

## **The Power of Habits: Understanding the Impact of Personal Values and Attitudes on Customer Food Choices and Sustainable Eating Behaviours**

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### **ABSTRACT**

This study examines how habits affect consumer's food preferences and sustainable eating practices. The study uses quantitative data to examine the relationship between individual values and attitudes toward consumer food preferences and sustainable eating practices and also uses structural equation modeling from the sample of three hundred people from four IT companies. According to the study's findings, consumer food preferences and sustainable eating habits are significantly influenced by personal beliefs and attitudes. Additionally, the findings imply that practices strongly influence consumer food preferences and sustainable eating behaviors. According to the results, businesses should prioritize changing consumer behavior to encourage long-term sustainable eating habits. Overall, this study advances our knowledge of how habits might affect consumer's food preferences and sustainable eating practices.

### **INTRODUCTION**

The increased need for produced food, fuel, and fiber is putting further stress on ecosystems all around the globe as the world's population grows, becomes richer, and moves into more metropolitan areas. 26 percent of all human emissions of greenhouse gases are solely attributable to the present food supply chain [1]. In addition, the production of food utilizes significant quantities of scarce resources, such as land, and is a major contributor to the worldwide decline in biodiversity as well as to the processes of acidification and eutrophication. [2] Only in Sweden do food-related carbon footprints make up 31% of the total customer-based greenhouse gas ( $CO_2$ ) equivalents that Swedish homes emit for each person annually.

A crucial factor in the success of industrialized nations' efforts over the last century to address their historically poor levels of food security is the rise of the agrion industry. The processing of food has been an essential factor since it has enabled an increase in the expected lifespan of food items, a reduction in the amount of food lost and wasted, and an improvement in the availability of nutrients and their optimization. However, the everyday perception of consumers focuses on additional factors than these achievements [10].

People in contemporary cultures have- a perception of a larger distance between themselves and the food makers (for example, in regards to how agriculture is produced, where it is produced, etc.) as a result of more globalized markets and higher levels of processing in the food chain.

Several studies have been conducted on the impact of values and attitudes on food choices and sustainable eating behaviors with different approaches. Some of them are discussed below.

[4] Consumers' preferences for natural items reveal three distinct interpretations of health. The concept of health can be viewed through various lenses, including purity and pleasure. The results of this investigation have important ramifications for future research on the use of organic food. [5] The purpose of this research was to inquire into the perspectives of Kurdish customers about organic and healthy food options. According to the data, worries over one's

health were the primary motivation for selecting organic and healthy food options. Through qualitative research that is based on deep conversations with decision-makers all along the food value chain. According to the findings, consumers are aware of various social abuse practices; nonetheless, they have a difficult time gaining access to information that may help them make more informed judgments. [6] By investigating the gap between attitudes and behaviors about sustainable clothing goods (SAP), this study aims to pinpoint the psychological drivers behind Chinese consumers' behavioral intentions to purchase environmentally friendly apparel products (SAP) and the barriers that stand in their way. This study created a research model, which was then experimentally evaluated by gathering information via surveys that were given out in Indonesia.

[7] The findings, based on a sample of 200 respondents, show that only social value influences green consumer behavior positively; functional value (price), there is no correlation between functionality (quality), eco value, situational value, epistemic value, or emotional worth.

The study will consider relational hypotheses for the research. The following hypotheses are developed for the study:

H1: There is a considerable connection between the factors that inspire one's food choice and their eating habits.

H2: There is a considerable correlation between eating behaviors and environmentally responsible for food selections.

H3: There is a considerable association between environmentally conscious eating decisions and the motivations behind such decisions.

H4: There is a significant relationship between eating habits and sustainable eating behaviors mediated by food choices

## THEORETICAL BACKGROUND

### Eating habits

[7] Eating habits are patterns of food consumption, including the type of food, the timing of meals, and the quantity of food eaten. Healthy eating habits are important for overall health and well-being. Unhealthy eating habits, on the other hand, can lead to several chronic diseases such as obesity, diabetes, heart disease, and stroke. It is important to develop healthy eating habits early in life. It is crucial to have a healthy diet that consists of a range of meals from every one of the food categories. Eating breakfast, lunch, and dinner at regular times, and limiting snacks in between meals, can help build healthy habits. Additionally, limiting sugary drinks and processed foods, as well as avoiding over eating, can help to form healthy eating habits. Establishing a routine is also key to developing healthy eating habits.

