International Journal of Emerging Markets*, *18*(12), 6015–6036. https://doi.org/10.1108/ijoem-07-2021-1033

Sürücü, L., Şeşen, H., & Maslakçı, A. (2023). *Regression, Mediation/Moderation, and Structural Equation Modeling with SPSS, AMOS, and PROCESS Macro*. Livre de Lyon.

Tajfel, H., & Turner, J.C. (1976). An integrative theory of intergroup conflict. In M.J. Hatch & M. Schultz (Eds.), *Organisational identity: A reader* (pp. 56–65). Oxford University Press.

Tanford, S., Kim, M., & Kim, E. J. (2020). Priming social media and framing cause-related marketing to promote sustainable hotel choice. *Journal of Sustainable Tourism*, *28*(11), 1762–1781. https://doi.org/10.1080/09669582.2020.1760287

Tanner, G., Schümann, M., Baur, C., & Bamberg, E. (2021). Too fatigued to consume (ir)responsibly? The importance of work-related fatigue and personal values for responsible consumption. *International Journal of Consumer Studies*, *45*(6), 1322–1334. https://doi.org/10.1111/ijcs.12655

Tavitiyaman, P., Zhang, X., & Chan, H. M. (2024). Impact of environmental awareness and knowledge on purchase intention of an eco-friendly hotel: Mediating role of habits and attitudes. *Journal of Hospitality and Tourism Insights*, *7*(5), 3148–3166. https://doi.org/10.1108/jhti-08-2023-0580

Thøgersen, J. (2010). Country differences in sustainable consumption: The case of organic food. *Journal of Macromarketing*, *30*(2), 171–185. https://doi.org/10.1177/0276146710361926

Timmons, S., & Byrne, R. M. (2018). Moral fatigue: The effects of cognitive fatigue on moral reasoning. *Quarterly Journal of Experimental Psychology*, *72*(4), 943–954. https://doi.org/10.1177/1747021818772045

Titova, L., & Sheldon, K. M. (2021). Happiness comes from trying to make others feel good, rather than oneself. *The Journal of Positive Psychology*, *17*(3), 341–355. https://doi.org/10.1080/17439760.2021.1897867

Troudi, H., & Bouyoucef, D. (2020). Predicting purchasing behavior of green food in Algerian context. *EuroMed Journal of Business*, *15*(1), 1–21. https://doi.org/10.1108/emjb-03-2019-0046

Trudel, R., Klein, J., Sen, S., & Dawar, N. (2019). Feeling good by doing good: A selfish motivation for ethical choice. *Journal of Business Ethics*, *166*(1), 39–49. https://doi.org/10.1007/s10551-019-04121-y

Tsai, P., Lin, G., Zheng, Y., Chen, Y., Chen, P., & Su, Z. (2020). Exploring the effect of Starbucks' green marketing on consumers' purchase decisions from consumers' perspective. *Journal of Retailing and Consumer Services*, *56*, Article 102162. https://doi.org/10.1016/j.jretconser.2020.102162

Van Gorp, B., & Van Der Goot, M. J. (2012). Sustainable food and agriculture: Stakeholder's frames. *Communication Culture and Critique*, *5*(2), 127–148. https://doi.org/10.1111/j.1753-9137.2012.01135.x

Vanhamme, J., Lindgreen, A., Reast, J., & Van Popering, N. (2012). To do well by doing good: Improving corporate image through cause-related marketing. *Journal of Business Ethics*, *109*(3), 259–274. https://doi.org/10.1007/s10551-011-1134-0

Van Selm, M., & Jankowski, N. W. (2006). Conducting online surveys. *Quality & Quantity*, *40*(3), 435–456. https://doi.org/10.1007/s11135-005-8081-8

Vehovar, V. & Manfreda K.L. (2017). Overview: Online surveys. In N.G. Fielding, R.M. Lee, & G. Blank (Eds.), *The SAGE Handbook of Online Research Methods*. (pp. 143–161) https://doi.org/10.4135/9781473957992.n9 SAGE Publications.

