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How personal and social-focused values shape the purchase intention for organic food: Cross-country comparison between Thailand and Germany

Julia Winterstein^{a,*}, Bing Zhu^b, André Habisch^a

^a Catholic University of Eichstätt-Ingolstadt, WFI Ingolstadt School of Management, Auf der Schanz 49, 85049, Ingolstadt, Germany

^b Assumption University, Martin de Tours School of Management and Economics, Department of Marketing, 88 Moo 8 Bang Na-Trad Km. 26Bangsaothong,

Samuthprakarn, 10570, Thailand

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ABSTRACT

Organic food contributes to environmental sustainability and is becoming increasingly popular worldwide, although it is generally more expensive than conventionally produced food. Rather different sets of values and motivations are driving consumers' purchase intentions in mature compared with emerging organic food markets. To inquire about similarities and differences in consumers' motives our qualitative, comparative study employs a series of in-depth interviews with organic-food-store clients in Germany and Thailand from February to May 2021. The analysis applied means-end chain (MEC) theory to map the mental decision-making processes. Results were interpreted and compared referring to the Schwartz Theory of Basic Human Value (STV). The findings show a rather similar values base of both samples in terms of the relevance of 'quality of personal life' and 'personal well-being'. Substantial differences emerged in the Germans high emphasis on the values 'health of environment' and 'social responsibility' which were absent in Thailand, while Thais put great importance on the 'responsibility for family'. Focusing on the five most important values in each country, we conclude a more personal-focused value system in Thailand, respectively a rather social-focused one in Germany. This paper contributes to the literature as it is one of the few qualitative studies on organic food purchase intention using MEC and STV and the first one conducted in Thailand. The findings provide valuable insights for producers and marketers to better address German and Thai consumers' needs to influence their purchase intention towards organic food consumption.

1. Introduction

Organic agriculture follows a strategy of preventive environmental management, contributing to environmental sustainability by reducing soil and water pollution, promoting biodiversity, and using less energy (FAO, 2021). The objective is to produce and process food using only natural ingredients and methods to reduce the environmental impact by meeting international and self-imposed standards (European Commission, 2023). Organic food is thus not only important for environmental and personal health but is also becoming increasingly popular in society. From an environmental, social, and economic perspective, the continued positive development of organic agriculture and food sales is thus desirable (Aghasafari et al., 2020).

For example, Germany is the world's second-largest market for organics, generating annual sales of 16 billion euros (ca. \$17,2 billion) in 2021, which represents more than 10% of global sales for organic food (BOLW, 2022). While the organic market in Germany has reached a maturity stage (Iweala et al., 2019), the representation of organic foods in the densely populated Asian markets is still rather limited (Pham et al., 2019). In Thailand, the organic food industry is a niche market with a 3 billion Baht (ca. \$90 million) market value, representing as little as 0.002% of the total Thai consumer spending in 2020 (Statista, 2021; Theparat, 2020).

Understanding factors that shape the purchase intention for organic food products is thus decisive and helps marketers and researchers to better address people's needs and shape sustainable food consumption in the future (Thøgersen, 2009). One important tool for examining the decision-making of consumers is the means-end chain (MEC) theory, which concludes with people's perception of product attributes and their linkage with consequences and personal values. The MEC theory's basic assumption is that people tend to choose products with attributes (='means') that lead to a desired outcome, which in turn matches their

* Corresponding author. *E-mail addresses:* julia.winterstein@stud.ku.de (J. Winterstein), bingzhu@msme.au.edu (B. Zhu), andre.habisch@ku.de (A. Habisch).

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Received 9 March 2022; Received in revised form 22 October 2023; Accepted 18 December 2023 Available online 27 December 2023 0959-6526/© 2023 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/). personal values and life goals (='end') (Gutman, 1982; Reynolds and Olson, 2001). MEC theory has hardly been used to identify drivers of consumers' organic food choices. The few published studies indicate that people in emerging (e.g. Taiwan) and mature markets (e.g. Italy, Germany, or the US) associate organics with health, good taste, rich nutrition, environmental protection, and food safety (Baker et al., 2004; Chen et al., 2015; Haas et al., 2013; Zanoli and Naspetti, 2002). Hence, there is little known about the linkages between organic food's attributes, functions, and the consumers underlying values that form consumers' purchase intention (Baker et al., 2004; Wang et al., 2019), requiring further research to increase the reliability and validity of previous results thereby offering insights into the potential for growth and development of organic food markets.

According to Schwartz (2012), personal values refer to goals that motivate action, e.g. organic food purchase intention. To contextualize and compare values, the Schwartz Theory of Basic Human Value (STV) has identified ten broad personal values, respectively 19 in the refined theory (Schwartz, 2012; Schwartz et al., 2012). The theory has been prevalent in comparative cultural studies globally (Schwartz et al., 2012), also in the context of organic food (Puska, 2019), and in connection with MEC theory (Torres et al., 2016). Yet, the number of studies applying the STV is small with most of them being quantitatively based and limited to a few, mostly European, countries. The studies lack to reveal deeper insights into the consumer's mindset and neglect important Asian markets, which may be very different from European due to varying personal, societal, and cultural conditions. Understanding the consumer motives for purchasing organic food in different cultural contexts is essential for promoting sustainable and healthy food choices (Arsil, Li, & Bruwer, 2016; Puska, 2019).

To fill this gap, this paper aims to provide insights into consumer motives for purchasing organic food in different cultural contexts. The research question guiding the study is to identify which values influence consumers' purchase intention for organic food in Thailand and Germany. We utilize in-depth interviews, applying MEC theory as a methodological framework and STV for result interpretation. The objectives are (1) to discover how consumers associate organic food attributes with values, and (2) to perform a cross-cultural comparison between the mature organic food market of Germany and the emerging market of Thailand. This paper represents the first study applying MEC theory in Thailand's organic food field and one of the very few combining MEC and STV for organic food, contributing pioneer research on (Asian) organic food markets. The findings provide valuable insights for producers and marketers to better cater to German and Thai consumers' needs and influence their purchase intention for organic food.

The study is constructed as follows: Section 2 introduces MEC theory and STV and studies on food using them. The research method is expounded on in Section 3 and results are resolved in Section 4. In Section 5, we discuss results from German and Thai perspectives as well as theoretical, managerial, and social implications. Section 6 presents the study's conclusion. Limitations and future research approaches are included in Section 7.

2. Theoretical background

2.1. Means-end chain theory

The MEC theory was developed by Gutman (1982) and is based on several prominent psychological theories (Kilwinger and Dam, 2021; Reynolds and Olson, 2001; Uijl et al., 2015), including personal construct theory (Kelly, 1955), attribute theory and cognitive structure (Rosenberg, 1956), and human values (Rokeach, 1973). As a value-based cognitive model, MEC allows researchers to understand not only what motivates consumers to purchase a product or service, but also why consumers value certain products or services (Gutman, 1982; Kilwinger and Dam, 2021; Reynolds and Gutman, 1988). Typically, MEC attempts to explain how a product or service is selected to fulfill the needs to attain desired goals (Veludo-de-Oliveira et al., 2006). It demonstrates how consumers associate their knowledge about product attributes with a constellation of functional and psychological consequences thereby uncovering their underlying values (Kirchhoff et al., 2011; Zanoli and Naspetti, 2002). The key assumption of MEC is that products are not bought for products themselves, but for the benefits associated with consuming them; hence, if a product satisfies consumers' needs (in terms of function and psychology) to a great extent, it can also help to actualize their goals and values (Costa et al., 2004).

MEC theory emphasizes the association between product attributes, the consequences generated by the product attributes, and the personal values, that are strengthened by the consequence (Botschen and Hemetsberger, 1998), in the following referred to as Attribute-Consequence-Value (ACV) sequential process.

As shown in Fig. 1, MEC contains three levels. Accordingly, "the higher the hierarchical level, the more the level of abstraction grows" (Leão and Mello, 2007, p. 4). At a higher level of abstraction, both functional consequences and psychological consequences are generated by the product attributes. At the highest level of abstraction, consumers' values will be uncovered (Walker et al., 1987). Consequently, a hierarchical value map is to be developed to illustrate the linkages among attributes, consequences, and values (Reynolds and Gutman, 1988; Uijl et al., 2015).