### Food choice motivates

[7] Food choice is an important factor in maintaining a healthy lifestyle. The type of food we choose to eat can have a profound effect on our physical and mental well-being. Eating the right foods can help us to feel energized and motivated throughout the day, as well as help maintain a healthy weight. The appropriate meal choices may support maintaining an appropriate weight, lower the risk of chronic disease development, and enhance general health. It is possible to make sure that the body is receiving the vital nutrients it requires by eating a balanced diet consisting of fruits, vegetables, lean meats, whole grains, nuts, or seeds. Additionally, limiting processed and refined foods can help to reduce the amount of unhealthy fats and empty calories that are consumed. In addition to the physical benefits of eating healthy, making the appropriate eating choices may improve mental wellness as well. A healthy, balanced diet may help to lessen the signs of anxiety and depression and even enhance cognitive performance. It has been shown that foods rich in antioxidants, omega-3 fats, and other nutrients may improve mental health.

### Sustainable eating choices

[7] Sustainable eating is the practice of making food choices that are healthy for both the environment and the individual. This can include choosing foods that are locally sourced, organic, or plant-based. Sustainable eating is an important part of living an environmentally friendly lifestyle, as it can reduce the environmental impact of the food industry.

When choosing foods for a sustainable diet, it's important to consider the environmental impacts of the food production process. Local foods, for example, often require less energy to produce than foods that are transported from far away. Additionally, organic foods are grown without the use of synthetic fertilizers and pesticides, reducing the pollution and depletion of natural resources associated with conventional farming practices. Plant-based diets are also a great choice for sustainability, as they require fewer resources to produce and don't contribute to animal suffering. It's also important to consider the health benefits of sustainable eating. Locally sourced foods are often fresher, resulting in a higher nutrient content.

## METHODOLOGY

The primary objective of this research is to examine the influence of individual values and attitudes on the selection of food by customers and their adoption of sustainable eating practices. In this study, we used quantitative analysis for data collection.

### Data Collection

The data was collected through a combination of surveys; it was conducted to collect data on the effect of individual attitudes and beliefs on consumer food preferences and sustainable eating practices.

### Sampling Technique

For this study, we have considered 300 employees from four IT companies and also prepared the appropriate questions for their survey and responses collected from respondents with a full questionnaire saved for future research. A structured questionnaire was constructed to collect the data necessary for this research using a random sample approach.

### Random Sampling

A technique of gathering samples from a group of people known as random sampling ensures that every prospective participant has a comparable likelihood of being chosen as a sample. By picking a sample at random from a pool of potential recipients, one may often receive an accurate picture of the whole community. Random sampling is one of the easiest strategies for getting data from the whole population.

In the case when a sample is only picked once, the random sampling formula is as follows:

$$P = 1 - \frac{N-1}{N} \cdot \frac{N-2}{N-1} \cdots \cdots \cdots \frac{N-n}{N-(n-1)}$$

the following is the equation for random sampling if an individual sample is only selected once.

Now,  $P = \frac{n}{N}$  will be the outcome if  $1 - \left(\frac{N-n}{n}\right)$  is canceled. In addition,  $P = 1 - \left(1 - \left(\frac{1}{N}\right)\right)n$  states that it is required to offer the option of picking an example more than once.

### Inclusion Criteria

IT employees from four chosen firms were willing to participate in the study regardless of their personal information.

### Exclusion Criteria

Employees with other companies who were not willing to participate in the study and those who were not available at the place during the period of data collection.

## Data Analysis

To determine the effect of one's personal beliefs and values on consumer food selections and sustainable eating habits, data were collected using the random sample approach. Below is a brief explanation of the use of structural equation modeling (SEM).