Verain, M. C., Dagevos, H., & Antonides, G. (2015). Sustainable food consumption: Product choice or curtailment? *Appetite*, *91*, 375–384. https://doi.org/10.1016/j.appet.2015.04.055

Verma, S. (2017). Niche level segmentation of green consumers. *South Asian Journal of Business Studies*, *6*(3), 274–290. https://doi.org/10.1108/sajbs-05-2016-0040

Vermeir, I., Weijters, B., De Houwer, J., Geuens, M., Slabbinck, H., Spruyt, A., Van Kerckhove, A., Van Lippevelde, W., De Steur, H., & Verbeke, W. (2020). Environmentally sustainable food consumption: A review and research agenda from a goal-directed perspective. *Frontiers in Psychology*, *11*, Article 1603. https://doi.org/10.3389/fpsyg.2020.01603

Virdi, I. T. (2023). Effect of exaggerated claims on brand evaluation. In R. Behl (Ed.), *Entrepreneurship and regional development* (pp. 243–258). https://doi.org/10.1007/978-3-319-57413-4_2 Springer.

Volschenk, J., Gerber, C., & Santos, B. A. (2022). The (in)ability of consumers to perceive greenwashing and its influence on purchase intent and willingness to pay. *South African Journal of Economic and Management Sciences*, *25*(1), Article a4553. https://doi.org/10.4102/sajems.v25i1.4553

Von Meyer-Höfer, M., Von Der Wense, V., & Spiller, A. (2014). Characterising convinced sustainable food consumers. *British Food Journal*, *117*(3), 1082–1104. https://doi.org/10.1108/bfj-01-2014-0003

Vu, H. T., Blomberg, M., Seo, H., Liu, Y., Shayesteh, F., & Viet, H., DO. (2020). Social media and environmental activism: Framing climate change on Facebook by global NGOs. *Science Communication*, *43*(1), 91–115. https://doi.org/10.1177/1075547020971644

Wang, E. S., & Chou, C. (2020). Norms, consumer social responsibility and fair trade product purchase intention. *International Journal of Retail & Distribution Management*, *49*(1), 23–39. https://doi.org/10.1108/ijrdm-09-2019-0305

Weisstein, F. L., Meyer, J., & Kershaw, J. (2023). A matter of alignment? Effects of product types and environmental claim framing on consumer evaluation of sustainable foods. *Business Strategy and the Environment*, *33*(3), 1661–1674. https://doi.org/10.1002/bse.3565

Williams, E. G., Ratchford, J. L., Pawl, T., Balkaya-Ince, M., & Schnitker, S. A. (2024). Transcendent moral motivation and virtue development: A meditation-based experiment exploring self-transcending and self-enhancing motives. *International Journal of Applied Positive Psychology, 9*, 1745–1772. https://doi.org/10.1007/s41042-024-00190-1

World Economic Forum. (2025, January 15). *Global risks 2025: A world of growing divisions*. https://www.weforum.org/publications/global-risks-report-2025/in-full/global-risks-2025-a-world-of-growing-divisions-c943fe3ba0/

Yan, R., Diddi, S., & Bloodhart, B. (2021). Predicting clothing disposal: The moderating roles of clothing sustainability knowledge and self-enhancement values. *Cleaner and Responsible Consumption*, *3*, Article 100029. https://doi.org/10.1016/j.clrc.2021.100029

Yang, S., & Chai, J. (2022). The influence of enterprises' green marketing behavior on consumers' green consumption intention: Mediating role and moderating role. *Sustainability*, *14*(22), Article 15478. https://doi.org/10.3390/su142215478

Yang, C., & Hsu, T. (2017). Effects of skepticism about corporate social responsibility advertising on consumer attitude. *Social Behavior and Personality an International Journal*, *45*(3), 453–467. https://doi.org/10.2224/sbp.5788