Specifically, the laddering interview technique is highly recommended to collect data for MEC studies: an interview technique, with which a "face-to-face, individual, in-depth, semi-structured interview" is conducted to underline the attribute-consequence-values linkage that consumers associate with particular products (Costa et al., 2004, p. 405).

The MEC theory has been applied to customers of specific food products. For instance, Kirchhoff et al. (2011) conducted a laddering interview with 61 Australian vegetable consumers. By employing MEC techniques, the researchers concluded that respondents often associate vegetables with freshness, vitamins, and nutrition. Arsil et al. (2018) applied MEC to reveal the personal values behind Indonesian and Malaysian Muslims' consumption decisions regarding halal food in the scope of STV. Findings provide evidence that security plays a predominant role followed by tradition, benevolence, and achievement values orientation. Similarly, a MEC study by Baker et al. (2004) investigated the underlying values of organic food choices among Germans. 24 laddering interviews revealed three dominant perceptual orientations: health/enjoyment, belief in nature, and animal welfare. They also found that the absence of pesticides, chemicals, and chemical fertilizers played a decisive role in the purchase decision.

In this context, MEC is considered to be an effective model for gaining consumer insights, especially consumers' product knowledge and their motivations for choosing products (Kilwinger and Dam, 2021). The reason is that when consumers are different in terms of knowledge,

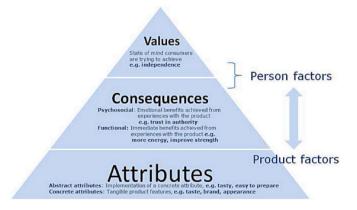


Fig. 1. Framework of Mean-end Chian Theory. Source: adapted from Saaka et al. (2004) and Uijl et al. (2015).

skill, and context, the way that they associate attributes to the consequence thereby formulating personal values could be varied (Storkerson, 2010). For this reason, the MEC theory together with the laddering interview technique is applied in this cross-cultural study, through which we could achieve an in-depth understanding of how organic consumers in different markets and cultural contexts are motivated to buy organic food.

Based on the aforementioned studies, MEC theory is suitable to reveal a hierarchical association of attribute-consequence-value constellations. However, there is limited evidence for a combination of MEC with STV. Therefore, we intend to fill this gap by conducting a comparative MEC study to deeply understand organic food consumption in mature and emerging markets.

2.2. Schwartz's Theory of Basic Human Value

STV has been prevalent in comparative cultural studies globally (Schwartz et al., 2012). According to Schwartz (1994, p. 21), human values refer to "desirable transsituational goals, varying in importance, that serve as guiding principles in people's lives" (see also Imm Ng, Anne Lee and Soutar, 2007). At the individual level, STV originally includes ten basic values, which are "self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism" (Schwartz and Bardi, 2001, p. 270; see also Imm Ng et al., 2007). These ten basic values constitute a motivational structure that demonstrates "conflicts and compatibility" (Schwartz, 2012, p. 2) among the values that people may encounter when making a decision (Schwartz, 2006). Further, due to various issues including "multicollinearity, low internal reliabilities, and cross-loadings" (Schwartz et al., 2012, p. 668; see also Davidov et al., 2008; Knoppen and Saris, 2009), the original value theory was refined to solve the mentioned problems; as a result, 19 more nuanced values were derived. Moreover, Schwartz (2012) conceptualized his refined values in three layers. Firstly, the values are embedded into a framework of four adjacent and non-adjacent domains, covering conservation, openness to change, self-enhancement, and self-transcendence. In the second layer, the values are classified into personal-focus and social-focus hemispheres (Rickaby et al., 2020; Schwartz, 2015). Finally, the outermost layer differentiates between values related to anxiety and self-protection and the values dealing with self-development and free of anxiety (Schwartz et al., 2012; Torres et al., 2016).

Especially the second layer, distinguishing values by personal and social focus, is of interest to study. Koscielniak and Bojanowska (2019) showed that personal-oriented values (Hedonism, Power, and Stimulation) were rather associated with unethical behavior than socially-oriented values (Conformity and Tradition). Feldman et al. (2015) also found unethical behavior positively correlated with self-enhancement values (= personal focus) and negatively correlated with self-transcendence and conservation (= social focus).

Inspired by the findings of Schwartz (2012), more and more scholars have applied STV to understand how certain subjective priorities affect individual behavior in organic food purchase decisions. For example, Puska (2019) analyzed Finnish consumers' prosocial behavior through an online survey on organic food consumption. The findings indicate that the socially focused values of universalism, benevolence, tradition, conformity, and security are positively associated with a prosociality impression. Accordingly, when these value priorities are prevalent, people tend to acknowledge the organic consumer as prosocial, as organic food consumption is perceived as an innovative practice benefitting not only consumers but also others. Thøgersen et al. (2015) conducted a comparative study on organic food consumption in China and Brazil, confirming the significance of universalism (= social focus) in influencing consumers' attitudes toward buying organic food in both markets. Besides, Mainardes et al. (2017)conducted a study on consumer intention to buy organic food in Brazil, thereby attempting to reveal how personal-focused values shape consumers' attitudes and

purchase intentions for organic food.

Concluding, STV seems appropriate for result interpretation in two respects. Firstly, based on the previous paragraph, the theory has already been successfully applied in the field of organic food regarding the social and personal-focused hemisphere layer. Secondly, as STV originally emerged from intercultural comparative studies (Schwartz, 2012), the theory is suitable to compare the findings from Germany as a mature market (Iweala et al., 2019) with Thailand as an emerging market (Pham et al., 2019).

3. Method

3.1. Research sampling and data collection

Interviewees were recruited from Germany and Thailand through the use of convenience sampling (Germany) and snowball sampling (Thailand). Data collection methods were tailored to suit different market conditions. In Thailand, the consumption of organic food is still largely restricted to high-income groups (Global Organic Trade, 2021), which presented a challenge in terms of recruiting participants who had experience with organic food. To overcome this, a snowball sampling technique was utilized to reach potential interviewees through referrals from experienced consumers to other experienced consumers. Thus, the authors began within their peer circle of colleagues and friends, identifying regular organic buyers and seeking referrals within their network. Conversely, in Germany where the organic food market is widely developed and widespread, a convenience sampling approach was employed, recruiting participants who regularly purchase organics from organic food stores and farmers' markets, confirming their expertise (see Appendix A for the consumer behavior profile of the interviewees). The interviews were focused on individuals from Generation Y (born between 1981 and 1994), as this cohort is known to possess high purchasing power, strong consumer behavior, brand awareness, and a desire for a high standard of living (Göbbel, 2021).

To gather independent perspectives from interviewees, we utilized one-to-one semi-structured interviews, which provide a flexible and effective method for collecting in-depth information (Adams, 2015). Interviewees from Germany and Thailand were invited to take part in these interviews, which were conducted in German and English, respectively. We followed the recommendations of Ritchie et al. (2003) and limited the number of respondents for individual interviews to 50 or fewer to ensure better control over interview quality and to facilitate the analysis of complex results. The interviews were also conducted using a saturation technique, considered the gold standard in qualitative research, where interviews are concluded when no new information can be obtained (Morse and Coulehan, 2015).

Social desirability bias was highly considered when conducting the interviews. To overcome such bias and increase reliability, we first made clear the pertinence and the research method (Bispo Júnior, 2022) of the study and then adjusted the way to interview. To this end, we conducted a trial test with a few interviewees and eliminated any sensitive topics. During the interview, if the interviewee was unclear about the interview questions, real-time explanation and clarification were provided.

To ensure the reliability and validity of the interview data, the interview transcripts underwent a rigorous validation process, so-called member-checking. This involved verifying the accuracy of responses with the interviewees themselves, including a review of the written answers after the interviews. This measure served to confirm that the interviewees had a complete understanding of the questions asked and that the interviewer had correctly interpreted their answers (Birt et al., 2016).

In total, 31 interviewees from Germany and 30 interviewees from Thailand, with some market and product knowledge, were interviewed, which is consistent with previous qualitative studies on organic food (Baker et al., 2004; Fotopoulos et al., 2002; Kirchhoff et al., 2011). Interviews were conducted between February and May 2021, took between 10 and 30 min (on average 17 min), and due to the COVID-19 pandemic, were mostly conducted by telephone (71 % in Germany and 100 % in Thailand).

