

## Consumer Self-Identity, Emotions, Ethical Beliefs, and Authenticity about Ethical Purchasing of Consumer Goods for a Circular Economy Model

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### Abstract

We examine how consumers' feelings of guilt and their ethical beliefs—precisely idealism and relativism—impact their purchasing decisions related to Greece's Circular Economy Model (CEM). By focusing on customer satisfaction and engagement, we aim to understand better how consumers interact with sustainable products within the circular economy, building upon Burke and Reitzes' (1981) Self-Identity Theory (SIT). Additionally, we explore how consumer authenticity influences the relationships between moral beliefs, guilt, and ethical purchasing behavior. A structured online questionnaire was distributed via Google Forms to address three research objectives. It included nine demographic and six structured questions. A convenience sample of 371 respondents from Athens, Thessaloniki, Patras, and Heraklion, consisting of Hellenic Open University students and coworkers buying eco-friendly products, participated. Statistical analysis tested seventeen research hypotheses, supporting eleven, rejecting five, and yielding inconclusive evidence for one. The study reveals a nonlinear positive association between ethical beliefs and three key factors: ethical purchasing behavior, purchase intention, and adopting sustainable consumer practices. Additionally, a linear positive relationship exists among adopting sustainable consumer behaviors, ethical purchasing behavior, and ethical purchase intention. The connections between ethical beliefs and the adoption of sustainable consumer practices, as well as those between ethical beliefs and ethical purchase intention, are influenced by consumer authenticity. The findings of this study have critical theoretical, research, managerial, and practical implications for academics and marketing managers, supporting the initial assumptions.

**Keywords:** Circular Economy Model, Ethical Beliefs, Self-conscious Emotions, Ethical Purchase Intention, Consumer Authenticity, Ethical Purchase Behavior, Adoption of Sustainable Consumption Practices.

**JEL classification:** M31, M39.

## 1. Introduction

### 1.1. Research aim and research problem

To transform into a competitive, low-carbon, sustainable economy, the EU must adopt a circular economy that reduces waste while preserving the value of goods and resources. This approach presents opportunities for Europe (European Commission 2015, 2017) and revamping the Greek economy (e.g., Trigkas et al., 2020). However, challenges arise in a social media-driven environment where consumer behavior is influenced by authenticity (Khan & Abbas, 2023; Sarkar et al., 2023). The effectiveness of sustainable consumption practices in business has been widely studied.

The literature needs to address consumer roles in ethical purchasing practices better. Santos-Corrada et al. (2024) highlight the importance of understanding consumer psychological mechanisms and behavior constructs. This research will examine the effects of consumers' ethical beliefs (idealism and relativism) and guilt on ethical purchasing behavior within Greece's Circular Economy Model (CEM). We will build on the theoretical work of

Mostaghel and Chirumalla (2021) and Santos-Corrada et al. (2024). Our research intention is to explore how consumer authenticity, ethical beliefs, and self-conscious emotions influence ethical purchase intentions and sustainable consumption practices.

## **1.2. Research objectives and initial assumptions**

Mostaghel and Chirumalla's (2021) work builds on Santos-Corrada et al. (2024) and significantly contributes to the field. Khan and Abbas (2023) highlight the importance of ethical beliefs and consumer authenticity, while Barbeta-Viñas (2023) examines self-conscious emotions.

The research objectives of this study are: (1) To explore the relationships between ethical belief systems (idealism and relativism), ethical purchase intentions, behaviors, and sustainable consumption practices among Greek consumers regarding consumer goods toward CEM. (2) To analyze the relationships among self-conscious emotions, ethical beliefs, ethical purchase intentions, behaviors, and sustainable consumption practices of Greek consumers concerning consumer goods toward CEM. (3) To thoroughly investigate the moderating role of consumer authenticity on the relationships between ethical beliefs, self-conscious emotions, and their effects on ethical purchase intentions, behaviors, and sustainable consumption practices of Greek consumers regarding consumer goods toward CEM.

This study begins with three key assumptions: (1) Ethical beliefs (idealism and relativism) guide consumers in evaluating ethically questionable behavior toward CEM and sustainable consumption. (2) These beliefs and self-conscious emotions affect ethical purchase intentions, behaviors, and adopting sustainable practices as part of social responsibility. (3) As personal traits, consumers' expressions reflect their true selves, influencing the relationships among ethical beliefs, purchase behavior, and outcomes.

## **1.3. Importance of the topic expected contributions and justification for the focus of the study**

Steg and Vlek (2009) highlight that cultural norms influence consumer behavior. Understanding Greek customers' ethical beliefs and self-perception is essential for developing culturally sensitive and sustainable projects. Santos-Corrada et al. (2024) build on the work of Mostaghel and Chirumalla (2021) and Khan and Abbas (2023), focusing on ethical beliefs and consumer authenticity. Barbeta-Viñas (2023) adds insights into the role of self-conscious emotions in this context.

The study integrates psychological concepts to connect consumption and sustainability. It examines the factors that influence ethical consumer behavior in circular economy practices and improves our understanding of ethical purchasing and consumption. We focus on self-identity, ethical beliefs, self-conscious emotions, and consumer authenticity to provide practical insights to marketers. The field of consumer behavior is essential for promoting sustainable consumption and circular economy principles, particularly for Greece's economic recovery (Kirchherr et al., 2017; Trigkas et al., 2020).

## **2. Theoretical framework, research model and literature support**

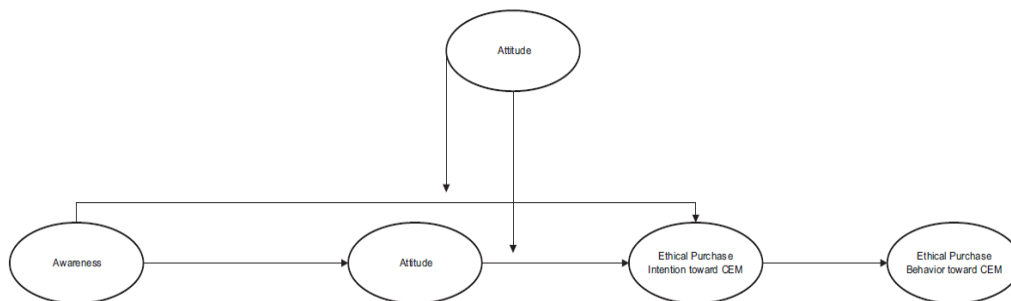
### **2.1. Self-identity theory**

Carl Rogers, a prominent psychologist, greatly influenced self-identification theory (Birdwell, 1968). He introduced the concept of self-concept, which refers to an individual's perception of themselves and their place in society. According to Rogers, people assess their identity through actions and achievements, comparing their self-perception to their "ideal self." A person's self-identity also encompasses various responsibilities and is shaped by factors like social identity and self-worth.

