







# The Influence of Health Consciousness, Environmental Concern, and Theory of Planned Behavior (TPB) on the Intention to Purchase Organic Food



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**Abstract** The purpose of this paper is to examine the effects of health consciousness environmental concern and the factors of the Theory of Planned Behavior (TPB) (attitude, subjective norms, and perceived behavioral control) on the intention to purchase organic food. The data for this study were collected using a questionnaire that contained 18 items. A convenient sample of 210 Greek individuals was included in the study (among the 1000 employees of a Greek university). Data analysis was conducted using SPSS version 24 and Jamovi. Results illustrate that health consciousness affect indirectly and positively the intention to purchase organic food through attitude. Attitude, subjective norms, and perceived behavioral control have a positive and direct relationship with intention to purchase organic food. Furthermore, health consciousness and environmental concern affect positive attitude. This study can provide insight into the key factors that contribute to the intention to buy organic food. In different contexts, additional variables may enhance the validity of these findings, and latent variables might confound them. Based on the findings of this study, society, organizations, and policy makers could support organic food producers.

**Keywords** Intention to Purchase Organic Food · Theory of Planned Behavior · Health Consciousness · Environmental Concern

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## 1 Introduction

Nutrition is an important factor in maintaining good health. Over the past few years, consumers have switched from conventional to organic food and changed their eating habits accordingly [1, 2]. The purpose of this paper is to examine the effects of health consciousness environmental concern and the factors of TPB (attitude, subjective norms and perceived behavioral control) on the intention to purchase organic food. Using theoretical perspectives and empirical analysis, we contribute to the larger discourse on the intention to purchase organic food. A key factor that we consider to be important when evaluating the intention to purchase organic food is health consciousness, environmental concern, and TPB [1, 3].

Although previous research has tested factors such as health consciousness, environmental concern, and the TPB framework [1–5], our study distinguishes itself by applying these concepts in a novel context. Specifically, we focus on Greek consumers, a demographic that has not been extensively studied in the existing literature on organic food purchasing intention. By utilizing both SPSS and Jamovi program for data analysis, we ensure efficient and accessible processing, enabling us to draw meaningful insights into the purchasing intention of organic food. This methodological approach, combined with the cultural context, sets our study apart and contributes fresh perspectives to the discourse on organic food consumption.

## 2 Theoretical Background

The health of consumers is an important factor to consider when purchasing food products. Health-conscious consumers tend to have the intention to purchase organic food [1, 4]. The concern an individual has for the environment plays a significant role in environmental research, which is directly related to their behavior toward the environment. Environmental concerns directly influence the intention of consumers to purchase organic food [1, 5]. In light of the above, the following hypotheses are proposed.

**H1:** Health consciousness affects positively the intention to purchase organic food

**H2:** Environmental concern affects positively the intention to purchase organic food

TPB is a common expectancy-value model used to predict and explain food choice. Behavior is determined by behavioral intention, which is comprised of attitudes, subjective norms, and perceived behavioral control [6–9]. Based on the findings of this study, an extended TPB model is effective in predicting or explaining food purchase intentions for organic foods [10, 11]. A consumer's attitude toward organic food can be characterized by their beliefs about its health benefits, environmental sustainability, and ethics. A positive attitude toward organic food is associated with a stronger intention to purchase it. Positive attitudes toward organic food are associated

with an intention to buy it. According to subjective norms, if someone perceives that important people in their lives expect them to buy organic food, they are more likely to do so. Several studies indicate that subjective norms influence positively consumers' intentions to purchase organic food. Individuals are more likely to purchase organic food if they feel that their peers or social circles support the purchase of organic food. An individual's perceived behavioral control reflects how they perceive their ability to perform a behavior. Individuals intend to purchase organic food taking into consideration factors like availability, affordability, and knowledge about organic foods. Having reduced barriers to purchasing organic food (e.g., greater affordability and availability) leads to an increased intention to purchase it [1, 12–19]. As a result of the above, we propose the following hypotheses.

**H3:** Attitude affects positively the intention to purchase organic food

**H4:** Subjective norms affect positively the intention to purchase organic food

**H5:** Perceived behavioral control affects positively the intention to purchase organic food

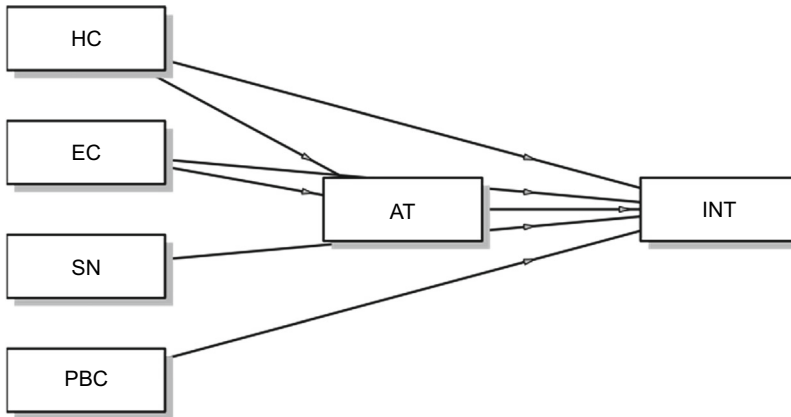
Individuals who are health conscious take proactive measures to maintain and improve their health. Health consciousness shapes consumers' attitudes toward organic food. Environmental concern refers to an individual's awareness of environmental issues and their actions. In addition to being environmentally friendly, organic food often aligns with the values of environmentally conscious consumers, leading to positive attitudes toward them. Attitudes mediate the relationship between environmental concern and health consciousness purchase intentions. Positive attitude toward organic food, based on its environmental and health advantages, leads to a higher intention to buy these products [1, 7, 12, 13, 17, 20–22]. Based on the above mentioned, we propose the following hypotheses.