The interviewees turned out to be heterogeneous in terms of their gender, age, housing situation, education, and employment status. The German participants' gender was evenly distributed (48.4% females), whereas in Thailand slightly more females were interviewed (60.0%). People in Thailand were slightly older (median 34 years old) than those from Germany (median 30 years old). The majority hold a university or college degree (64.5% in Germany, 100.0% in Thailand) and was private sector employed (58.1% in Germany, 93.3% in Thailand). German people's housing situation varied whereas most Thais lived with their families (73.3%).

3.2. Interview questionnaire design

The interview questionnaire consists of five sections: (1) definition of 'organic food', which was read out to the interviewees, (2) filter question on the involvement in the decision-making process for grocery shopping, (3) consumer behavior, (4) MEC, and (5) socio-demographics (see Appendix B). After the introduction (sections 1-3), the interviewer initiated the MEC analysis by utilizing soft laddering and direct elicitation techniques. To ensure the validity of the questionnaire design, we drew inspiration from Kirchhoff et al. (2011) MEC study on food, which also employed soft laddering and direct elicitation. Soft laddering technique ensures "the subject's natural flow of speech" (Kirchhoff et al., 2011, p. 1034) so that more complex cognitive structures will be profoundly revealed and understood (Kirchhoff et al., 2011). Direct elicitation is especially suitable for exploratory studies where the respondents are only provided with the product category, e.g. 'organic food' as a stimulus and then can directly answer with what comes to their minds (Bech-Larsen et al., 1997). Accordingly, when asked about product attributes, consumers were asked to identify three attributes that primarily influence their choice of organic food and why these things are important to their buying decision. After that, interviewees were asked about the reasons for the assignment of importance and the functional and social/psychological consequences that would be produced from eating organic food. Finally, based on the information they provided earlier, we unearthed hidden values that could portray personal life goals. Ulitmately, the interview ended with questions about the interviewees' socio-demographics.

3.3. Analysis

Data analysis and interpretation of the qualitative data from the MEC study follow the three-step process suggested by Reynolds and Gutman (1988), (see Table 1) for a summary.

Following the transcription of the interviews, the first step encompasses a content analysis of all elements of the collected ladders. Therefore, we draw all ladders on a separate coding form and clustered the elements according to the categories 'Attributes', 'Consequences', and 'Values', followed by the sub-categories, e.g., 'Abstract Attributes' and 'Concrete Attributes'. The German ladders were translated into English by two bilingual German researchers for consistency. Subsequently, two researchers undertook the task of synthesizing the collected data by employing synonyms and coding techniques to enable meaningful interpretation. To facilitate better comparability, wherever possible, summary codes were based on established studies (Baker et al., 2004; Chen et al., 2015; Haas et al., 2013; Kirchhoff et al., 2011; Zanoli &Naspetti, 2002). To minimize potential interpretation bias and increase reliability, one of the researchers was kept blind to the data collection process. The inter-coder reliability was found to be approximately 85%, with any 15% discrepancies being addressed through discussion and consensus. This level of agreement is in line with the recommended standard for interrater reliability of at least 70%, as suggested by Perreault and Leigh (1989). To proceed with the summary

Table 1

Data analysis following the three-step process suggested by Reynolds and	l Gut-
man (1988).	

Step	Process	Explaination
1 Content Analysis	Content analysis of all elements of the collected ladders from the interviews	Separate coding form to cluster the elements accordin to Attributes, Consequences, and Values
	Synthesiszing of the collected elements by employing synonyms and coding techniques to enable meaningful interpretation	Summary codes based on established studiesInter-coder reliability
	Assignment of letters and numbers to every element for the summary codes	 1st digit = country code 2nd digit = attribute, consequence or value 3rd and 4th digit = consecutive numbering
2 Implication Matrix	Set up of the matrix to identify all aggregated connections	 Differentiation between direct and indirect connections Determination of the dominant elements
3 Hierarchival Value Map	Construction of map to graph the linkages between the elements	 Linkages' strength is indicated by the line width Cut-off level that covers ²/₃ of all relations among elements

codes, letters and numbers were assigned. The first digit represents the country code: the codes identified in Germany start with 'G', the ones from Thailand with 'T'. The second digit describes the type of element: 'A' for attribute, 'C' for consequence, and 'V' for value. The last two digits are assigned based on consecutive numbering.

Secondly, an implication matrix is set up to identify all aggregated connections, displaying "the number of times each element leads to each other element" (Reynolds and Gutman, 1988, p. 20). Reynolds and Gutman (1988) differentiate direct and indirect connections between the elements. Direct connections are described as "implicative relationships among adjacent elements" (Reynolds and Gutman, 1988, p. 20) while indirect connections are "the connections among elements when there is another element between them" (Veludo-de-Oliveira et al., 2006, p. 634). Direct connections are indicated by the numbers before the decimal character, indirect connections by the number after the decimal.

The third step comprises the construction of a hierarchical value map (HVM) to graph the linkages between the MEC elements. The linkages' strength is indicated by the line width: the thicker the line, the stronger the connection. To avoid confusion and ensure targeted results, Reynolds and Gutman (1988) recommend not transferring all connections from the implication matrix into the HVM, but only the most relevant, using connections with mentions above a certain cut-off level. The cut-off level usually requires "3 to 5 relations, given a sample of 50–60 individuals" whereby the remaining connections should cover at least "two-thirds of all relations among elements" (Reynolds and Gutman, 1988, p. 20). Once the cut-off level is set, it is known which elements are to be mapped in the HVM and one can start drawing the elements and connections, beginning with the first row of the implication matrix. To highlight the frequently mentioned connections, the line width is adapted.

The study utilized Microsoft Excel for data sorting, data preparation, descriptive analysis, and implication matrix and Microsoft PowerPoint for drawing the hierarchical value map. For further interpretation in cross-cultural comparison, the identified values were compared and classified following the STV (Schwartz, 2012).

4. Results

4.1. Means-end chain analysis

In the content analysis, we summarized, categorized, and coded the interview elements of both countries using the same terms where possible. In Germany, a total of 43 codes (17 attributes, 17 consequences, and 9 values) were identified, in Thailand 53 codes (23 attributes, 19 consequences, and 11 values). The nominations varied between one and 37. As Reynolds and Gutman (1988) suggest to apply multiple cut-offs to yield informative and feasible results, we utilized a cut-off level of five resulting in a stable set of elements. This reduced the number of codes as follows: 27 codes in Germany (9 attributes, 11 consequences, and 7 values) and 25 codes in Thailand (10 attributes, 8 consequences, and 7 values). Table 2 provides an overview of the summary codes. A distinction between terminal and instrumental values was not made due to the poor assignability of the elements. However, this approach is not uncommon and has already been applied similarly in other studies (Baker et al., 2004; Kirchhoff et al., 2011; Zanoli and Naspetti, 2002).

Following the content analysis, the study transformed the data into an implication matrix (see Tables 3 and 4) – square matrixes measuring 27×27 , respectively 25×25 . The numbers in an implication matrix display the number of direct and indirect connections between two elements. Accordingly, in the German matrix, the number 8,01 in column 'G-C02' and line 'G-A04' indicates eight direct and one indirect connections between the concrete attribute 'Price' and the functional consequence 'Quality. That means that eight interviewees said a high price leads to quality, while one respondent connected both elements with another in between.

Before processing the implication matrix into an HVM, Reynolds and

Table 2

List of summary codes.

Gutman (1988) suggest a cut-off level between three and five that covers at least two-thirds of all connections. As a cut-off level of five and four covered too few relations, a cut-off level of three direct connections, covering 80.6% of the relations in Germany and 71.7% in Thailand was applied. Based on that, an HVM was drawn for each country (see Figs. 2 and 3). The maps of Germany and Thailand include ten identical elements, namely 'price' (A), 'absence of chemicals' (A), 'organic label' (A), 'optics' (A), 'good taste' (A), 'health benefits' (C), 'quality' (C), 'health of environment' (V), 'quality of personal life' (V), and 'personal well-being' (V). The other elements (17 in Germany, 15 in Thailand) differentiate.

