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Implicit Ethical Consumerism: Development and Cross-Cultural Validation of a Novel Affect-Misattribution Measure

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ABSTRACT

The literature has documented a pervasive attitude-behavior gap in ethical consumption, whereby many consumers do not consistently translate their expressed positive attitudes toward ethical products into behavior. For marketers investing in social responsibility initiatives, this suggests that more accurate segmentation and demand forecasting may require an implicit measure of ethical consumerism. This study draws from literatures in ethical consumption and the psychology of attitudes to develop and validate such a measurement tool. Across three pretests and three studies, findings show that our implicit measure (based on the Affect Misattribution Procedure [AMP]) is cross-culturally robust in predicting ethical consumption behavior beyond effects of explicit measures. Overall, this study indicates that academics and practitioners can enhance their predictive capabilities regarding ethical consumption behavior by integrating the AMP-inspired measure with traditional explicit measures, rather than solely relying on the latter.

Across most cultural contexts, consuming ethically is socially desirable (Belk et al. 2005; Hassan et al. 2022). Ethical consumerism—a propensity to choose products that contribute positively to environmental, social, and/or animal wellbeing (Carrington et al. 2014)—may enhance consumers' social status in the eyes of others (Griskevicius et al. 2010). Consequently, consumers often exaggerate their explicit attitudes towards ethical products, creating a pervasive attitude-behavior gap (Carrington et al. 2014, 2016). Although several theoretical explanations have been offered, the attitude-behavior gap remains pronounced (Park and Lin 2020). Accordingly, the current research draws on literature in psychometrics and attitude theories to develop and validate an implicit measure of ethical consumerism that is cross-culturally robust and capable of predicting ethical consumption behavior beyond explicit measures. In so doing, we provide a novel measurement tool usable by marketers and environmental psychologists with interest in ethical consumption.

Next, we review the literatures around (1) the ethical attitude-behavior gap and (2) implicit versus explicit attitudes. This leads to the development of an implicit measure of ethical consumerism that we refine and cross-validate in three studies conducted across national contexts. We conclude by discussing the implications of our findings.

1 | Conceptual Development

1.1 | Ethical Consumerism

Defining an "ethical" product is challenging because ethicality is subjective. However, the literature (see Table 1 for summary) treats several product claims and attributes as generally ethical. For instance, products that reduce environmental harm (e.g., "made from recycled materials"), protect human rights

TABLE 1 | Relevant literature on ethical consumption and attitude-behavior gap.

Theme	Acknowledged Definition	Reference	Influential contributions
Consumers Ethics	*The ethical principles and standards that govern the behavior of individuals and groups in the acquisition, utilization, and disposal of goods and services.*	Muncy and Vitell 1992, p.292	Belk et al. (2005) Devinney et al. (2010) Hassan et al. (2022)
Ethical Consumerism	*Social movement based in consumers' "concerns about the ethicality and impact of their consumption choices upon the environment, animals, and/or society."*	Carrington et al. 2014, p.2759	Carrington et al. (2016) Gürhan-Canli et al. (2018) Zollo (2021)
Sustainable Consumption	*Purchasing goods produced with just wages, fair worker treatment, and ecological sustainability"* countering "*animal testing, factory farming, and politicians who oppose environmental regulations.*	Zollo et al. 2018, p.693	Goodarzi et al. (2021) Park and Lin (2020) Zollo (2021)
Attitude-Behavior Gap	*The widespread failure of consumers to put their ethical attitudes and ethical consumption intentions into action.*	Carrington et al. 2016, p.24	Carrington et al. (2014) Eckhardt et al. (2010) Park and Lin (2020)
Impediments to Overcoming the Attitude-Behavior Gap	*-higher prices-perceived inferior quality-companies' greenwashing-lack of options-limited information-inconvenience*	Zollo 2024, pp.566-569	Jägel et al. (2012) Vieira et al. (2023) Young et al. (2010)
Implicit Ethical Consumerism	*The implicit (i.e., nonconscious) portion of one's propensity to choose products that positively contribute to environmental, social, and/or animal well-being without*	This article	Govind et al. (2019) Greenwald et al. (1998)