Self-perception significantly influences behavior by shaping how individuals evaluate themselves. This evaluation leads to adjustments in behavior to align with self-expectations. For instance, if someone sees themselves as feminine and connects that identity with affection, they will modify their behavior accordingly. Participation in graduate studies and planning activities reflects high academic responsibility and influences behavior. Identity shapes choices and activities, leading to selections that align with individual identities. The effects of actions on various facets of identity show intricate relationships between identification and attribution. Performance is influenced by identity and other factors, highlighting the complexity of activities related to one's sense of self (Burke & Reitzes, 1981).

## 2.2. Theoretical model for ethical purchase intention, and ethical purchase behavior of consumer goods toward the Circular Economy Model

Mostaghel and Chirumalla (2021) investigate the critical factors influencing purchasing intentions and customer behavior toward the retail sector's Closed Cycle Economy Units (CBMs). Customer input has often been overlooked despite the growing interest in CBMs. The study contributes three key insights: (1) it broadens the understanding of CBMs by incorporating a customer perspective; (2) it offers a theoretical framework examining ethical purchasing and consumer sensitivity towards social and environmental issues; and (3) it enhances knowledge of customer perceptions, aiding businesses in aligning their strategies with consumer expectations (Mostaghel & Chirumalla, 2021). The theoretical model by Mostaghel and Chirumalla (2021), adapted by Santos-Corrada et al. (2024), is relevant for this study as it addresses gaps in the literature through Burke and Reitzes' self-identity theory (1981). It examines how consumers' ethical beliefs (idealism and relativism) and feelings of guilt influence ethical purchasing behavior toward the Circular Economy Model (CEM) in Greece.



**Figure 1. Theoretical model**

Source: Santos-Corrada et al. (2024), p. 233

## 2.3. Hypotheses development

Research by Khan and Abbas (2023), Forsyth et al. (2008), and Henle et al. (2005) indicate that the intention to purchase environmentally friendly products positively influences consumer confidence and preference for retailers with a Green Comprehension Metric (CBM) (Mostaghel & Chirumalla, 2021; Wei et al., 2017). This recognition reflects a shift toward sustainable consumption and highlights consumers' growing awareness of environmental sustainability, leading them to choose products that align with their values. Therefore, we can state:

*H1: Ethical beliefs positively influence ethical purchase behavior.*

Recent research by Khan and Abbas (2023), along with prior studies by Forsyth et al. (2008) and Henle et al. (2005), highlights a distinction in ethical behavior in markets. Moral beliefs are categorized into idealism and relativism. Relativism deals with overarching moral standards, whereas idealism focuses on the collective benefit and the desire to buy eco-friendly

products (Santos-Corrada et al., 2024). This difference highlights the intricate nature of ethical reasons behind consumer decisions. Consequently, we can assert:

*H2: Ethical beliefs positively influence ethical purchase intention.*

Recent studies by Khan and Abbas (2023) and earlier works by Forsyth et al. (2008) and Henle et al. (2005) categorize moral beliefs into two main types: idealism and relativism. Relativism is based on generalized rules, while idealism focuses on the common good, which can positively impact ethical consumption and sustainable choices. It showcases the intricate motivations behind individual ethical beliefs and consumer behaviors. Further contributions by Mostaghel and Chirumalla (2021) and Schuitema and De Groot (2015) deepen this complex discussion.

According to the recent study by Khan and Abbas (2023) and previous research by Forsyth et al. (2008) and Henle et al. (2005), moral beliefs can be divided into two categories: idealism and relativism. Relativism focuses on principles derived from generalized rules, whereas idealism emphasizes the greater good, impacting sustainable purchasing choices. This underscores the intricate nature of ethical beliefs and consumer behavior. Insights from Mostaghel and Chirumalla (2021) and Schuitema and De Groot (2015) enrich this multidimensional topic, and thus, we can state:

*H3: Ethical beliefs positively influence adoption of sustainable consumption practices.*

Recent studies, including those by Barbeta-Viñas (2023) and Luan (2016), have shown that emotions like embarrassment, pride, guilt, and shame can arise when individuals question their self-perceptions. These emotions positively shape the ethical intent to purchase environmentally friendly products (Santos-Corrada et al., 2024; Mostaghel and Chirumalla, 2021; Malik et al., 2017). This study underscores the role of emotions in ethical decision-making and consumer behavior, and therefore, we can state:

*H4: Self-conscious emotions positively influence ethical purchase intention.*

Studies by Barbeta-Viñas (2023), Luan (2016), Scheier and Carver (1985), and Fenigstein et al. (1975) show that emotions like embarrassment, pride, guilt, and shame arise when individuals question their self-perceptions or how others perceive them. These conscious emotions significantly influence ethical buying behavior. Additionally, choosing to buy from retailers that embrace sustainable practices, as shown by Mostaghel and Chirumalla (2021) and Wei et al. (2017), further reinforces ethical purchasing intentions, promoting products with minimal environmental impact and consequently, we can state:

*H5: Self-conscious emotions positively influence ethical purchase behavior.*

According to several studies (Barbeta-Viñas, 2023; Luan, 2016; Scheier and Carver, 1985; Fenigstein et al., 1975), the emotions in shaping beliefs and self-perceptions are vital. Conscious emotions like embarrassment, pride, guilt, and shame significantly influence decisions and behaviors. These emotions can promote sustainable consumer practices by enhancing awareness, attitudes, and purchasing intent. Therefore, ethical consumption becomes a crucial tool for encouraging sustainable practices essential for development and environmental protection. Consequently, we can conclude that:

*H6: Self-conscious emotions positively influence adoption of sustainable consumption practices.*

Recent empirical works (e.g., Santos-Corrada et al., 2024; Mostaghel & Chirumalla, 2021; Malik et al., 2017) indicate that the intention to buy environmentally friendly products positively influences ethical consumer behavior, especially when purchasing from retailers committed to Corporate Social Responsibility (CSR). Highlighting these works the crucial role of environmental awareness in shaping sustainable purchasing habits, therefore, we conclude:

*H7: Ethical purchase intention positively influences ethical purchase behavior.*

Recent studies by Santos-Corrada et al. (2024), Mostaghel and Chirumalla (2021), and Malik et al. (2017) show that the intention to purchase environmentally friendly products positively influences sustainable consumer practices. This intention enhances consumer awareness, attitudes, purchasing intentions, and purchases. The research emphasizes ethical consumption as a critical factor in sustainable practices, with contributions from Schuitema and De Groot (2015) and Khan and Abbas (2023), alongside foundational work by Creyer (1997), and thus we can state:

*H8: Ethical purchase intention positively influences adoption of sustainable consumption practices.*

*Ethical buying behavior* is a complex phenomenon explored by various researchers. Mostaghel and Chirumalla (2021) and Wei et al. (2017) highlight that consumers are inclined to purchase from retailers using behavioral marketing (CBM), which encourages sustainable practices that are seen as a social dilemma. This process involves consumer awareness, market attitudes, buying intentions, and actual purchases. Ethical consumption is also viewed as a social good supporting sustainable practice. Critical insights from Schuitema and De Groot (2015) and Khan and Abbas (2023), along with Creyer's (1997) framework, further enhance understanding of this issue. Therefore, we can state:

*H9: Ethical purchase behavior positively influences adoption of sustainable consumption practices.*

Moral beliefs, as discussed by Khan and Abbas (2023), Forsyth et al. (2008), and Henle et al. (2005), serve as a framework for addressing ethical dilemmas, with idealism emphasizing others' well-being and relativism rooted in universal moral standards. Additionally, Mostaghel and Chirumalla (2021) and Wei et al. (2017) highlight that purchasing with environmental considerations promotes sustainable consumer practices. This awareness drives consumer choices, particularly toward retailers utilizing Behavioral Marketing (CBM) (Santos-Corrada et al., 2024; Mostaghel & Chirumalla, 2021; Wei et al., 2017), and therefore, we conclude:

*H10: Ethical beliefs positively influence ethical purchase behavior through the intermediate effect of ethical purchase intention.*

*Conscious emotions*, as described by Barbeta-Viñas (2023), Luan (2016), Scheier and Carver (1985), and Fenigstein et al. (1975), arise when individuals question how others perceive their value. These self-evaluative emotions include embarrassment, pride, guilt, and shame. They influence ethical purchase intentions, which can reduce environmental impacts and promote sustainable consumer practices. This relationship is framed within ethical consumption and social good, as noted by Santos-Corrada et al. (2024) and further explored by Mostaghel and Chirumalla (2021) and Schuitema and De Groot (2015). Therefore, we can state:

*H11: Self-conscious emotions positively influence adoption of sustainable consumption practices through the intermediate effect of ethical purchase intention.*

*Consumer authenticity* refers to how genuinely consumers express themselves, independent of external influences (Khan & Abbas, 2023; Kernis & Goldman, 2006). This concept differs from authentic consumption and brand authenticity. Authentic consumption relates to the overall experience of a consumption event and can influence the link between moral beliefs and ethical buying behavior. Moral beliefs, categorized as relativism (based on universal principles) and idealism (focused on others' well-being), help individuals evaluate ethical dilemmas (Khan and Abbas, 2023; Forsyth et al., 2008; Henle et al., 2005). Lastly, ethical buying behavior is indicated by a customer's purchasing decisions from shops that engage in consumer-based marketing (CBM) (Mostaghel and Chirumalla, 2021; Wei et al., 2017). Therefore, we can state:

*H12a: Consumer authenticity moderates the relationship between ethical beliefs and ethical purchase behavior.*

Consumer authenticity, as defined by Khan and Abbas (2023) and Kernis and Goldman (2006), refers to how true a consumer's expressions are to themselves rather than influenced by external factors. It differs from authentic consumption, focusing on the overall experience during a consumption event, and helps bridge the gap between moral beliefs and ethical buying behavior. Moral beliefs, which include idealism (concern for others) and relativism (basing morals on universal principles), guide individuals in evaluating ethical dilemmas (Khan & Abbas, 2023; Forsyth et al., 2008; Henle et al., 2005). Furthermore, as highlighted by Santos-Corrada et al. (2024), ethical buying intent is the desire to purchase items with minimal negative environmental impact. Therefore, we can state:

*H12b: Consumer authenticity moderates the relationship between ethical beliefs and ethical purchase intention.*

*Consumer authenticity* is the extent to which a consumer expresses their true self, independent of external influences (Khan & Abbas, 2023; Kernis & Goldman, 2006). Unlike authentic consumption and brand authenticity, which focus on the overall experience, consumer authenticity emphasizes genuine self-expression. This authenticity can moderate the relationship between conscious emotions—such as embarrassment, pride, guilt, and shame—and moral purchase intent. According to Barbeta-Viñas (2023), emotions arise when people question their or others' perceptions of value. Moral purchase intent refers to buying products that minimize environmental impact (Santos-Corrada et al., 2024). Therefore, we can state:

*H12c: Consumer authenticity moderates the relationship between self-conscious emotions and ethical purchase intention.*

Consumer authenticity, as defined by Khan and Abbas (2023) and Kernis and Goldman (2006), refers to the degree to which a consumer's expressions reflect their true self rather than external influences. This concept differs from authentic consumption, which refers to the holistic experience of consuming. Moreover, moral convictions, highlighted in various studies (Khan & Abbas, 2023; Forsyth et al., 2008; Henle et al., 2005), provide a framework for evaluating ethical behavior and fall into two categories: idealism (concern for others' well-being) and relativism (morality based on universal principles). As explored by Mostaghel and Chirumalla (2021) and Schuitema and De Groot (2015), adopting sustainable consumer practices involves awareness, attitudes, purchasing intentions, and ethical consumption, viewed as a social good that facilitates sustainable practices. Therefore, we can state:

*H12d: Consumer authenticity moderates the relationship between ethical beliefs and adoption of sustainable consumption practices.*

Consumer authenticity, as defined by Khan and Abbas (2023) and Kernis and Goldman (2006), refers to aligning a consumer's expressions with their true self, distinct from external influences. Authentic consumption represents the holistic experience during a consumption event, which can influence the link between conscious emotions and ethical buying behavior. According to Barbeta-Viñas (2023), emotions arise when individuals question their or others' perceived value, including embarrassment, pride, guilt, and shame. Ethical buying behavior, as noted by Mostaghel and Chirumalla (2021) and Wei et al. (2017), reflects consumers' purchasing practices from retailers with a conscious brand mission (CBM). Therefore, we can state:

*H12e: Consumer authenticity moderates the relationship between self-conscious emotions and ethical purchase behavior.*

Consumer authenticity, as defined by Khan and Abbas (2023) and Kernis and Goldman (2006), refers to the degree to which a consumer's expressions align with their true self rather than being influenced by external factors. This differs from authenticity and brand authenticity

and pertains to the overall consumption experience. Authentic consumption can influence the link between emotions and sustainable consumer practices. Barbeta-Viñas (2023) notes that emotions arise when one's value is questioned, with conscious emotions like embarrassment, pride, guilt, and shame being categorized as self-evaluative feelings. According to Mostaghel and Chirumalla (2021) and Schuitema and De Groot (2015), adopting sustainable consumption is viewed as a social dilemma, influenced by awareness, attitudes, and ethical consumption to promote social good. Therefore, we can state:

*H12f: Consumer authenticity moderates the relationship between self-conscious emotions and adoption of sustainable consumption practices.*