## Structural Equation Modelling

Structural equation modeling (SEM), a multivariate, hypothesis-driven technique, is based on a model of the structure that conveys a hypothesis about the causal links between multiple variables. In the context of functional magnetic resonance imaging (fMRI), these variables, for instance, are defined by the body's oxygen cutoff point-dependent (BOLD) intervals of  $y_1, y_2, y_3, \dots, y_n$  separate brain regions and the hypothesized causal links are based on connections between the portions of the brain that are physically possible. The referred to as route factor is used to characterize the strength of each link; it functions in a manner that is analogous to that of a partial coefficient of regress in that it explains how the change of  $y_i$  is dependent on the variance of  $y_j$ , provided that all other impacts on  $y_j$  are maintained at their original levels.

The equation provides a summary of the conventional SEM statistical model.

$$y = Ay + u$$

where  $y$  is an array of  $n$  local time series, and each of them has  $s$  scans, as well as  $u$  is a matrix of zero-mean Gaussian error parts that drive the simulation system.  $A$  is a matrix of route Coefficients that contain zeros for any connections that don't exist. Parameter estimation is achieved by minimizing the difference between the actual and the modeled correlation matrix. Equation transformation allows for the computation of any particular set of parameters.

$$y = (I - A)^{-1}u$$

$$\Sigma = yy^T$$

$$\Sigma = (I - A)^{-1}uu^T(I - A)^{-1T}$$

On the other hand,  $I$  is a representation of the identity matrix. The observed time series  $y$  is generated by applying the outcome of the interregional link matrix, which is to say, to the Stochastic innovation  $u$ , and the initial part of equations may be considered a model that creates knowledge of how the system functions originates from its connectional structure.

**RESULTS**

**Analysis**

fig 1 Demographic Summary

Demographic variable		Frequency	Percent	Mean	Std
Gender	Male	157	52.3	1.4767	0.5003
	Female	143	47.7		
	Total	300	100.0		
Age	25-30	85	28.3	2.0800	0.8015
	31-35	106	35.3		
	36-40	109	36.3		
	Total	300	100.0		
Income	20-30	60	20.0	2.6000	1.0881
	30-40	81	27.0		
	40-50	78	26.0		
	above50	81	27.0		
	Total	300	100.0		
Marital_status	Married	147	49.0	1.5100	0.5007
	Unmarried	153	51.0		
	Total	300	100.0		

The above table shows the demographic summary of the study. In this study total of 300 respondents participated, 157 respondents were male respondents and 143 were female respondents. Their age ranges from 25 to 40, and this is divided into three groups (25-30, 31-35, 36-40). 85 respondent’s age varies in between 25-30, 106 respondent’s age varies in between 31- 35 and 109 are in between 36-40. Their monthly income is also considered in the study, out of 300 respondents, 60 respondents have with salary of 20-30 thousand, 81 with 30-40 thousand, 78 with 40-50 thousand and 81 are earning above 50 thousand. of these 300 respondents, 147 are Married and 153 are Unmarried.

**Mediating Analysis**

We used Structural Equation Modelling (SEM) with the AMOS to examine the impact of Eating Habits on Sustainable eating choices with Food choice motivates as a moderating factor. We tested Food choice motivates as a moderator as part of hypotheses testing.

Table1 Regression Weights:(Group number1 -Default Model)

Paths	Estimate	S.E.	C.R.	P	Label
ZFood_choice_motivates <--- ZEating_Habits	.096	.048	1.999	.046	H1supported
ZSustainable_Eating_choice <--- ZEating_Habits	.159	.059	2.712	.007	H2supported
ZSustainable_Eating_choice <--- ZFood_choice_motivates	.143	.070	2.031	.042	H3supported

According to hypotheses generated by route analysis, Eating Habits are strongly and positively related to Food choice motivates ( $\beta=.096$ ,  $P=.046$ ). Sustainable eating choice is positively and strongly correlated with Eating Habits ( $\beta=.159$ ,  $P=.005$ ). Sustainable Eating choice is positively and strongly correlated with Food choice motivates ( $\beta=.143$ ,  $P.042$ ).