(e.g., "fair-trade"), and promote animal welfare (e.g., "cruelty-free") may be broadly considered as ethical products. While some prior studies have focused on only one of these ethical domains of ethical consumption at a time (e.g., Goodarzi et al. 2021), the literature more generally defines ethical consumerism as an aggregated construct across these domains (Carrington et al. 2014, 2016; Zollo 2021). We adopt this consolidated view of ethical consumerism in both conceptualizing the construct and subsequent measure development.

That is, our implicit measure of ethical consumerism includes references to diverse contexts of ethical consumption (e.g., ethical treatment of employees, animal welfare, environmental protection, etc.). In addition to reflecting the literature, doing so strengthens the generalizability of our measure as one assessing implicit ethical consumerism rather than merely implicit animal welfare concerns (e.g.,). By way of initial empirical support, our subsequent pretest data also consistently show that consumer perceptions of ethicality correlate highly across domains (e.g., Fair Trade, Free Range, etc.; see Supporting Information).

1.2 | The Ethical Attitude-Behavior Gap

Consumers worldwide report greater interest in ethical products than ever before (Gürhan-Canli et al. 2018). Yet scholars continue to lament the gap between consumers' attitudes and behavior with respect to ethical products (Park and Lin 2020). The phenomenon is pervasive cross-culturally. For instance, Young et al. (2010) observed that while 30% of UK consumers are "very concerned" about the environment, environmentally-friendly food products make up only 5% of food sales. Similarly, Vieira et al. (2023) surveyed consumers in Portugal and found mean scores of environmental concerns near the scale's ceiling, but average frequencies of pro-environmental behaviors below the scale mid-point. Goodarzi et al. (2021) showed that informing Italian consumers about sustainable technology improved attitudes but not adoption rates.

Scholars have sought to "close the gap" by examining what makes it so pervasive. This literature has shown that consuming ethically is socially desirable cross-culturally (Belk et al. 2005) and satisfies a fundamental motive toward status attainment (Griskevicius et al. 2010). Expressing favorable attitudes therefore, confers social benefits at no cost. Conversely, consumers face a host of barriers to ethical consumption behavior. Ethical products are typically priced at a premium (Jägel et al. 2012) and may conflict with other goals, like minimizing shopping effort (Vieira et al. 2023). Psychologically, consumers may feel helpless to remedy grand social problems merely by choosing ethical products (Belk et al. 2005).

In sum, consumers are motivated to exaggerate their favorable attitudes toward ethical products beyond their actual behavior.

This introduces measurement inaccuracies in segmentation and targeting strategies geared toward ethical consumers. For academic researchers, sole reliance on explicit measures of ethical consumerism may limit the validity of findings in this domain. Framing this attitude-behavior gap as a measurement issue (Carrington et al. 2014), we therefore seek to address it by developing a measure of *implicit* ethical consumerism that may be used alongside existing explicit measures.

To our knowledge, only one instance of published research (Govind et al. 2019) has shown that implicit attitudes toward ethical consumption help predict ethical consumer behavior, beyond the effects of explicit attitudes. Our research aims to build on this foundation by creating and validating a more robust and practical measure of implicit ethical consumerism.

1.3 | Implicit Attitudes

Many cognitive processes, such as attitude formation, have nonconscious (i.e., implicit) components. In socially sensitive contexts (such as ethical consumption), implicit attitudes are particularly important to predicting behavior (Greenwald et al. 1998). Because implicit attitudes may be formed nonconsciously, they cannot be assessed using direct survey measures (Nosek 2007).