**Table 1. Operational definitions of the key constructs**

<i>Constructs</i>	<i>Definitions</i>	<i>Sources</i>
<i>Ethical Beliefs</i>	A set of moral principles or ethics that give people a framework for evaluating and resolving morally dubious actions. There are two categories of ethical beliefs: idealism and relativism. While relativism refers to the extent to which individuals base their moral philosophies on universal ethical rules, idealism refers to people's concern for the benefit of others.	Khan and Abbas (2023); Forsyth et al. (2008); Henle et al. (2005)
<i>Self-conscious Emotions</i>	Emotions are brought on when circumstances make one question one's own or other people's perceptions of their worth or value. Self-conscious emotions include embarrassment, pride, guilt, and shame. They are likewise known as self-evaluative emotions.	Barbeta-Viñas (2023)
<i>Ethical Purchase Intention</i>	Refers to the intention to purchase products that minimize the environmental impact.	Santos-Corrada et al. (2024)
<i>Consumer Authenticity</i>	The degree to which a consumer's expressions are true to themselves rather than a reaction to outside influences is known as consumer authenticity. Authentic consumption and brand authenticity are not the same as consumer authenticity. On the other hand, the subjective, holistic experience of a consumption event is what is meant to be meant by authentic consumption.	Khan and Abbas (2023); Kernis and Goldman (2006)
<i>Ethical Purchase Behavior</i>	The extent to which the consumer has made a purchase from retailer with a CBM.	Mostaghel and Chirumalla (2021). Wei et al. (2017)
<i>Adoption of Sustainable Consumption Practices</i>	Characterized as a social dilemma, it acts on awareness, attitude, purchase intention, and product purchase, and it is examined through ethical consumption, which is used as a social good to explain sustainable consumption practices.	Mostaghel and Chirumalla (2021); Schuitema and De Groot (2015)

Source: Authors

Adapting the model by Santos-Corrada et al. (2024) confirms its relevance and grounds our study in established theory. We address gaps in the literature using Burke and Reitzes' self-identity theory (1981), which is critical to understanding our research motivations and behaviors. The hypotheses derived from international literature are shown in Figure 1.

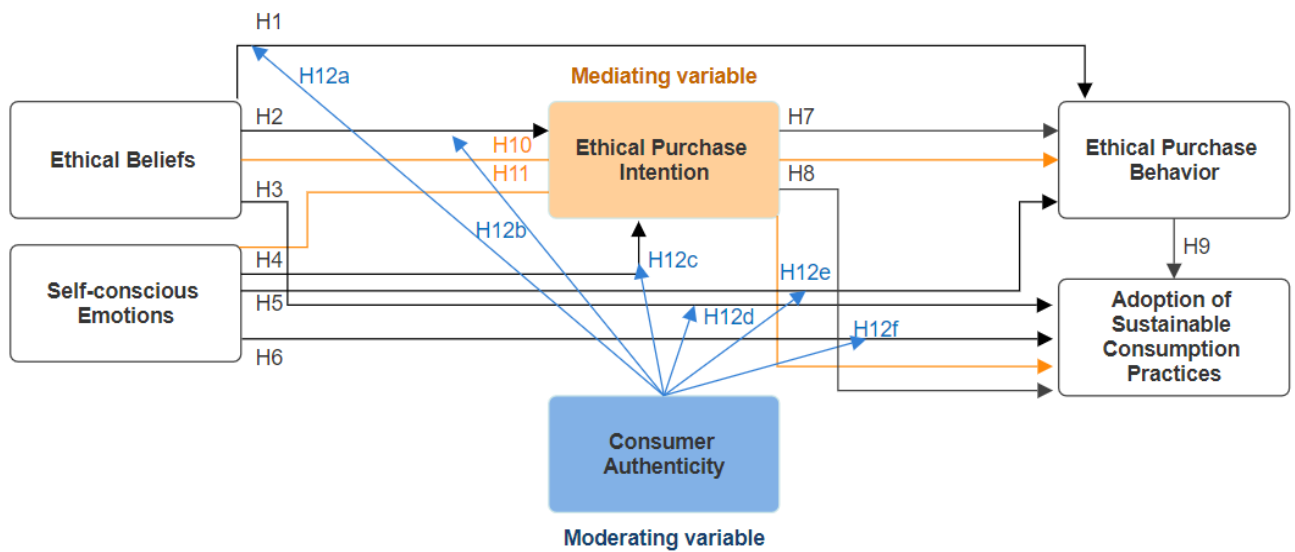


Figure 2. Research model

Source: Authors

### 3. Methodology

#### 3.1. Research method, sample, sampling strategy, process and data collection

Our study uses a questionnaire survey method to gather quantitative data from a predefined group. We employ a self-administered structured questionnaire (SAQ), eliminating interviewer bias and enhancing data quality. Based on Chowdhury et al. (2022), a questionnaire consists of written or printed multiple-choice questions for statistical analysis. The study focuses on Greek consumers' ethical beliefs, purchase intentions, and sustainable consumption practices regarding consumer goods. We distributed the questionnaire online using Google Forms. Accurate data collection is essential for effective research (Berenson et al., 2015), and while analyzing an entire population yields authentic conclusions, sample analysis remains practical (Berenson et al., 2015).

#### 3.2. Measures, measurement of variables and variables' level of measurement

We created a structured questionnaire for our study, consisting of 15 closed-ended Likert scale questions ranging from "strongly disagree" to "strongly agree". The participants indicated their level of agreement using a 5-point scale. The questionnaire includes both nominal variables (like gender and age) and ordinal variables. The nominal data are collected through closed-ended questions, reflecting categories without inherent ordering (e.g., Sanchez, 2023). Regarding the ordinal variables are crucial in indicating a predetermined ranking, and nominative variables categorize data related to social attitudes, beliefs, and behaviors. Ordinal variables, however, often mirror levels of satisfaction or agreement, as seen in a survey that asks participants to rate satisfaction from "strongly disagree" to "strongly agree" (e.g., Agresti, 2010). We incorporated measures from prior studies within the current context, employing a 5-point Likert scale for participant responses.

Our study measures "Moral Beliefs" as ordinal. Following Khan and Abbas (2023) who explore of how ethical principles guide individuals in evaluating and addressing morally questionable actions, a crucial aspect of ethical consumption. The second construct is about the



mindful feelings of "information-seeking satisfaction", which refers to emotions triggered when questioning one's or others' perceptions of value, as supported by studies including Barbeta-Viñas (2023), reinforcing the validity of our findings. The third construct, "Ethical Purchase Intention", refers to the intention to buy products that reduce environmental impact, as noted in various studies (Santos-Corrada et al., 2024). It is measured at an ordinal level.

The fourth construct, "Consumer Authenticity" aligns with studies (Khan & Abbas, 2023; Kernis & Goldman, 2006) and refers to how accurate a consumer's expressions are to themselves rather than influenced by external factors. It is measured at an ordinal level. The fifth construct, "Ethical purchasing behavior", aligns with studies (Mostaghel & Chirumalla, 2021; Wei et al., 2017) and reflects how much consumers buy from retailers with CBM. It is measured on an ordinal scale. The "Adoption of Sustainable Consumption Practices" construct, as outlined by Mostaghel and Chirumalla (2021) and Schuitema and De Groot (2015), is viewed as a social dilemma influencing awareness, attitude, purchasing intention, and product purchase. It focuses on ethical consumption to promote sustainable practices, measured at an ordinal level.

## 4. Research results

### 4.1. Reliability analysis

The highest value is 0.918, for Ethnical beliefs, which is excellent reliability and are highly consistent with each other, indicating a strong internal consistency. An alpha value of 0.783 is above the acceptable threshold, suggesting that the items measuring self-conscious emotions are reasonably consistent and reliable. This construct also demonstrates excellent reliability. With an alpha value of 0.867, the items assessing ethical purchase intention show a high level of internal consistency.