The most dominant ladders in Germany exist between 'appropriate animal husbandry' (G-A02) \rightarrow 'animal welfare' (G-F03; 11 direct connections) \rightarrow 'health of environment' (G-V01; 5 direct connections) as well as between 'price' (G-A04) \rightarrow 'quality' (G-F02; 9 direct connections) \rightarrow 'health benefits' (G-F01; 20 direct connections) \rightarrow 'contributing to personal health' (G-F10; 9 direct connections). Thereby, the most frequently mentioned consequence 'health benefits' (G-F01; 37 nominations) is based on several values that are rated almost equally: 'personal well-being' (G-V04), 'long life' (G-V05), and 'quality of personal life' (G-V03). Considering the underlying values, 'health of environment' (G-V01; 19 nominations) was mentioned most frequently, followed by 'social responsibility' (G-V02; 17 nominations).

In Thailand, the most relevant ladder is 'more healthy' (T-A03) \rightarrow 'health benefits' (T-F01; 11 direct connections) \rightarrow 'personal well-being' (T-V02; 8 direct connections). As in Germany, the most frequently mentioned consequence 'health benefits' (T-F01) is subject to different values, which are largely evenly distributed: 'quality of personal life' (T-V01), 'personal well-being' (T-V02), and 'responsibility for family' (T-V04). In addition, the attribute 'food safety & security' (T-A06; 17 nominations) has a relatively strong connection to the consequence 'health benefits' (T-F01; 10 direct connections).

Germany			Thailand		
Code	Concrete Attribute	#	Code	Concrete Attribute	#
G-A01	Absence of pesticides	15	T-A01	Price	11
G-A02	Appropriate animal husbandry	15	T-A02	Organic label	8
G-A03	Regional label	13	T-A03	Absence of chemicals	6
G-A04	Price	11	T-A04	Availability	5
G-A05	Absence of chemicals	6			
G-A06	Organic label	6			
Code	Abstract Attribute	#	Code	Abstract Attribute	#
G-A07	Optics	8	T-A05	Food safety & security	17
G-A08	Good taste	8	T-A06	More healthy	16
G-A09	Better production conditions	6	T-A07	Better ingredients	13
			T-A08	Good taste	11
			T-A09	Affordable	9
			T-A10	Optics	5
Code	Functional Consequence	#	Code	Functional Consequence	#
G-C01	Health benefits	37	T-C01	Health benefits	26
G-C02	Quality	24	T-C02	Enjoy life	15
G-C03	Animal welfare	13	T-C03	Culinary delights	8
G-C04	Environmental protection	11	T-C04	Save money	8
G-C05	Shorter transport routes	9	T-C05	Trust	7
G-C06	Supporting local economy	5	T-C06	Quality	7
G-C07	Supporting producers	5			
G-C08	Transparency	5			
Code	Psychological Consequence	#	Code	Psychological Consequence	#
G-C09	Contributing to environmental protection	12	T-C07	Feel good	13
G-C10	Contributing to personal health	9	T-C08	Feel safe	6
G-C11	Good consciousness/Satisfaction	5			
Code	Values	#	Code	Value	#
G-V01	Health of environment	19	T-V01	Quality of personal life	33
G-V02	Social responsibility	17	T-V02	Personal well-being	26
G-V03	Quality of personal life	12	T-V03	Self-fulfillment	16
G-V04	Personal well-being	11	T-V04	Responsibility for family	11
G-V05	Long life	7	T-V05	Secure personal future	10
G-V06	Respect for animals	6	T-V06	Health of environment	5
G-V07	Enjoyment/pleasure	5	T-V07	Trust in institutional setting	5

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 Table 3

 Implication matrix – Germany.

	G- A01	G- A02	G- A03	G- A04	G- A05	G- A06	G- A07	G- A08	G- A09	G- C01	G- C02	G- C03	G- C04	G- C05	G- C06	G- C07	G- C08	G- C09	G- C10	G- C11	G- V01	G- V02	G- V03	G- V04	G- V05	G- V06	G- V07	Т
								1,00		8,00	3,00											0,02						1
01										1,00	1,00	11,00																1
02										1,00	1,00	11,00																-
													1,00	7,00	2,00	3,00	1,00											
)3											8,01										0,01							
04											0,01										0,01							
										4,00	1,00		1,00															
)5																												
												0,01					2,03											1
06								1,00			7,00											0,01						
07								1,00			7,00											0,01						
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104-1																								0.00
004-1		7,00																						2,00
COV-T	1,00	1,00			3,00	1,00																		6.00
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4.2. Application of Schwartz's Theory of Basic Human Values

The study applied STV to interpret the observed values of the MEC theory, to gain a deeper understanding of how values affect people's purchase intention in developed (Germany) and emerging organic food markets (Thailand). For the interpretation of only informative and feasible results, we focused on the five most mentioned values in each country. The values considered are as follows: (for Germany) 'health of environment' (G-V01), 'social responsibility' (G-V02), 'quality of personal life' (G-V03), 'personal well-being' (G-V04), and 'long life' (G-V05); (for Thailand) 'quality of personal life' (T-V01),' personal well-being' (T-V02), 'self-fulfilment' (T-V03), 'responsibility for family' (T-V04), and 'secure future' (T-V05).

Based on the circular structure of the refined STV of Schwartz et al. (2012), the identified values can be attributed to the personal and social-focus hemispheres as depicted in Table 5. Schwartz et al. (2012, p. 669) briefly explained these values as follows:

- (no. 4) Hedonism: pleasure and sensuous gratification
- (no. 5) Achievement: success according to social standards
- (no. 9) Security-personal: safety in one's immediate environment
- (no. 16) Benevolence-caring: devotion to the welfare of ingroup members
- (no. 17) Universalism-concern: commitment to equality, justice, and protection for all people
- (no. 18) Universalism-nature: preservation of the natural environment

The assignment shows that the four most frequently mentioned values of the Thai people can be traced back to a personal focus, while for Germany, two values each are personal and socially focused. However, the most frequently mentioned German values 'health of the environment' and 'social responsibility' arise from social motives.

5. Discussion

5.1. Values influencing organic food purchase intention

Following the research question to identify which values influence consumers' purchase intention for organic food, we applied MEC theory to derive ACV sequences that demonstrate motivators for organic food purchase intentions. Accordingly, the first objective of this study was to discover how consumers associate attributes of organic food with corresponding values.

The value 'quality of personal life' was one of the main motives among German and Thai consumers. Based on the interviews, it comprises enjoyment, pleasure, good mood, leisure, and relaxing time. The value is primarily achieved through the concrete attribute of 'absence of chemicals' and 'absence of pesticides', leading to the consequence 'health benefits'. Thus, people consume organic food because they want to avoid unhealthy substances in food production to contribute to their health. In turn, good health is important to achieve 'quality of life'. Various researchers have already proven that consumers connect organic food with a comfortable and enjoyable life. Zanoli and Naspetti (2002) found happiness and inner harmony among the most relevant underlying values for Italian organic food consumers. Enjoyment of life is also a significant value among Australians (Kirchhoff et al., 2011), Germans (Baker et al., 2004), and Taiwanese (Chen et al., 2015). Similarly, a study by Haas et al. (2013) identified 'quality of life' as a driving value in the purchasing decision in the U.S.

The ACV sequence of 'quality of life' also applies to the values 'long live' and 'personal well-being' which were strongly connected to the different perceptions of health: a healthy lifestyle, avoiding getting sick, building a strong immune system, or energetic life. Previous studies confirm that organic food consumers are health-conscious and that it is one of the main motives for organic purchases (Baker et al., 2004; Chen

Table 4

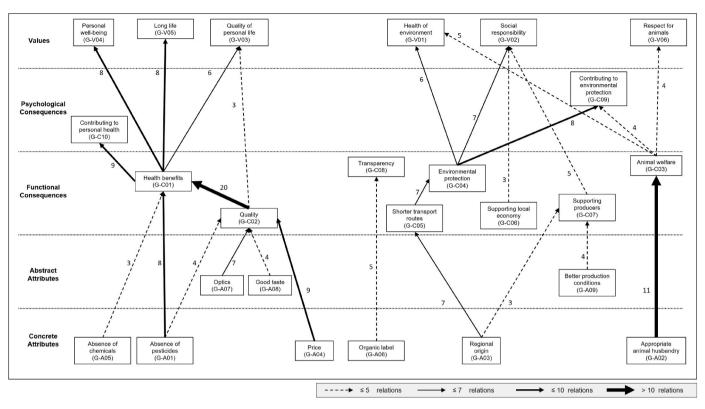


Fig. 2. Hierarchical value map - Germany.