Yang, H., & Yen, G. (2018). Impact of consumers' self-construal, empathy, and moral identity on purchase intention toward cause-related marketing goods: A perspective of the moderated mediation model. *Psychology*, *9*(2), 260–279. https://doi.org/10.4236/psych.2018.92017

Yue, L., Zeng, X., & Li, J. (2024). The effect of materialism on unethical behaviour: The mediating role of self-control. *Asian Journal of Social Psychology, 27*(4), 844–855. https://doi.org/10.1111/ajsp.12642

Zelenski, J. M., & Desrochers, J. E. (2021). Can positive and self-transcendent emotions promote pro-environmental behavior? *Current Opinion in Psychology*, *42*, 31–35. https://doi.org/10.1016/j.copsyc.2021.02.009

Zell, E., & Sedikides, C. (2024). Self-enhancement and counterproductive Covid-19 behavior. In M. K. Miller (Ed.), *The social science of the COVID-19 pandemic: A call to action for researchers* (pp. 94–106). Cambridge University Press.

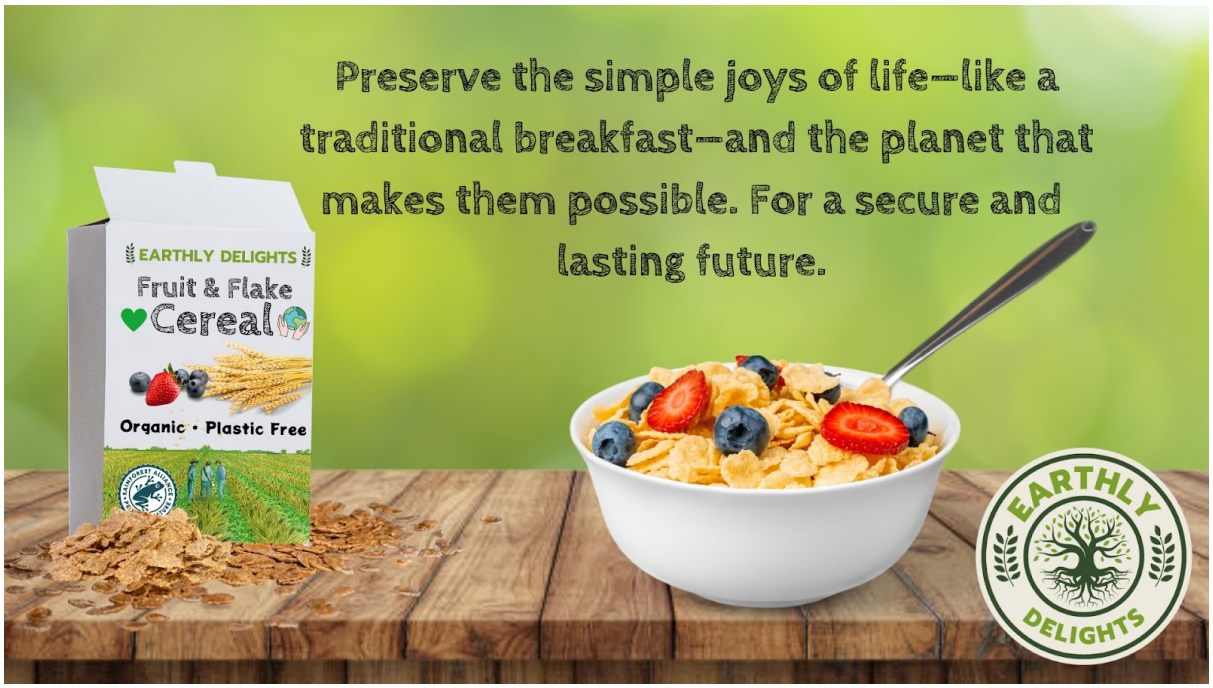
Zell, E., Stockus, C. A., Lesick, T. L., & Sedikides, C. (2022). Self-enhancement and physical health: A meta-analysis. *British Journal of Social Psychology*, *62*(1), 583–599. https://doi.org/10.1111/bjso.12577