The most widely used measure of implicit attitudes is the Implicit Association Test (IAT; Greenwald et al. 1998; see https://implicit.harvard.edu/). However, the IAT requires specialized software and relies on reaction-time data, complicating administration and inflating error variance (Payne et al. 2005). We therefore adopt an alternative paradigm (the Affect Misattribution Procedure [AMP; Payne et al. 2005]) for developing a novel measure of implicit ethical consumerism. In addition to its ease of administration, the AMP's reliability and predictive validity are commensurate with other implicit measures, including the IAT (Payne and Lundberg 2014).

The AMP exploits a psychological tendency of people to mistakenly transfer (i.e., misattribute) their affect for a known object onto an ambiguous one when the two objects appear together in close spatial or temporal proximity (Murphy and Zajonc 1993). Therefore, if a previously neutral stimulus (e.g., an ambiguous pictograph) is presented proximally to another, favorable stimulus (e.g., an attractive person), an observer may report favorable attitudes toward the pictograph even though the true positive affect was generated by the attractive person (Payne et al. 2005).

In practice, the AMP exposes participants to a known attitude object, followed immediately by an ambiguous symbol. Participants are instructed to *only* evaluate the ambiguous symbol and not the initial known object. Because the symbol is ambiguous, participants will (non-consciously) transfer their implicit attitudes toward the known object onto the ambiguous symbol, resulting in an implicit measure of attitudes toward the known object. Our research efforts, detailed below, focus on developing and validating an implicit ethical consumerism measure inspired by this paradigm.

1.4 | Methodological Overview

Our studies included consumers in the US (Study 1), Italy (Study 2), and the UK (Study 3) for cross-cultural robustness. To serve as the "known object," we used ethical labels commonly found on product packaging. Because ethical product labels are typically country- and language-specific, we conducted three pretests to identify three subsets of labels that are most familiar and ethical to consumers in the US, Italy, and the UK, respectively, to be used in the main studies. Following Payne et al. (2005), we used randomly selected Chinese pictographs to serve as ambiguous symbols (see the Appendix).

Participants in all studies and pretests were recruited using Prolific, an online panel used for cross-national consumer research. We included only participants who passed all attention check questions (see Supporting Information for attention checks and scale items). Additionally, in the main studies, participants listed all languages in which they are proficient, and those who selected Chinese were excluded from analyses to maintain the validity of the AMP (which uses Chinese pictographs as ambiguous symbols). Sample characteristics are summarized in Table 2.

The generalized procedure (based on Payne et al. 2005) and stimuli we developed are summarized in the Appendix. Study 1 included both ethical and neutral (for comparison) product labels as known objects. Because responses to the neutral labels did not impact our measure's effects or exhibit direct effects on the dependent variable, neutral labels were excluded from Studies 2 and 3 to simplify the procedure. Participants in all studies were given instructions regarding the "symbol-rating task" and were required to correctly answer comprehension check questions about these instructions before continuing.

In a given trial, a randomly selected product label was displayed for 1 s, followed by a randomly selected Chinese pictograph also displayed for 1 s, followed by a gray square as a pattern mask. Below the gray square, a single item asked participants to rate the visual pleasantness of the Chinese pictograph they had just seen (1 = *Very unpleasant*, 6 = *Very pleasant*). An even number of scale points was used to force participants to indicate some level of pleasantness/unpleasantness (Payne et al. 2005). This was repeated for all product labels, resulting in ten (five) trials per participant in Study 1 (Studies 2 and 3). The ratings of the Chinese pictographs that were paired with the five ethical labels were averaged for each participant, representing an implicit ethical consumerism score. A visual framework of our predictions is summarized in Figure 1.

2 | Study 1

2.1 | Pretest

This pretest was designed to guide our selection of US-based ethical product labels for the main study. Participants rated 20 ethical labels using one item each to operationalize ethicality and familiarity: "Any product carrying this label is..." (1 = *Not at all ethical*, 9 = *Highly ethical*) and "How familiar are you with this label?" (1 = *Not at all familiar*, 9 = *Very familiar*). Including

TABLE 2 | Sample characteristics.