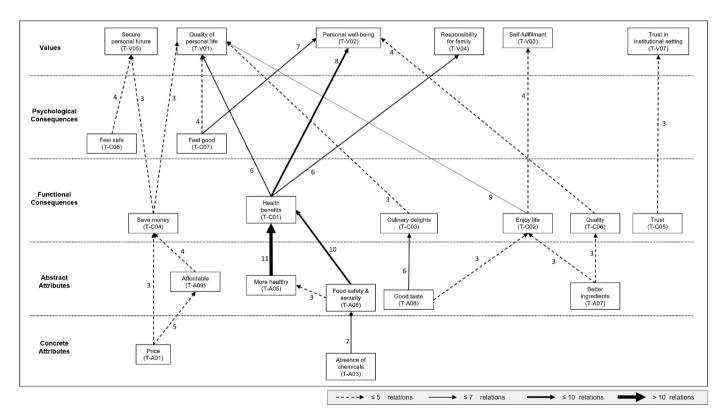


Fig. 3. Hierarchical value map – Thailand.

et al., 2015; Haas et al., 2013; Roitner-Schobesberger et al., 2008; Zanoli and Naspetti, 2002).

The value 'health of environment', focusing on an intact ecosystem, plants, and animals, as well as the value 'social responsibility' which

includes civic duty and the consideration of society at large follow a different argument. Both elements were derived by the German interviewees in such a way that they attach great importance to the attributes of 'regional origin', 'better production conditions', and

Table 5

Assignment of the identified values to Schwartz's Theory of Basic Human Value.

Values (MEC analysis)	Values	Focus hemispheres	Ranking Germany	Ranking Thailand
Health of environment	Universalism- nature	Social	1	-
Social responsibility	Universalism- concern	Social	2	-
Responsibility for family	Benevolence- caring	Social	-	4
Quality of personal life	Hedonism	Personal	3	1
Personal well- being	Security- personal	Personal	4	2
Long life	Hedonism	Personal	5	-
Self-fulfilment	Achievement	Personal	-	3
Secure future	Security- personal	Personal	-	5

'appropriate animal husbandry' when purchasing organics. The most important consequences associated with these product attributes are 'animal welfare' and 'environmental protection'. By buying organics that promise good production conditions and appropriate animal husbandry, people want to contribute to environmental protection and take responsibility for fellow human beings. Other studies also support the high value placed on environmental protection among organic consumers. A German MEC study by Baker et al. (2004) suggests 'belief in nature' as a dominant value of organic food choices thereby confirming a national stereotype. They argued that the absence of pesticides, chemicals, and fertilizers is a key sales argument in Germany. In the developed markets of the U.S., Taiwan, and China, environmental health concerns and the appreciation of nature have also been identified as decisive factors (Ahmed et al., 2021; Chen et al., 2015; Haas et al., 2013).

The value 'responsibility for family' was observed among Thai interviewees and comprises good caring for their children and older family members as well as their health. 'Responsibility for family' is triggered by the attribute 'absence of chemicals' and 'food safety & security', leading to perceived 'health benefits'. Here, too, the consumption of safe organic food should contribute to personal health and thus ensure that consumers can take care of their families. The literature shows that social responsibility, in the broader and narrower sense, is an influencing factor for organic food purchases. For example, Kirchhoff et al. (2011) observed 'enjoy family' as ranking high on the values rankings of Australian organic consumers; in a similar vein, Chen et al. (2015) highlighted that Taiwanese consumers emphasized 'social responsibility' when buying organic rice.

The value 'secure personal future' observed in Thailand is based on the idea that the attribute 'price' is also important when buying organics. Consumers want to save money when shopping, which in turn serves to finance their livelihood and also their future. However, price may not be a reason for buying organic food, as these foods tend to be more expensive than conventionally produced ones, but it influences the decision to buy the product or not.

Lastly, the value of 'self-fulfillment' meaning that the interviewees can achieve or purchase what they want was also highly associated with the purchase of organics. Achieving this personal life goal is based on being able to buy food that has a 'good taste' and contains 'better ingredients', which leads to an enjoyment of life and in further consequence to the fulfillment of goals and dreams. Other researchers also found 'achievement,' 'self-fulfilment,' 'achieve goals,' and 'sense of achievement' as relevant factors for organic food purchases when conducting MEC theory in developed markets (Chen et al., 2015; Kirchhoff et al., 2011; Zanoli and Naspetti, 2002).

In line with the research question, the second research objective aimed to perform a cross-cultural comparison between the mature organic food market of Germany and the emerging market of Thailand. Accordingly, a similarity was found in the relevance of the values 'quality of personal life' and 'personal well-being' that motivate consumers in both countries to purchase organics. However, a major difference between Germany and Thailand is that the other values were not recorded in the respective other country. This finding already indicates a considerable difference in the underlying values-perception when buying organic food. Moreover, there are differences in the prioritization of the values. While 'quality of personal life' was the most cited value in Thailand, in Germany it is 'health of environment'. Another manifest difference is that Germans emphasized 'social responsibility', whereas Thai consumers focus on their inner circle, the 'responsibility for family'.

5.2. Personal and social values in the scope of the schwartz values theory

To further examine the second research goal, the study applied the circular structure of the refined STV of Schwartz et al. (2012) for cross-cultural comparison. Schwartz (1992, 2012) differentiates between social and personal-focused values. Social-focused values govern how people interact with each other and influence their interests. Personal-focused values govern how people display personal features and interests. This study found that four of the five most important values in Thailand (quality of personal life, personal well-being, self-fulfilment, and responsibility for family) are personally focused, while for Germany, the two most mentioned values are socially motivated (health of environment and social responsibility).

Accordingly, it can be assumed that the purchase of organic food in Thailand is rather individually driven and identity-related. Buying organics seems to be an expression of personal motives such as selfenhancement and conservation (Schwartz, 2012). Purchasing these foods might be perceived as a luxury that one occasionally affords to enjoy the current life. A study by Srikes et al. (2009) supports this finding, as they observed that Thais have a high association with 'Hedonism' when purchasing mobile phones – a good that indicates financial and social status.

The observed personal-driven motives presumably comprise not only the individual itself but also its (extended) family. In Thailand, family is very important and a strong emphasis on its ties exists. Family is the foundation of social life and since several generations often live together in one house, the younger generation generally has a high sense of duty and responsibility towards the older (Cultural Atlas, 2021). However, Sortheix and Lönnqvist (2014) argue that in states with a lower human development index (HDI) position, people tend to care more for their interests and close relatives than for their broader social environment. Accordingly, personal-focused values can be understood as some kind of self-protection as the relationship between values and subjective well-being is dependent on how well those values assist people to cope with their surroundings. Sortheix and Schwartz (2017) complement the argument as they explain that personal-focused values can give an edge in low egalitarian societies, compensating for unequal opportunities.

The purchase decision of Germans, in contrast, seems to be based more on social-focused values. Particular emphasis is placed on values that can be assigned to universalism, which goal is the "understanding, appreciation, tolerance, and protection for the welfare of all people and for nature" (Schwartz, 2012, p. 7). In Germany, environmental protection is considered a major challenge for the future by almost two-thirds of the population. Sustainable agricultural policy, including organic farming, is of particular importance for a majority of people (59%; Umweltbundesamt, 2020). This observation could be explained by a well-defined mental frame - due to omnipresent political and public discussions concerning environmental protection and sustainability, environmental education, and a broad view on social impacts of environmental performance due to widespread media reporting and coverage. Moreover, also Germany with its temperate climate experienced the negative effects of climate change in recent years (e.g. heat, floods, droughts, and forest diebacks), which is why people are

interested in environmental protection, not least to ensure their high quality of life (Umweltbundesamt, 2021).