Zhang, S., Ding, A., & Xu, M. (2024). Call-to-action or inaction? Call-to-action buttons hurt in-feed social advertising. *International Journal of Advertising*, 1–29. https://doi.org/10.1080/02650487.2024.2433885

Appendices

Appendix A: Experimental manipulations

Condition 1: Openness to change frame.



Condition 2: Conservation frame.

Condition 3: Self-enhancement frame.

Condition 4: Self-transcendence frame.

Condition 5: Control

Appendix B: Survey

Dear participant, Thank you for your interest and participation in this study! We are a team of researchers consisting of Francesca Occhionero and Anne-Marie van Prooijen from Erasmus University Rotterdam. We are inviting individuals aged 18+ to participate in this research, conducted as part of a Master's thesis in Media and Business. It aims to explore perceptions of a new cereal product. There are no right or wrong answers, your honest opinions are what matter most! We are conducting this research independently. The survey takes approximately five minutes to complete. Your participation is voluntary, and you are free to discontinue your participation at any time. At Erasmus University Rotterdam, we process your personal data based on public interest. We will collect your IP address, and if you choose to provide it, your age, gender, and nationality. The data retrieved will be treated anonymously, and your personal information will be kept strictly confidential. Your privacy will be protected to the maximum extent. No personally identifiable information will be reported in any research product. We are committed to managing and using your responses in accordance with the FAIR principles, ensuring that the data collected is Findable, Accessible, Interoperable, and Reusable. The data will be stored for 10 years and might be used for conducting follow-up research projects. If you have any questions about the study or your privacy rights, please contact Francesca Occhionero (611867fo@eur.nl). Do you have a complaint or concerns about your privacy? Do you want to access, correct or withdraw your data? Please email the Data Protection Officer (fg@eur.nl) or visit www.autoriteitpersoonsgegevens.nl (T: 088 - 1805250). To proceed with the survey, please click "yes" on all boxes below.

	Yes (3)	No (4)
I consent to participate in this research (1)	o	o
I consent to the collection and use of my personal data (2)	o	o
I confirm that I am at least 18 years old (3)	o	o
I confirm that I understand that participating in this research is completely voluntary and that I can stop at any time (4)	o	o
I confirm that I understand that my data will be anonymised for publication, educational purposes and further research (5)	o	o

I give permission for my answers to be used in papers, such as an article in a journal or a book. (6)	o	o
I hereby consent to having my anonymized personal data stored and used for educational purposes and for future research. (7)	o	o

(Oops! It looks like you clicked "No" on one of the consent options. Just to make sure that wasn't an accident, please double-check your answer. If you still want to participate, you can always reopen the survey by clicking the link again! If you have any questions or need help, feel free to reach out at 611867fo@eur.nl.)

To help us better understand your responses, please indicate the extent to which you agree or disagree with this statement regarding your cereal preference.

	Strongly Disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I enjoy eating cereal (1)	o	o	o	o	o

Moving on, kindly indicate how important each value is as a guiding principle in your life.

	Not important (1)	Barely important (2)	Moderately important (3)	Important (4)	Very important (5)
POWER (social power, authority, wealth) (1)	o	o	o	o	o
ACHIEVEMENT (success, capability, ambition, influence on people and events) (2)	o	o	o	o	o