	Starting *N*	Failed Attention Check	Proficient in Chinese	Final N	Mean (SD) Age	% Female	Country of Residence
Study 1 Pretest	100	2	NA	98	32.21 (11.46)	57.1%	US
Study 1	396	6	24	366	29.63 (12.13)	65.0%	US
Study 2 Pretest	100	30	NA	70	29.96 (8.53)	34.3%	Italy
Study 2	514	100	0	414	28.49 (8.53)	50.5%	Italy
Study 3 Pretest	100	29	NA	71	35.41 (12.75)	45.1%	UK
Study 3 (T1)	602	91	22	489	45.49 (14.55)	53.6%	UK
Study 3 (T2)	278	2	0	276	46.20 (14.51)	54.0%	UK

Note: In Study 3, only T1 participants who passed all attention checks and did not indicate proficiency in Chinese ($N = 489$) were invited to complete T2; among those invited, 278 participants completed T2 for a response rate of 56.7%.

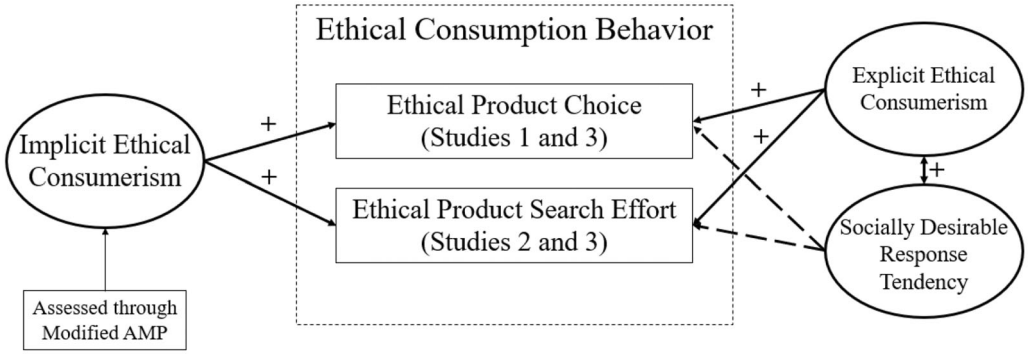

FIGURE 1 | Visual framework of key variables and predictions. *Note:* Direction and significance of social desirability's effects not hypothesized.

familiarity ratings was essential because the AMP relies on 1 s reactions to the ethical labels, and it is unlikely that such a brief exposure would have its intended effect unless participants were able to instantly recognize each label, which is most likely to occur for labels that are highly familiar.

The labels represented a range of ethical certifications that appear on common products in the US and reflected agreed-upon ethical product attributes (e.g., environmentally friendly, protective of animal welfare, etc.; Zollo 2021). We summed the *ethical* and *familiar* ratings for each label and retained the top five labels (see the Appendix) in terms of this index. Descriptive statistics and ethical-familiarity correlations for labels in all pretests are provided in the Supporting Information.

2.2 | Methods

The main study consisted of two ostensibly unrelated parts. Part 1 was described as a symbol-rating task, and Part 2 was described as a product-choice task. All participants were endowed with a $0.25 bonus to be "spent" in Part 2. In actuality, Part 1 was our modified AMP, containing the five ethical labels derived from the pretest and five neutral labels for comparison, all in randomized order.

Pleasantness ratings of the five Chinese pictographs that were paired with ethical labels were averaged into an implicit ethical consumerism score. Ratings of the pictographs paired with neutral labels were averaged into a control measure ("implicit neutral consumerism"). For comparison, participants also responded to a four-item scale ($\alpha = 0.89$) assessing explicit ethical consumerism adapted from Sudbury-Riley and Kohlbacher (2016), and a six-item version of Crowne and Marlowe's (1960) Social Desirability Scale ($\alpha = 0.60$) as a covariate. These two measures were presented in randomized order relative to the AMP.