### 4.2. Hypothesis testing

H1: There is a nonlinear positive monotonic relationship between the 2 variables ( $\rho=0.411$ ,  $p<0.001$ ). The equation that explains the relationship is:

$$y=-2,93+5,5*x - 1,59*x^2+0,16*x^3$$

H2: There is a moderately positive correlation ( $\rho=0.381$ ,  $p<0.001$ ). Further, there is a nonlinear positive monotonic relationship between the two variables. The equation that explains the relationship is:

$$y=-2,34+5,4*x - 1,44*x^2 + 0,13*x^3$$

H3: There is a moderately positive correlation ( $\rho=0.373$ ,  $p<0.001$ ). Further, there is a nonlinear positive monotonic relationship between the two variables. The equation that explains the relationship is:

$$y=-1,63+4,53*x^3 - 1,24*x^2+0,12*x^3$$

H4: There is a weak negative association, and the low p-value indicates that this association is unlikely due to random variation ( $\rho=-0.175$ ,  $p<0.01$ ). Further, there is a nonlinear and monotonic relationship between the two variables. The equation that explains the relationship is:

$$y=-3,65+8,77*x - 3,06*x^2+0,34*x^3$$

H5: There is a weak negative association, and the low p-value indicates that this association is unlikely due to random variation ( $\rho=-0.196$ ,  $p<0.001$ ). Further, there is a nonlinear and monotonic relationship between the two variables. The equation that explains the relationship is:

$$y=-1,91+6,01*x - 2,11*x^2+0,24*x^3$$

H6: Conscious emotions positively influence the adoption of sustainable consumption practices. The Spearman’s rho coefficient ( $\rho=0.072$ ,  $p=0.169$ ). Further, there is a positive nonlinear monotonic relationship. The equation that explains the relationship is:

$$y=-2,41+7,29*x - 2,62*x^2+0,3*x^3$$

H7: There is a strong positive correlation ( $\rho=0.638$ ,  $p<0.001$ ). Further, there is a linear positive monotonic relationship between the two variables. The equation that explains the relationship is:

$$y=4,01+0,03*x$$

H8: There is a modest positive correlation ( $\rho=0.555$ ,  $p<0.001$ ). Further, there is a linear positive monotonic relationship between the two variables. The equation that explains the relationship is:

$$y=2,08+0,34*x$$

H9: There is a moderately positive correlation ( $\rho=0.569$ ,  $p<0.001$ ). Further, there is a linear positive monotonic relationship between the 2 variables. The equation that explains the relationship is:

$$y=1,86+0,52*x$$

H10:

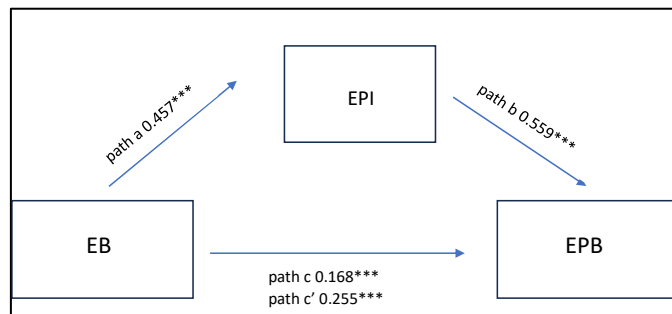


Figure 3. Indirect effect of ethical beliefs to ethical purchase behavior through ethical purchase intention  
Source: Authors

H11:

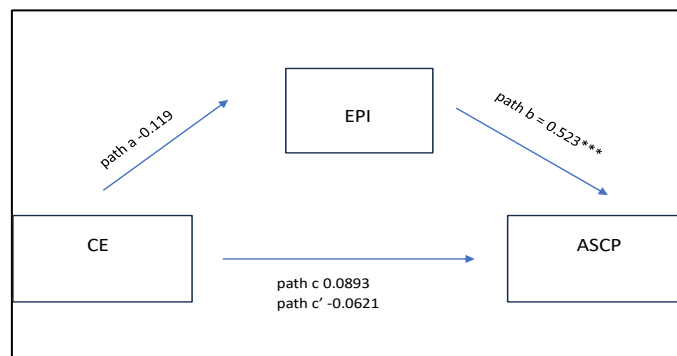
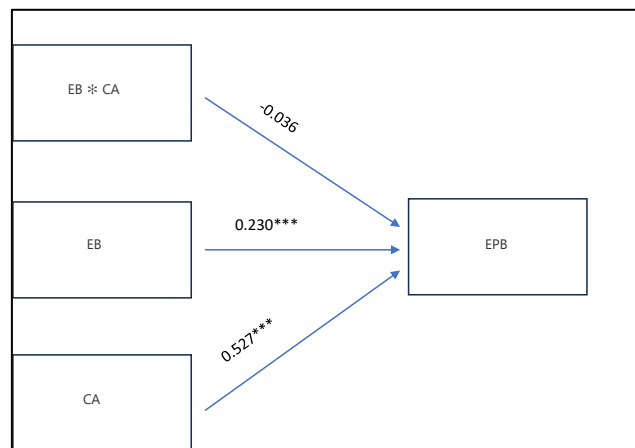


Figure 4. Indirect effect of Self-conscious emotions to adoption of sustainable consumption practices through ethical purchase intention  
Source: Authors

H12a:



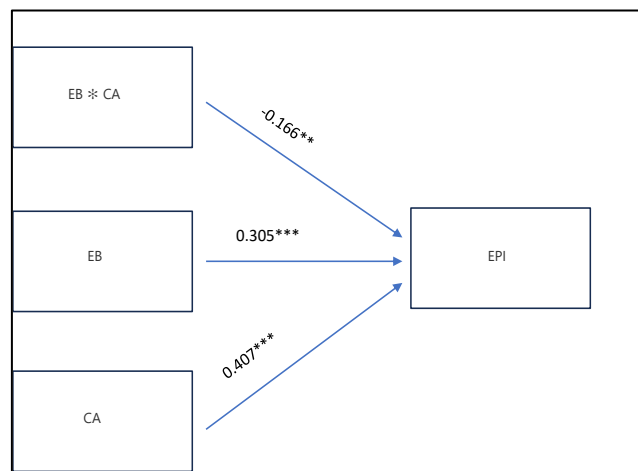
**Figure 5. Moderating effect of consumer authenticity on the relationship between ethical beliefs and ethical purchase behavior**  
Source: Authors

The regression equation follows.

$$EPB = 1.657 + 0.527*CA + 0.23*EB - 0.036*EB*CA$$

(Where: EPB= ethical purchasing behavior, CA= Consumer Authenticity, EB= Ethical beliefs)

H12b:

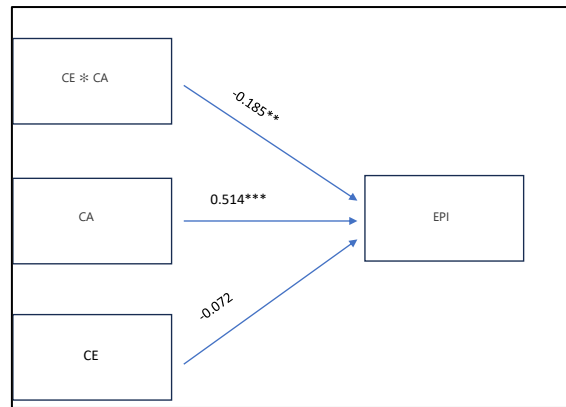


**Figure 6. Moderating effect of consumer authenticity on the relationship between ethical beliefs and ethical purchase intention**  
Source: Authors

$$EPI=2.423+0.407CA+0.305EB-0.166EB*CA$$

(Where: EPI= ethical purchase intent, CA= Consumer Authenticity, EB= Ethical beliefs)

H12c:



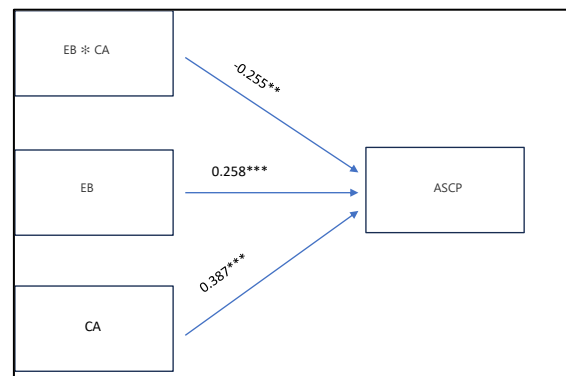
**Figure 7. Moderating effect of consumer authenticity on the relationship between self-conscious emotions and ethical purchase intention**

Source: Authors

$$EPI = 2,416 - 0,072 * SCE + 0,514 * CA - 0,185 * CE * CA$$

(Where: EPI= ethical purchase intent, SCE= Self-conscious Emotions, CA= Consumer Authenticity)

H12d:



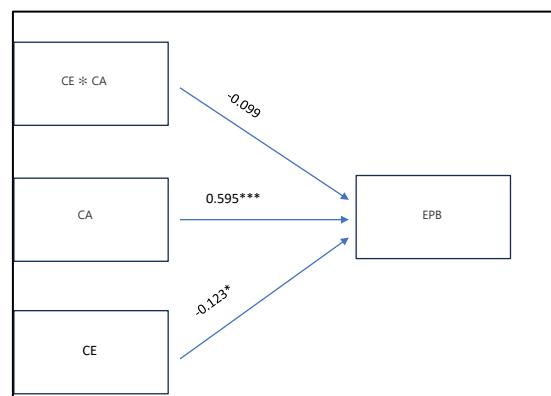
**Figure 8. Moderating effect of consumer authenticity on the relationship between ethical beliefs and adoption of sustainable consumption practices**

Source: Authors

$$ASCP = 1.636 + 0.387 * CA + 0.258 * EB - 0.255 * EB * CA$$

(Where: ASCP= adoption of sustainable consumption practices, CA= Consumer Authenticity, EB= Ethical beliefs)

H12e:



**Figure 9. Moderating effect of consumer authenticity on the relationship between self-conscious emotions and ethical purchase behavior**

Source: Authors

$$EPB = 2.219 - 0.123*CE + 0.595*CA - 0.099*CE*CA$$

(Where: EPB= ethical purchasing behavior, CE= Self-conscious Emotions , CA= Consumer Authenticity)

H12f:

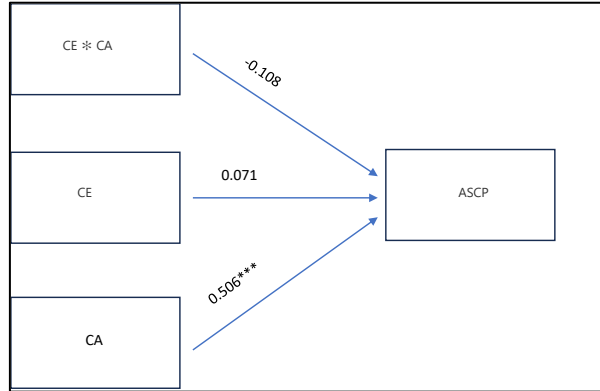


Figure 10. Moderating effect of consumer authenticity on the relationship between self-conscious emotions and adoption of sustainable consumption practices

Source: Authors

$$ASCP = 1.837 + 0.506*CA + 0.071*CE - 0.108*CE*CA$$

(Where: ASCP= adoption of sustainable consumption practices, CA= Consumer Authenticity, CE= Self-conscious Emotions)

### 4.3. Summary of research results

The following figure presents the research model including the research hypotheses results (see Figure 11).

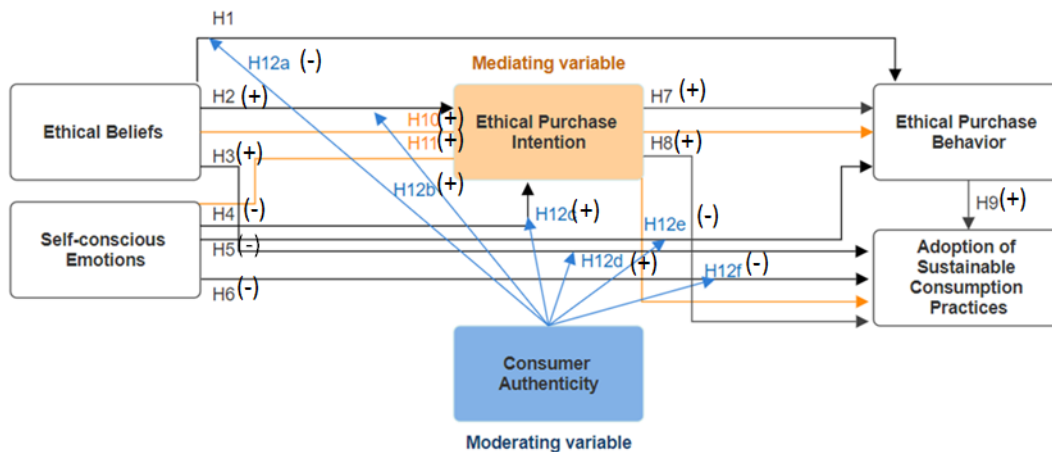


Figure 11. The research model including the research hypotheses results

Source: Authors

The hypotheses’ testing results are presented in the following table including the level of significance (see Table 2).