Baker et al. (2004) also observed an "us orientation" among Germans when choosing non-genetically modified foods, as it is beneficial to society at large. Sortheix and Lönnqvist (2014) argue that countries with a high HDI, such as Germany, are more socially focused as they have fewer limitations to achieve their personal goals, which enable them to follow and contribute to prosocial behavior. Sortheix and Schwartz (2017) further outline that egalitarian societies rather follow social-focused values to pursue harmony and preserve cooperative relations, as these attributes are required to coordinate groups that follow common goals such as environmental protection and social responsibility.

5.3. Implications

From a theoretical point of view, this study contributes to the existing literature in three ways. First, the findings contribute to a better knowledge of consumers' purchase intention by providing evidence on various new ACV sequences of organic food purchases. The research method revealed new types of attributes, consequences, and values on which further research can be based. Secondly, this is one of the few studies that conducted qualitative in-depth interviews following MEC theory and STV and the first study that applies MEC theory in the field of organic food in Thailand. As the number of existing MEC studies on organic food is small, this paper offers a more thorough and theory-based examination of an increasingly important research field. Thirdly, this is one of the first research that applied STV to disclose how personal and social-focused values shape the purchase intention for organics, thereby following the suggestion of Chen et al. (2015) to apply STV for cross-cultural comparison purposes.

In terms of managerial implications, marketers should on the one hand use the findings of this paper to better address consumers' needs to influence their purchase behavior towards increased organic food consumption. Accordingly, we suggest using the identified ACV sequences for target-oriented communication and marketing strategies (Zanoli and Naspetti, 2002). The findings can be applied to develop storylines for advertisements, that create positive associations and position the products strategically (Fotopoulos et al., 2002; Kirchhoff et al., 2011). On the other hand, the cultural background should also be taken into account, as the study has shown that the elements and priorities of ACV can vary across countries. Accordingly, a possible storyline for a German advertising campaign could be to highlight the absence of pesticides and chemicals in organic food, which is beneficial for personal health so that one can still live an active and healthy life in old age. In Thailand, personal health is also a focus, but with the aim of being able to take good care of one's family.

From a social point of view, encouraging and developing organic agriculture and consumption corresponds to the sustainable development goals advocated by the United Nations. However, the production and marketing of organic products, and even consumer education, can vary in developed and developing countries. Therefore, based on our conclusions, producers and marketers of organic products can have a deeper understanding of the similarity and heterogeneity of consumer behavior in different cultural and market environments, so that they can adjust their practices accordingly and make more targeted production and sales of organic products. Such adjustments will make organic products more and more popular, especially in developing countries, and consumers will have more opportunities to know about and consume organic products. Ultimately, our consumption pattern tends to be more sustainable.

6. Conclusion

This study applied qualitative MEC theory and STV for results interpretation to answer the research question of identifying which values influence consumers' purchase intention for organic food in Thailand and Germany. The study focused on the underlying values to understand how consumers associate their knowledge about organics' attributes with the personal benefits arising from their consumption (Costa et al., 2004; Kirchhoff et al., 2011; Zanoli and Naspetti, 2002). To derive similarities and differences in value perception between international markets, the developed organic food market of Germany and the emerging Asian market of Thailand were examined, using STV. The research revealed that German and Thai consumers were both motivated by the values 'quality of personal life' and 'personal well-being' to purchase organic food. Differences arise in the perception of 'social responsibility' and 'health of environment', which was emphasized in Germany, versus 'responsibility for family' which was highlighted in Thailand as a motivator for organic consumption.

Focusing on the five most important values in each country, the survey applied the circular structure of the refined STV of Schwartz et al. (2012) for cross-cultural comparison. Concluding a more personal-focused value system in Thailand, respectively a rather social-focused one in Germany that motivates consumers to purchase organics.

This paper contributes to the literature as it is one of the few qualitative studies on organic food purchase intention using MEC and STV and the first one conducted in Thailand. The findings suggest better addressing consumers' values and needs to increase organic food consumption as this benefits not only the environment and personal health but also society at large.

7. Limitations and future research

As with all empirical studies, this paper has several limitations from which further research approaches can be derived. First, the data is based on a limited number of personal interviews, which could arouse answers according to social desirability and may therefore not be representative of the general population. To reduce the social desirability bias, we made clear the pertinence and the research method of the study to the interviewees and then adjusted the way to interview. However, especially among German respondents, with their strong orientation on social goals, the answers could be influenced by conformity and the desire to comply with public values and common normative expectations. This may have led to 'health of environment' and 'social responsibility' as the most frequently named values in the interviews. A survey situation without the physical presence of an interviewer, for example via a quantitative computer-administered survey, may reduce the effect of social desirability bias and could significantly extend the sample size in future studies.

Second, limitations may also result from the heterogeneous samples, as Thai interviewees were on average some years older than the Germans. This may result in different life goals and priorities, e.g. a higher focus on 'responsibility for family' among the Thai people who probably already have children, whereas the German sample is not yet thinking about family planning. To limit this bias, we collected data according to the different market conditions: convenience sampling in Germany where organic food is rather common, and snowball sampling in Thailand, where organic food is still a niche product. Yet, we suggest complementing the present study with a larger and more diverse sample to produce further empirical evidence concerning our basic findings. Data from other developed and emerging countries should also be collected to validate the observed elements, especially values.

Thirdly, another limitation lies in the context of decision-makers in social and personal-driven markets. Generally speaking, values tend to remain fairly consistent over time, in various situations and contexts (Schwartz, 1992). However, personal values are not static and can evolve (Schwartz, 2012). Accordingly, findings of the socially motivated Thai customers seem more consistent than those from Germany, as personal-focused values can change over time. Decision-makers must consider evolving personal values when applying our findings. Monitoring changes in consumer motivations and values is vital, requiring

adaptable strategies and ongoing longitudinal studies for effective marketing in personal-driven markets.

CRediT authorship contribution statement

Julia Winterstein: Conceptualization, Data curation, Formal analysis, Investigation, Project administration, Validation, Visualization, Writing – original draft, Writing – review & editing. **Bing Zhu:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Resources, Validation, Visualization, Writing – original draft, Writing – review & editing. **André Habisch:** Conceptualization, Resources, Supervision, Writing - review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Appendix AConsumer Behavior Profile of Interviewees

	Germany (n = 31)	Thailand (n = 30)
	Frequency	Frequency
Shopping Frequency		
\leq 4x per month	58,1%	93,4%
5–6x per month	22,6%	0,0%
7–9x per month	12,9%	0,0%
\geq 10 per month	6,4%	3,3%
Irregular	0,0%	3,3%
Arithmetic Mean	5,7x per month	2,8x per month
Median	5x per month	2x per month
Shopping Channels		
Online & offline	0,0%	6,7%
Offline	100,0%	93,3%
Offline Shopping Channels		
Retail	100,0%	96,7%
Weekly market	22,6%	3,3%
Farmer's shop	12,9%	0,0%
Spending per Month		
≤ 30€/3000 THB	41,9%	73,3%
31-50€/3001-5000 THB	16,1%	16,7%
51–100€/5001–10,000 THB	38,7%	6,7%
> 100€/> 10,000 THB	3,2%	3,3%
Arithmetic Mean	51 €	3.300,00 THB
Median	40 €	2.000,00 THB
Top 5 Organic Food Product Categorie	es	
1st	Vegetable	Fruit
2nd	Eggs	Vegetable
3rd	Fruit	Meat
4th	Dairy	Dairy
5th	Meat	Snacks

Appendix BInterview Guidelines

Interviewee No.:	Place/Phone:
Gender:	Duration:
Year of Birth:	Age:

(1) Definition of "organic food" which was read out to the interviewees

The term "organic food" refers to food from organic agriculture, including cultivation techniques and species-appropriate animal husbandry. When using the organic label, producers have to meet specific criteria, which are among others:

•No chemical-synthetic pesticides and fertilizers

•Maximum number of animals per hectare

•Appropriate housing conditions

•Ban on preventive antibiotic treatment

•Ban on genetic engineering

Processing of only 53 approved additives

[•]Organic animal feed

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(2) Filter question

Q1. Filter question (involvement is required to participate): Are you involved in the decision-making process for grocery shopping?

• Yes

• No

(3) Consumer behavior

Q2. How often do you purchase organic food per month?

Q3. From which channel have you bought organic food, online or offline? Please specify.

- Online: ______
- Offline: _____

Q4. How much do you normally spend on organic food per month?

Q5. What organic food have you purchased within the last month?