HEDONISM (gratification of desires, enjoyment in life, self-indulgence) (3)	o	o	o	o	o
STIMULATION (daring, a varied and challenging life, an exciting life) (4)	o	o	o	o	o
SELF-DIRECTION (creativity, freedom, curiosity, independence) (5)	o	o	o	o	o
UNIVERSALISM (broadmindedness, social justice, a world at peace, unity with nature, environmental protection) (6)	o	o	o	o	o
BENEVOLENCE (helpfulness, honesty, forgiveness, loyalty, responsibility) (7)	o	o	o	o	o
TRADITION (respect for tradition, humbleness, accepting one's portion in life, modesty) (8)	o	o	o	o	o
CONFORMITY (obedience, honouring parents and elders, self-discipline, politeness) (9)	o	o	o	o	o
SECURITY (national security, family security, social order, cleanliness) (10)	o	o	o	o	o

Attention check Quick check-in! Please click the 🍉 emoji below to show you're paying attention.

- o 🥑 (1)
- o 🍉 (2)
- o 🥥 (3)

Please take a moment to look at the advertisement below. After viewing it, you will be asked to share your opinion about the advertisement.

Please indicate how much you agree or disagree with the following statements about the ad you just saw The ad suggests that...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Eating this cereal will help make the world a better place for others (1)	o	o	o	o	o
Eating this cereal will contribute to my personal success (2)	o	o	o	o	o
Choosing this cereal is a step towards change (3)	o	o	o	o	o
This cereal promotes a secure future (4)	o	o	o	o	o

Now that you've viewed the advertisement, please describe your general feelings about this product. I find this product...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Appealing (1)	o	o	o	o	o
Good (2)	o	o	o	o	o
Pleasant (3)	o	o	o	o	o
Favourable (4)	o	o	o	o	o
Likeable (5)	o	o	o	o	o

Next, please rate your likelihood of purchasing the product. I would...

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
Definitely intend to buy the product (1)	o	o	o	o	o
Definitely be interested to buy the product (2)	o	o	o	o	o
Definitely buy the product (3)	o	o	o	o	o
Probably buy the product (4)	o	o	o	o	o

You're nearly done! Please rate to what extent you agree or disagree with the statement below.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I actively make food choices that support sustainability (1)	o	o	o	o	o

The following questions ask for some basic background information. These questions are optional, but your responses will help us better understand the results of the survey. All answers will remain confidential and will not be used to identify you personally.

Age What is your age? (Example: 22)

Gender What is your gender?

- o Female (1)
- o Male (2)
- o Non-binary / third gender (3)
- o Prefer not to say (4)

Nationality Please select the country of your nationality. If you have more than one, choose the one you identify with most.

▼ Afghanistan (1) ... Zimbabwe (194)

Thank you for participating in this study! During the study, you were randomly assigned to view one of five advertisements, each designed to emphasise a different value-related message. Your responses will contribute to research on sustainability messaging and how consumer's values affect consumption choices. All responses will remain confidential and anonymous, and your participation was completely voluntary. If you have any questions about the study or would like to learn more about the findings, please feel free to contact Francesca Occhionero via 611867fo@eur.nl. If you have any comments or feedback, please feel free to share them in the field below. Thank you again for your time and valuable input!

Appendix C: Interview guide for pre-testing

Comprehension of Questions

- Were there any questions you found confusing or hard to understand?
- Did any question feel ambiguous or open to multiple interpretations?
- Did you have to re-read any question to understand it? Which one(s)?

Response Options

- Were the response options appropriate and easy to choose from?
- Did any response scale feel confusing or inconsistent?

Ease of Completion

- How easy or difficult was it to complete the entire questionnaire?
- Approximately how long did it take you to finish the questionnaire? Did that feel appropriate?
- Did you experience any technical or navigation issues?
- Is there anything you would change about the questionnaire?

Appendix D: Declaration Page: Use of Generative AI Tools in Course Assignments

Acknowledgment of Generative AI Tools
I acknowledge that I am aware of the existence and functionality of generative artificial intelligence (AI) tools, which are capable of producing content such as text, images, and other creative works autonomously.