Table 2. Hypotheses' testing results

Research Hypothesis	Support	Significance level
<b>H1:</b> Ethical beliefs positively influence ethical purchase behavior.	Supported	$\alpha=0.05$
<b>H2:</b> Ethical beliefs positively influence ethical purchase intention.	Supported	$\alpha=0.05$
<b>H3:</b> Ethical beliefs positively influence adoption of sustainable consumption practices.	Supported	$\alpha=0.05$
<b>H4:</b> Self-conscious emotions positively influence ethical purchase intention.	Not supported	$\alpha=0.05$
<b>H5:</b> Self-conscious emotions positively influence ethical purchase behavior.	Not supported	$\alpha=0.05$
<b>H6:</b> Self-conscious emotions positively influence adoption of sustainable consumption practices.	Inconclusive	$\alpha=0.05$
<b>H7:</b> Ethical purchase intention positively influences ethical purchase behavior.	Supported	$\alpha=0.05$
<b>H8:</b> Ethical purchase intention positively influences adoption of sustainable consumption practices.	Supported	$\alpha=0.05$
<b>H9:</b> Ethical purchase behavior positively influences adoption of sustainable consumption practices.	Supported	$\alpha=0.05$
<b>H10:</b> Ethical beliefs positively influence ethical purchase behavior through the intermediate effect of ethical purchase intention.	Supported	$\alpha=0.05$
<b>H11:</b> Self-conscious emotions positively influence adoption of sustainable consumption practices through the intermediate effect of ethical purchase intention.	Supported	$\alpha=0.05$
<b>H12a:</b> Consumer authenticity moderates the relationship between ethical beliefs and ethical purchase behavior.	Not supported	$\alpha=0.05$
<b>H12b:</b> Consumer authenticity moderates the relationship between ethical beliefs and ethical purchase intention.	Supported	$\alpha=0.05$
<b>H12c:</b> Consumer authenticity moderates the relationship between self-conscious emotions and ethical purchase intention.	Supported	$\alpha=0.05$
<b>H12d:</b> Consumer authenticity moderates the relationship between ethical beliefs and adoption of sustainable consumption practices.	Supported	$\alpha=0.05$
<b>H12e:</b> Consumer authenticity moderates the relationship between self-conscious emotions and ethical purchase behavior.	Not supported	$\alpha=0.05$
<b>H12f:</b> Consumer authenticity moderates the relationship between self-conscious emotions and adoption of sustainable consumption practices.	Not supported	$\alpha=0.05$

\**Inconclusive:*  $p\text{-value} > \alpha$ , evidence is inconclusive regarding the relationship being tested.

Source: Authors

#### 4.4. Empirical tested model

Considering the real-world applications of our study findings, 46.2% of the explanation is adequate to meet our research goals and is exploratory. While 46.2% is an excellent place to start, it should be considered in the larger context of our research goals and industry standards.

The regression equation follows:

$$ASCP = 0.203 + 0.092 * EB + 0.076 * SCE + 0.291 * EPI + 0.229 * CA + 0.335 * EPB$$

(Where: ASCP= adoption of sustainable consumption practices, EB= Ethical beliefs, SCE= Self-conscious Emotions, EPI= ethical purchase intent, CA= Consumer Authenticity, EPB= ethical purchasing behavior)

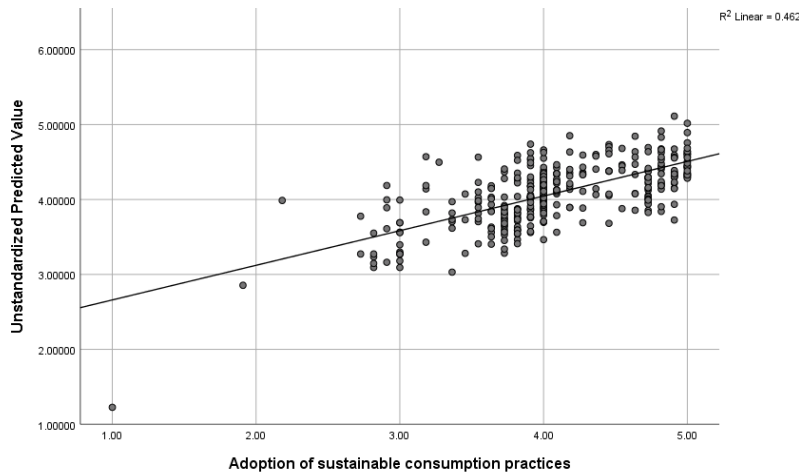


Figure 12. Regression fitted line

Source: Authors

Based on the research results and the relative interpretation, the empirical tested model forms as follows:

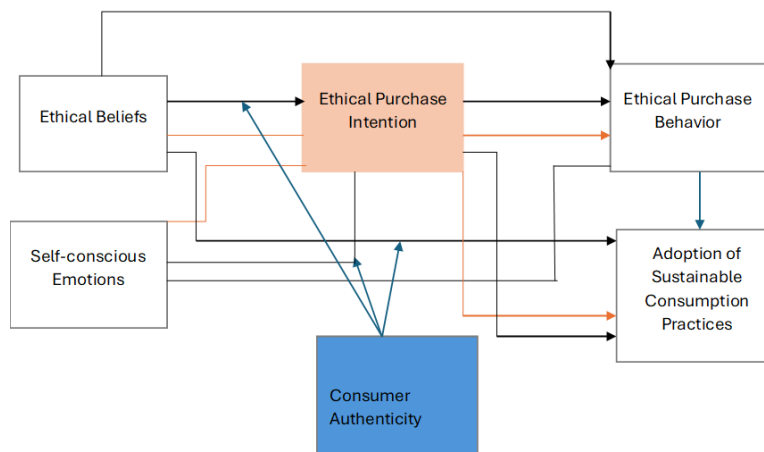


Figure 13. Empirical tested model

Source: Authors

#### 5. Discussion

Our study focuses on three key research objectives. First, we examine how the ethical belief system (idealism and relativism) affects ethical purchase intentions, behaviors, and the adoption of sustainable practices among Greek consumers regarding consumer goods and CEM. Second, we explore the relationships between self-conscious emotions and ethical beliefs and their influence on ethical purchasing and sustainability. Lastly, we investigate how

consumer authenticity moderates the connections between ethical beliefs and self-conscious emotions and their impact on purchasing behavior and sustainable practices among Greek consumers. Previous studies by Tukker (2015) and Ghisellini et al. (2015) emphasize understanding consumer behavior in sustainable practices. Our aim is to dissect the psychological mechanisms that play a role in ethical consumption, and we underscore that moral beliefs and emotions are key in a consumer's ethical decision-making process. Idealism and relativism are positively influencing consumer buying intentions; on the other hand, consumer authenticity has a mediating effect on both idealism and relativism effects.

The results align with previous studies, including Santos-Corrada et al. (2024), reinforcing our understanding of ethical purchasing. The present study analyzes the psychological mechanisms influencing ethical purchasing behavior in Greece's Circular Economy. Findings show that consumers' authentic and emotional behaviors are major contributors in the aim to purchase ethical products, thus marketers of sustainable consumption are facing an opportunity to think creatively.