(4) MEC analysis

Q6. Attributes.

In this part, we ask interviewees to identify three attributes that primarily influenced their choice of organic food and why the attributes are important to them.

Q7. Consequences.

In this part, we ask questions regarding functional and psychological benefits according to the previously named attributes. Some interviewees may answer as what we expect, but some do not; consequently, we have to ask more questions till we can conclude the consequences.

Q8. Values.

In this part, we continue to ask questions regarding the lifestyle, activity, and value system that corresponds to the previous answers to conclude on the underlying values. So, the questions will be varied.

(5) Socio-demographics

Q9. What is your housing situation?

- Living alone
- Living together with my family
- Living together with my partner
- Living in a shared-flat

Q10. What is your monthly net income? (personal or household)

• _____ €/THB

Not specified

Q11. What is your highest school leaving certificate?

Secondary School

- High School Certificate
- University/College
- Others

Q12. What is your employment status?

- Student
- Private-sector employed
- Public-sector employed
- Government officer

- Self-employed
- Others

References

- Adams, W.C., 2015. Conducting semi-structured interviews. In: Newcomer, K.E., Hatry, H.P., Wholey, J.S. (Eds.), Handbook of Practical Program Evaluation. John Wiley & Sons, Inc, Hoboken, NJ, USA, pp. 492–505. https://doi.org/10.1002/ 9781119171386.ch19.
- Aghasafari, H., Karbasi, A., Mohammadi, H., Calisti, R., 2020. Determination of the best strategies for development of organic farming: a SWOT – fuzzy Analytic Network Process approach. J. Clean. Prod. 277, 124039 https://doi.org/10.1016/j. jclepro.2020.124039.
- Ahmed, N., Li, C., Khan, A., Qalati, S.A., Naz, S., Rana, F., 2021. Purchase intention toward organic food among young consumers using theory of planned behavior: role of environmental concerns and environmental awareness. J. Environ. Plann. Manag. 64 (5), 796–822. https://doi.org/10.1080/09640568.2020.1785404.
- Arsil, P., Li, E., Bruwer, J., 2016. Using means-end chain analysis to reveal consumers' motivation for buying local foods: an exploratory study. Gadjah Mada Int. J. Bus. 18 (3), 285–300.
- Arsil, P., Tey, Y.S., Brindal, M., Phua, C.U., Liana, D., 2018. Personal values underlying halal food consumption: evidence from Indonesia and Malaysia. Br. Food J. 120 (11), 2524–2538. https://doi.org/10.1108/BFJ-09-2017-0519.
- Atlas, Cultural, 2021. Thai Culture: Family Household Structure and Interactions. Retrieved from. https://culturalatlas.sbs.com.au/thai-culture/thai-culture-family.
- Baker, S., Thompson, K.E., Engelken, J., Huntley, K., 2004. Mapping the values driving organic food choice. Eur. J. Market. 38 (8), 995–1012. https://doi.org/10.1108/ 03090560410539131.
- Bech-Larsen, T., Nielsen, N.A., Grunert, K.G., Sørensen, E., 1997. Attributes of Low Involvement Products-A Comparison of Five Elicitation Techniques and a Test of Their Nomological Validity. Aarhus Business School.
- Birt, L., Scott, S., Cavers, D., Campbell, C., Walter, F., 2016. Member checking: a tool to enhance trustworthiness or merely a nod to validation? Qual. Health Res. 26 (13), 1802–1811. https://doi.org/10.1177/1049732316654870.
- Bispo Júnior, J.P., 2022. Social desirability bias in qualitative health research. Rev. Saude Publica 56, 101. https://doi.org/10.11606/s1518-8787.2022056004164.
- BÖLW, 2022. Branchen Report 2022. Ökologische Lebensmittelwirtschaft. Retrieved from. https://www.boelw.de/fileadmin/user_upload/Dokumente/Zahlen_und_Fak ten/Broschuere_2022/BOELW_Branchenreport2022.pdf.
- Botschen, G., Hemetsberger, A., 1998. Diagnosing means-end structures to determine the degree of potential marketing program standardization. J. Bus. Res. 42 (2), 151–159. https://doi.org/10.1016/S0148-2963(97)00116-1.
- Chen, N.-H., Lee, C.-H., Huang, C.-T., 2015. Why buy organic rice? genetic algorithmbased fuzzy association mining rules for means-end chain data. Int. J. Consum. Stud. 39 (6), 692–707. https://doi.org/10.1111/ijcs.12210.
- Costa, A., Dekker, M., Jongen, W., 2004. An overview of means-end theory: potential application in consumer-oriented food product design. Trends Food Sci. Technol. 15 (7–8), 403–415. https://doi.org/10.1016/j.tifs.2004.02.005.
- Davidov, E., Schmidt, P., Schwartz, S.H., 2008. Bringing values back in: the adequacy of the European social survey to measure values in 20 countries. Publ. Opin. Q. 72 (3), 420–445. https://doi.org/10.1093/poq/nfn035.
- European Commission, 2023. Organics at a Glance. Retrieved from. https://agriculture. ec.europa.eu/farming/organic-farming/organics-glance_en.
- FAO. What are the environmental benefits of organic agriculture (n.a.). Retrieved from. https://www.fao.org/organicag/oa-faq/oa-faq6/en/.
- Feldman, G., Chao, M.M., Farh, J.-L., Bardi, A. [Anat], 2015. The motivation and inhibition of breaking the rules: personal values structures predict unethicality. J. Res. Pers. 59, 69–80. https://doi.org/10.1016/j.jrp.2015.09.003.
- Fotopoulos, C., Krystallis, A., Ness, M., 2002. Consumers' motivations in purchasing "new wines" in Greece with emphasis on wine produced by organic grapes: a meansend chains approach. Unknown. https://doi.org/10.22004/ag.econ.24805.
- Global Organic Trade, 2021. Thailand Organics Dashboard from Passport. Retrieved from. https://globalorganictrade.com/country/thailand.
- Göbbel, T., 2021. Decoding Generation Y: A New Era of Consumer Behavior: How Responsibility of Corporations Can Decide whether a Millennial Buys a Product or Not. Retrieved from. https://www.rolandberger.com/en/About/Events/de/Decodin g-Generation-Y/.
- Gutman, J., 1982. A means-end chain model based on consumer categorization processes. J. Market. 46 (2), 60–72. https://doi.org/10.1177/ 002224298204600207.
- Haas, R., Sterns, J., Meixner, O., Nyob, D.I., Taar, V., 2013. Do US consumers' perceive local and organic food differently? An analysis based on means-end chain analysis and word association. Int. J. Food Syst. Dynam. 4 (3), 214–226.
- Imm Ng, S., Anne Lee, J., Soutar, G.N., 2007. Are Hofstede's and Schwartz's value frameworks congruent? Int. Market. Rev. 24 (2), 164–180. https://doi.org/10.1108/ 02651330710741802.
- Iweala, S., Spiller, A., Meyerding, S., 2019. Buy good, feel good? The influence of the warm glow of giving on the evaluation of food items with ethical claims in the U.K. and Germany. J. Clean. Prod. 215, 315–328. https://doi.org/10.1016/j. jclepro.2018.12.266.
- Kelly, G.A., 1955. The Psychology of Personal Constructs. W.W. Norton & Company, Inc, New York.