GenAI use would include, but not limited to:
- Generated content (e.g., ChatGPT, Quillbot)
- Writing improvements, including grammar and spelling corrections (e.g., Grammarly)
- Language translation (e.g., DeepL)
- Research task assistance (e.g., finding survey scales, qualitative coding, debugging code)
- Using GenAI as a search engine tool to find academic articles or books (e.g.,

I declare that I have used generative AI tools, specifically [Gemini, ChatGPT], in the process of creating parts or components of my course assignment. The purpose of using these tools was to aid in generating content or assisting with specific aspects of the assignment.

Extent of AI Usage
I confirm that while I utilized generative AI tools to aid in content creation, the majority of the intellectual effort, creative input, and decision-making involved in completing the assignment were undertaken by me. I have enclosed the prompts/logging of the GenAI tool use in an appendix.

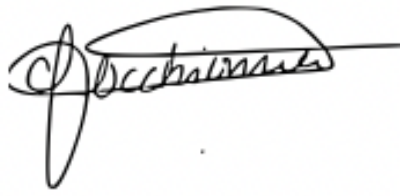
Prompts used:
- Assistance with Boolean operators
    - How can I find articles that is discuss each of Schwartz value dimensions and sustainability?
    - How can I find articles that is discuss each of Schwartz value dimensions and different types of behaviours related to ethical behaviour and sustainability?
    - How can I find articles that discuss how the climate crisis is being discussed in advertisements?
    - How can I find articles that explain the cognitive side of value congruence?
    - How can I find articles that explain how values are a part of, or shaped by culture?
    - How can I find articles that link attitudes and behaviours (that are not related to the theory of planned behaviour)?
- Understanding/ summarising content
    - How do values and value congruence play a role in how an advertisement may be perceived by viewers?
    - What is the connection between belief congruence and framing?
    - How are values (Schwartz) a part of culture?
    - How is framing in the news different than in advertisements?
    - How are values different from beliefs and personality?
    - What does this mean in simple words [Inserted text from article]
    - Summarise this article (Sagiv & Roccas, 2021) in relation to the mechanism of how values affect behaviour?
    - Help me unpack this feedback [insert feedback comment], what does this mean that I need to change?
    - Is it a 2x2 experiment if I have two independent variables, but I am testing them separately?
    - What theories can be used to examine how values intersect with culture?
- Proofreading text
    - Point out the spelling, grammatical or syntax errors in this text.
    - Which are sentences that should be simplified or made clearer?

    - Which sentences may be perceived as casual, and not academic?
- Assistance in thesis structure
    - What elements are needed in [introduction, methodology]?
    - Where do you discuss reliability? Within the different sections of the methodology or in a separate section?
    - Where should I place the justifications for my research choices? Within the different sections of the methodology or in a separate section?
- Generating questions for pre-test interview
    - What are some questions I can use in an interview for the participants who pretested a survey?
    - What questions can I use to gage how well they understood the instructions, items and response options?
- Producing ideas for advertising messages based on Schwartz's values
    - What are examples of advertising slogans I can use for a breakfast food that relates to Schwartz' dimensions?
    - How can I integrate [corresponding values of each dimension] into an ad slogal for breakfast food?

Ethical and Academic Integrity

I understand the ethical implications and academic integrity concerns related to the use of AI tools in coursework. I assure that the AI-generated content was used responsibly, and any content derived from these tools has been appropriately cited and attributed according to the guidelines provided by the instructor and the course. I have taken necessary steps to distinguish between my original work and the AI-generated contributions. Any direct quotations, paraphrased content, or other forms of AI-generated material have been properly referenced in accordance with academic conventions.

By signing this declaration, I affirm that this declaration is accurate and truthful. I take full responsibility for the integrity of my assignment and am prepared to discuss and explain the role of generative AI tools in my creative process if required by the instructor or the Examination Board. I further affirm that I have used generative AI tools in accordance with ethical standards and academic integrity expectations.



Francesca Occhionero 14.05.2025