This study correlates with previous studies, such as Wang and Udall (2023), which explored moral self-identity's impact on green product adoption, and Zahid et al. (2023), examining social identity in secondary clothing purchases. They emphasize the significance of understanding the psychological factors driving ethical consumption. Based on the studies by Wood et al. (2008) on consumer authenticity and Whitmarsh and O'Neill (2010) on green identity, we enhance our understanding of ethical purchasing behavior. It enriches the literature on ethical consumption by examining the roles of ethical beliefs, emotions, and authenticity. The findings also have practical implications for creating marketing strategies that promote sustainable consumption in Greece, supporting the Circular Economy.

Compared with previous studies, this study highlights the importance of psychological mechanisms in shaping ethical consumption and the need for further research in this field. This study offers an essential addition to the literature, proposing a new model of understanding ethical consumption that incorporates ethical beliefs, conscious emotions, and consumer authenticity.

### **5.1. Theoretical and research implications**

Self-identity theory states that people mold their self-concept according to their beliefs and values. For example, a person who considers himself or herself an ethical consumer is likely to purchase only the products that he or she perceives to be compatible with his or her values. Solid ethical self-identity (ESI) people are more likely to adopt behaviors that align with the Circular Economy Model (CEM); they prioritize sustainability and waste reduction, choosing long-lasting or recycled products over repaired ones. Studies indicate that high ESI individuals tend to select green products that match their moral beliefs (Hanel & Basil, 2023). It highlights the importance of ethical choices in reducing environmental impact.

For Hanel and Basil (2023) consumer authenticity involves being true to oneself and expressing oneself honestly. However, SIT may not fully address the complex relationship between authenticity, moral beliefs, and actions, particularly as self-conscious feelings like pride or guilt can change over time. Although there is a correlation between ethical beliefs and the intended actions, additional external factors such as situational constraints and peers' influence may affect actual purchasing behavior. In addition, SIT may neglect the process involving consumer authenticity and self-conscious emotions, especially in the context of CEM. Additional theories (e.g., Consumer Culture Theory, Self-Perception Theory) may be needed to get a complete picture of these dynamics, according to Waqas et al. (2021).

Within the Circular Economy Model, the role of SIT in ethical beliefs and purchasing behavior is significant and urgent, and our study underscores the pivotal role of ethical self-



identity in socially conscious consumer behavior. Consumers and citizens who adhere to their ethical values tend to make the right choices for the environment, playing a critical role in the efficient operation of the Circular Economy, according to Li et al. (2021). Also, reminding them of past green initiatives can motivate them even more to help the planet (Hanel & Basil, 2023).

However, understanding is key to marketing strategies aimed at promoting Circular Economy concepts. Bhutto et al. (2022) claim that customers' intentions to purchase environmentally friendly goods, such as green cars, examine the role that consumption values and ethical self-identity play, demonstrating how the relationship between sustainable consumption intentions and consumption ideals with ethical self-identity as mediator. Recent studies have examined how religious beliefs and attitudes influence purchasing habits (e.g., Zaman et al., 2023). Understanding how people make purchasing choices in a circular economy is essential. It is urgent because the connection between an individual's moral identity and purchasing decisions is complex.

Enhancing consumers' ethical self-identity can significantly support the principles of the circular economy and promote sustainable purchasing behaviors, according to Arman and Mark-Herbert (2022). Consumer Ethical Motivation emphasizes the importance of understanding the gap between consumers' beliefs and actions (Hanel & Basil, 2023) as well as examining conflicting consumer priorities. Thus, we can confidently assert that this knowledge is essential for understanding consumer behavior in a circular economy.

## 5.2. Practical implications

Retail businesses need to understand that consumers' identity and ethical beliefs influence their purchasing decisions to create marketing strategies that prioritize sustainability and ethical behavior, as emphasized by CEM (e.g., Hanel & Basil, 2023). Retailers should more effectively adapt their strategies to align with customers' values and understand how customers perceive their identity. Such recognition of self-identity allows retailers to tailor their approaches to meet these values, naturally influencing consumer behavior (e.g., Hanel & Basil, 2023).

Consumers seeking authenticity are more likely to engage with organizations that project a commitment to ethical standards. Therefore, retailers should ensure that their messaging aligns with the principles of the Circular Economy—a point agreed upon by researchers over the past decade (e.g., Escalas, 2013). This alignment helps retailers effectively influence customer behavior by addressing emotions such as pride in ethical choices and remorse for unsustainable practices. Retail environments can embody the circular economy model by creating authentic in-store experiences that resonate with customers' ethical values (Escalas, 2013).

Businesses should focus on developing authentic retail environments that significantly shape consumer behavior (Hanel & Basil, 2023), implementing loyalty programs. Loyalty programs promote ethical purchases aligned with personal identity can enhance customer engagement according to Arman and Mark-Herbert (2022). Luan (2016) highlight the role of brand partnerships upholding sustainability principles to enhance the retailer's reputation. Further, they can draw in important market segments that value ethical consumption (e.g., Luan, 2016).

It is very important for retail stores to listen to what their customers want and provide them with feedback. This helps stores understand how to make their customers happy (Burke & Reitzes, 1981).. Additionally, when stores share information about how they help the environment, it builds trust with their customers. In this way, people who care about doing the right thing will feel good about shopping there. When stores incorporate these values into their marketing strategies, it encourages people to make ethical purchases supporting not only the CE Model but most importantly in a way that is good for the planet (e.g., Larsen et al., 2020).

### 5.3. Further research and limitations

Researchers should conduct longitudinal studies to track trends in circular economy behaviors, revealing enduring factors and evolving dynamics. While quantitative analysis offers valuable insights, qualitative research can uncover underlying motivations and perceptions. Methods like in-depth interviews and focus groups can capture personal narratives often missed in quantitative data. Cross-cultural studies can highlight how cultural values influence perceptions of the circular economy. Exploring varied sustainable product strategies can also identify practical design principles for enhancing engagement. Finally, examining factors like trust, privacy concerns, and financial considerations can provide a comprehensive understanding of sustainable product adoption.

### Conclusions

The study has two main objectives: to understand what motivates people to buy environmentally friendly products and to help everyone make better shopping choices. Researchers found that individuals who strongly believe in doing what is right are more likely to purchase items that are good for the Earth. According to some experts, the desire to make good choices when shopping connects our self-understanding and beliefs with how we behave.

This study helps us learn more about how people choose to shop in a way that is good for the world. It examines what makes people want to shop ethically and finds that being true to oneself is important. The study also suggests that we should consider emotions such as being genuine and self-aware when trying to understand how people shop responsibly. Ethical purchasing intent is identified as a critical mediator in promoting ethical consumption. The findings empower manufacturers and policymakers in Greece to create strategies that encourage sustainable consumption and support the circular economy by fostering authenticity and self-awareness in consumers.

Our study highlights critical areas for further exploration into the factors influencing ethical consumer behavior across different cultures. It offers valuable contributions to understanding ethical purchasing within the Circular Economic Model. By integrating psychological factors like ethical beliefs and consumer authenticity, we enhance the literature and provide practical guidelines for promoting sustainable practices in Greece. The findings can inform strategies that encourage sustainable consumption and support the transition to a more sustainable future.

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