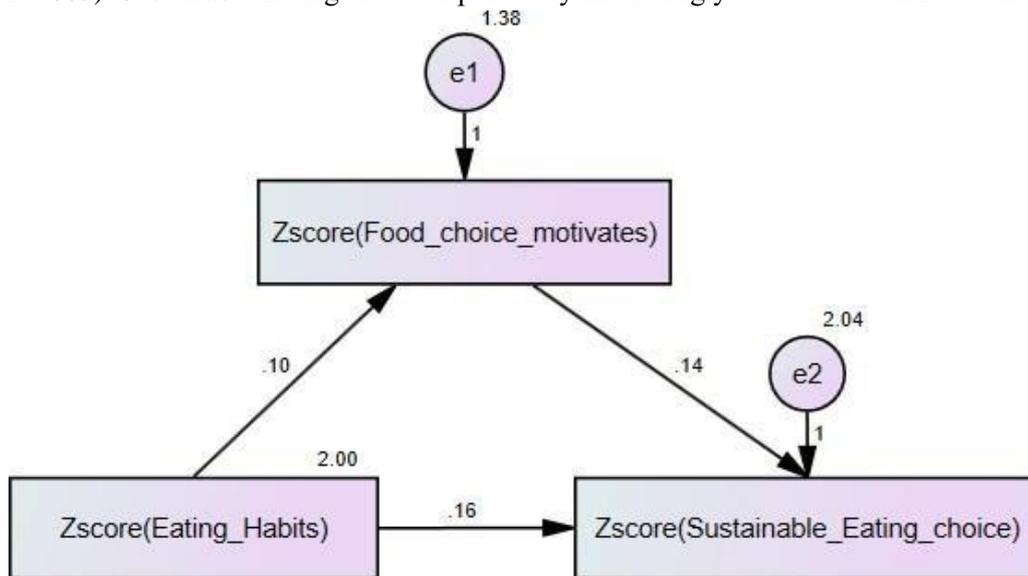


figure 2 structural equation model

table 2 direct and indirect effect

Relationship	Direct Effect	Indirect Effect	P Value	Remarks
Z Eating_Habits → Z Food_choice_motivates → Z Sustainable_Eating_choice	0.159	0.014	0.031	H4 supported

The study looked at the relationship between Eating Habits and Sustainable Eating choices as it was mediated by Food choice motivates. The findings supported H4 by showing a strong indirect influence of Eating Habits on Sustainable Eating choice that was both positive and significant ( $b=0.014$ ,  $p=.031$ ). Moreover, the direct impact of Eating Habits on Sustainable Eating choices was also shown to be significant ( $b=0.159$ ,  $p=0.031$ ) in the presence of the mediator. So, Food choice motivates served as a kind of mediating factor in the relationship between Eating Habits and Sustainable Eating choices.

Table 3 mediating analysis

Variable	Value
Chi-square value ( $\chi^2$ )	16.613
Degrees of freedom ( $d_f$ )	3
$C_{min}/d_f$	5.538
P value	0.001
GFI	0.962
RFI	0.936
NFI	0.934
IF	0.967
CFI	0.932
RMR	0.06
RMSEA	0.07

The structural model's quality of fit, on the other hand, was satisfactory as an illustration of the sample data ( $\chi^2(28) = 16.613$ , NFI=0.934; IFI=0.967, GFI=0.962, RFI=0.936 and CFI= 0.932 which is much larger than the 0.90 criteria as suggested and 0.95. Similarly, RMR = 0.06 and RMSEA= 0.07 values are lower than the 0.080 critical value. Results indicated a good fit for the model presented including RMSEA of 0.07, RMR of 0.06, GFI of 0.962, and CFI of .932.

## CONCLUSION

In conclusion, personal values and attitudes have a significant impact on customer food choices and sustainable eating behaviors. People's values and attitudes are often shaped by their culture, lifestyle, and family environment, and they will ultimately influence the types of food they purchase and consume. People with a higher environmental consciousness will likely be more likely to choose sustainable food options and avoid those that are environmentally damaging. On the other hand, those who are more concerned about convenience and price may be more likely to choose less sustainable options. The food industry must take all of these factors into consideration when designing its products and marketing strategies. Companies can use their knowledge of customer values and attitudes to create products and campaigns that meet the needs of their target audiences, as well as promote sustainable eating behaviors. Furthermore, restaurants and other food providers should strive to provide more healthy and sustainable options, making it easier for customers to make better choices. Ultimately, personal values and attitudes play a key role in determining customer food choices and sustainable eating behaviors. By understanding these factors, food businesses can create more effective strategies to promote sustainable food consumption, while also increasing customer satisfaction.

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