- Kilwinger, F.B.M., Dam, Y.K., 2021. Methodological considerations on the means-end chain analysis revisited. Psychol. Market. 38 (9), 1513–1524. https://doi.org/ 10.1002/mar.21521.
- Kirchhoff, S., Smyth, H., Sanderson, J., Sultanbawa, Y., Gething, K., 2011. Increasing vegetable consumption: a means-end chain approach. Br. Food J. 113 (8), 1031–1044. https://doi.org/10.1108/00070701111153779.
- Knoppen, D., Saris, W., 2009. Schwartz's Theory of Human Values: Balancing Homogeneity of Reflective Items and Theoretical Coverage (RECSM Working Paper 9). Retrieved from. http://hdl.handle.net/10230/28314.
- Koscielniak, M., Bojanowska, A., 2019. The role of personal values and student achievement in academic dishonesty. Front. Psychol. 10, 1887. https://doi.org/ 10.3389/fpsyg.2019.01887.
- Leão, A.L. M.d.S., Mello, S. C. B. de, 2007. The means-end approach to understanding customer values of a on-line newspaper. BAR - Brazilian Administration Review 4 (1), 1–20. https://doi.org/10.1590/S1807-76922007000100002.
- Mainardes, E.W., Araujo, D. V. B. de, Lasso, S., Andrade, D.M., 2017. Influences on the intention to buy organic food in an emerging market. Market. Intell. Plann. 35 (7), 858–876. https://doi.org/10.1108/MIP-04-2017-0067.
- Morse, J.M., Coulehan, J., 2015. Maintaining confidentiality in qualitative publications. Qual. Health Res. 25 (2), 151–152. https://doi.org/10.1177/1049732314563489.
- Perreault, W.D., Leigh, L.E., 1989. Reliability of nominal data based on qualitative judgments. J. Market. Res. 26 (2), 135. https://doi.org/10.2307/3172601.
- Pham, T.H., Nguyen, T.N., Phan, T.T.H., Nguyen, N.T., 2019. Evaluating the purchase behaviour of organic food by young consumers in an emerging market economy. J. Strat. Market. 27 (6), 540–556. https://doi.org/10.1080/ 0965254X.2018.1447984.
- Puska, P., 2019. Does organic food consumption signal prosociality? An application of schwartz's value theory. J. Food Prod. Market. 25 (2), 207–231. https://doi.org/ 10.1080/10454446.2018.1522286.
- Reynolds, T.J., Gutman, J., 1988. Laddering theory, method, analysis and interpretation. J. Advert. Res. 28 (1), 11–31.
- Reynolds, T.J., Olson, J.C. (Eds.), 2001. Understanding Consumer Decision Making: the Means-End Approach to Marketing and Advertising Strategy. Lawrence Erlbaum Associates Publishers.
- Rickaby, M.A., Glass, J., Fernie, S., 2020. Conceptualizing the relationship between personal values and sustainability—a TMO case study. Adm. Sci. 10 (1), 15. https:// doi.org/10.3390/admsci10010015.
- Ritchie, J., Lewis, J., Elam, G., 2003. Designing and Selecting Samples. SAGE publications, Thousand Oaks, CA. Retrieved from. https://mthoyibi.files.wordpress. com/2011/10/qualitative-research-practice_a-guide-for-social-science-students-an d-researchers_jane-ritchie-and-jane-lewis-eds_20031.pdf.
- Roitner-Schobesberger, B., Darnhofer, I., Somsook, S., Vogl, C.R., 2008. Consumer perceptions of organic foods in Bangkok, Thailand. Food Pol. 33 (2), 112–121.
- Rokeach, M., 1973. The Nature of Human Values. Free Press. Rosenberg, M.J., 1956. Cognitive structure and attitudinal affect. J. Abnorm. Psychol. 53
- (3), 367–372. https://doi.org/10.1037/h0044579.
- Saaka, A., Sidon, C., Blake, B.F., 2004. Laddering. A "How to Do it" Manual–With a Note of Caution. Research Reports in Consumer Behavior: How To Series. Cleveland State University, Ohio, US.
- Schwartz, S.H., 1992. Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. In: Advances in Experimental Social Psychology. Advances in Experimental Social Psychology, vol. 25. Elsevier, pp. 1–65. https://doi.org/10.1016/S0065-2601(08)60281-6 vol. 25.
- Schwartz, S.H., 1994. Are there universal aspects in the structure and contents of human values? J. Soc. Issues 50 (4), 19–45.
- Schwartz, S.H., 2006. A theory of cultural value orientations: explication and applications. Comp. Sociol. 5 (2), 137–182. https://doi.org/10.1163/ 156913306778667357.
- Schwartz, S.H., 2012. An overview of the Schwartz theory of basic values. Online Readings in Psychology and Culture 2 (1). https://doi.org/10.9707/2307-0919.1116.
- Schwartz, S.H., 2015. Basic individual values: sources and consequences. In: Brosch, T., Sander, D. (Eds.), Handbook of Value. Oxford University Press, Oxford, pp. 63–84.
- Schwartz, S.H., Bardi, A.[A.], 2001. Value hierarchies across cultures. J. Cross Cult. Psychol. 32 (3), 268–290. https://doi.org/10.1177/0022022101032003002.
- Schwartz, S.H., Cieciuch, J., Vecchione, M., Davidov, E., Fischer, R., Beierlein, C., Konty, M., 2012. Refining the theory of basic individual values. Journal of Personality and Social Psychology 103 (4), 663–688. https://doi.org/10.1037/ a0029393.
- Sortheix, F.M., Lönnqvist, J.-E., 2014. Personal value priorities and life satisfaction in europe. J. Cross Cult. Psychol. 45 (2), 282–299. https://doi.org/10.1177/ 0022022113504621.
- Sortheix, F.M., Schwartz, S.H., 2017. Values that underlie and undermine well–being: variability across countries. Eur. J. Pers. 31 (2), 187–201. https://doi.org/10.1002/ per.2096.
- Srikes, M., Louvieris, P., Collins, C., 2009. The impact of culture on mobile phone purchasing: a comparison between Thai and British consumers. In: 17th European Conference on Information Systems, ECIS 2009, 2012-2023.
- Statista, 2021. Forecast of the Real Total Consumer Spending on Food in Thailand from 2010 to 2025 (In Million U.S. Dollars). Retrieved from. https://www.statista.com/f

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orecasts/1158607/real-food-and-beverages-consumer-spending-forecast-in-thailand

Storkerson, P., 2010. Naturalistic cognition: a research paradigm for human-centered design. J. Res. Pract. 6 (2), M12.

- Theparat, C., 2020. Govt Pushes B1.9bn Organic Hub Plan. Retrieved from. https://www .bangkokpost.com/thailand/general/1984031/govt-pushes-b1-9bn-organic-hub-p lan.
- Thøgersen, J., 2009. The motivational roots of norms for environmentally responsible behavior. Basic Appl. Soc. Psychol. 31 (4), 348–362. https://doi.org/10.1080/ 01973530903317144.
- Thøgersen, J., Barcellos, M. D. de, Perin, M.G., Zhou, Y., 2015. Consumer buying motives and attitudes towards organic food in two emerging markets. Int. Market. Rev. 32 (3/4), 389–413. https://doi.org/10.1108/IMR-06-2013-0123.
- Torres, C., Nascimento, G.T., Schwartz, S.H., 2016. The Refined Theory of Values: associations with behavior and evidences of discriminative and predictive validity. Psicol. Usp. 27 (2), 341–356.
- Uijl, L. C. den, Kremer, S., Jager, G., van der Stelt, A.J., Graaf, C. de, Gibson, P., Lawlor, J.B., 2015. That's why I take my ONS. Means-end chain as a novel approach to elucidate the personally relevant factors driving ONS consumption in nutritionally

frail elderly users. Appetite 89, 33-40. https://doi.org/10.1016/j. appet.2015.01.016.

- Umweltbundesamt, 2020. Environmental Awareness in Germany: Environmental Protection and Climate Action as a Key Challenge. Retrieved from. https://www.um weltbundesamt.de/en/topics/sustainability-strategies-international/environmenta l-awareness-in-germany.
- Umweltbundesamt, 2021. New Study Shows Risks of Climate Change in Germany. Retrieved from. https://www.umweltbundesamt.de/en/press/pressinformation/n ew-study-shows-risks-of-climate-change-in-germany.
- Veludo-de-Oliveira, T.M., Ikeda, A.A., Campomar, M.C., 2006. Discussing laddering application by the means-end chain theory. Qual. Rep. 11 (4), 626–642.
- Walker, S.N., Sechrist, K.R., Pender, N.J., 1987. The Health-Promoting Lifestyle Profile: development and psychometric characteristics. Nurs. Res. 36 (2), 76–81. Retrieved from PMID: 3644262.
- Wang, X., Pacho, F., Liu, J., Kajungiro, R., 2019. Factors influencing organic food purchase intention in developing countries and the moderating role of knowledge. Sustainability 11 (1), 209. https://doi.org/10.3390/su11010209.
- Zanoli, R., Naspetti, S., 2002. Consumer motivations in the purchase of organic food. Br. Food J. 104 (8), 643–653. https://doi.org/10.1108/00070700210425930.