**H6:** Health consciousness affects indirectly the intention to purchase organic food through attitude

**H7:** Environmental concern affects indirectly the intention to purchase organic food through attitude

### 3 Methods

In this study, 210 Greek individuals selected (118 females and 92 males) among the 1000 employees of a Greek university. Statistical analysis was conducted using SPSS version 24 and Jamovi [8, 9, 14]. Using the principal component analysis (PCA) with Varimax rotation, the linear components were tested. The Jamovi program was used to examine the direct effects of TPB (attitude, subjective norms, perceived behavioral control), health consciousness, and environmental concern on intention to purchase



**Fig. 1** Statistical model

organic food. Additionally, we examined indirect effects of health consciousness and environmental concern on intention to purchase organic food through attitude (Fig. 1).

## 4 Results

For each variable, the weights of the components were greater than 0.7 according to PCA analysis ( $KMO = 0.764$ ,  $\chi^2 = 1216$ ,  $p < 0.01$ ). Cronbach's alpha reliability rating of 0.86 was found for attitude, 0.912 for subjective norms, 0.703 for perceived behavioral control, 0.776 for intention to purchase organic food, 0.777 for health consciousness, and 0.845 for environmental concern.

The results (Table 1) indicate that health consciousness affects indirectly and positively the intention to purchase organic food through attitude. Attitude, subjective norms, and perceived behavioral control have a positive and direct relationship with intention to purchase organic food. Furthermore, health consciousness and environmental concern affect positively attitude. We accept the hypotheses H3, H4, H5, and H6 and we reject the hypotheses H1, H2, and H7.

**Table 1** Effects

Effect	Estimate	SE	95% C.I. (a)		$\beta$	p
			Lower	Upper		
<b><u>HC <math>\Rightarrow</math> AT <math>\Rightarrow</math> INT</u></b>	<b><u>0.095</u></b>	<b><u>0.032</u></b>	<b><u>0.033</u></b>	<b><u>0.157</u></b>	<b><u>0.119</u></b>	<b><u>0.003</u></b>
EC $\Rightarrow$ AT $\Rightarrow$ INT	0.096	0.050	-0.002	0.195	0.073	0.056
<b><u>HC <math>\Rightarrow</math> AT</u></b>	<b><u>0.195</u></b>	<b><u>0.060</u></b>	<b><u>0.076</u></b>	<b><u>0.313</u></b>	<b><u>0.244</u></b>	<b><u>0.001</u></b>
<b><u>EC <math>\Rightarrow</math> AT</u></b>	<b><u>0.197</u></b>	<b><u>0.100</u></b>	<b><u>0.001</u></b>	<b><u>0.393</u></b>	<b><u>0.149</u></b>	<b><u>0.049</u></b>
<b><u>AT <math>\Rightarrow</math> INT</u></b>	<b><u>0.488</u></b>	<b><u>0.061</u></b>	<b><u>0.368</u></b>	<b><u>0.609</u></b>	<b><u>0.488</u></b>	<b><u>&lt; 0.001</u></b>
HC $\Rightarrow$ INT	0.002	0.052	-0.100	0.104	0.002	0.975
EC $\Rightarrow$ INT	0.119	0.082	-0.043	0.280	0.090	0.150
<b><u>SN <math>\Rightarrow</math> INT</u></b>	<b><u>0.156</u></b>	<b><u>0.048</u></b>	<b><u>0.062</u></b>	<b><u>0.249</u></b>	<b><u>0.201</u></b>	<b><u>0.001</u></b>
<b><u>PBC <math>\Rightarrow</math> INT</u></b>	<b><u>0.196</u></b>	<b><u>0.055</u></b>	<b><u>0.089</u></b>	<b><u>0.304</u></b>	<b><u>0.219</u></b>	<b><u>&lt; 0.001</u></b>

## 5 Conclusion

By analyzing the results of this study, organizations, policy makers, and society can gain a better understanding of the key factors that influence the desire to purchase organic food. The consumption of organic food will have a strong environmental impact (reduced fertilizer use, water conservation, and biodiversity preservation), benefits for consumers (lower chemical exposure and higher nutrient content) and promotes sustainability (preserving resources for future generations). In order to make organic food available to consumers, society, organizations, and policy makers could support organic food producers (provide fair wages, ensure farmers' well-being, and ensure safe working conditions) [1, 5, 10, 12, 23, 24].

It is important to consider several limitations in this study. This study does not measure actual purchases of organic food but rather purchase intentions [1]. It is essential to evaluate the results of this study across different socio-demographic or ethnic groups before making more conclusive generalizations [11, 14]. This study also has the limitation of measuring organic food in general, whereas earlier studies have shown that organic consumption differs among products, such as milk, fruits, etc. [1]. It would be interesting to investigate whether latent variables may be confounding the relationships discussed above with additional variables, not included in this study [9].

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