Part 2 was a product-choice task based on a procedure developed by Reich et al. (2018). Participants were instructed to imagine that they had four items on their shopping list. They were informed that at the end of the study, they would receive the remainder of their $0.25 bonus (not spent during the task), and that they would enter into a drawing to receive one of the products they chose. In this way, product choices and the associated prices were consequential to participants. We then presented participants with four product categories (water bottle, hand sanitizer, coffee beans, and chocolate bar), each within a table showing a side-by-side comparison between Brand A and Brand B in terms of four attributes: one ethical attribute, two extraneous attributes, and a nominal price (see Supporting Information). The two brands only differed in terms of the ethical attribute and price, such that the ethical brand was always twice as expensive as the conventional brand. We randomized whether Brand A or Brand B contained the ethical attribute for each product.

Participants chose one brand to purchase for each product category (1 = ethical choice, 0 = conventional choice). These scores were summed to create an index of ethical choice (range: 0–4). We included a single-item check to ensure participants were conscious of their choices: "When you were choosing products in the shopping task, to what extent did you choose

TABLE 3 | Hierarchical linear regression results.

Study 1 (DV = Ethical Choice Index)			Study 2 (DV = Search Effort Index)		
Predictor	**β**	***p***	**Predictor**	**β**	***p***
Step 1			Step 1		
Implicit Ethical Consumerism*	0.23	<0.001	**Implicit Ethical Consumerism***	0.13	.008
Step 2			Step 2		
Implicit Ethical Consumerism*	0.17	.003	**Implicit Ethical Consumerism***	0.12	.02
Implicit Neutral Consumerism	0.10	.08	Set	−0.07	.18
Step 3			Type	0.03	.54
Implicit Ethical Consumerism*	0.17	.004	Social Desirability	0.07	.15
Implicit Neutral Consumerism	0.10	.08	Step 3		
Set	0.07	.16	**Implicit Ethical Consumerism***	0.10	.049
Type	0.02	.67	Set	−0.07	.17
Social Desirability	−0.01	.79	Type	0.04	.45
Step 4			Social Desirability	0.06	.25
Implicit Ethical Consumerism*	0.11	.03	Explicit Ethical Consumerism	0.09	.09
Implicit Neutral Consumerism	0.05	.32			
Set	0.04	.35			
Type	0.06	.19			
Social Desirability	−0.05	.27			
Explicit Ethical Consumerism*	0.50	<0.001			
Study 3 (DV = Ethical Choice Index)			Study 3 (DV = Search Effort Index)		
Predictor	**β**	***p***	Predictor	**β**	***p***
Step 1			Step 1		
Implicit Ethical Consumerism*	0.20	<0.001	**Implicit Ethical Consumerism***	0.17	.006
Step 2			Step 2		
Implicit Ethical Consumerism*	0.20	.001	**Implicit Ethical Consumerism***	0.17	.006
Set	0.01	.89	Set	−0.05	.41
Type	0.02	.73	Type*	0.13	.04
Social Desirability	0.09	.15	Social Desirability*	−0.12	.04
Step 3			Step 3		
Implicit Ethical Consumerism*	0.12	.03	**Implicit Ethical Consumerism***	0.15	.01
Set	−0.03	.60	Set	−0.06	.35
Type	−0.01	.82	Type*	0.12	.05
Social Desirability	0.04	.49	Social Desirability*	−0.13	.03
Explicit Ethical Consumerism*	0.43	<0.001	Explicit Ethical Consumerism	0.08	.19

*$p < 0.05$; Implicit Ethical Consumerism highlighted in bold for emphasis; β = standardized regression coefficient.

conventional versus ethical brands?" 1 = *primarily conventional brands*, 11 = *primarily ethical brands*). This item strongly correlated with the ethical choice index ($r = 0.84$, $p < 0.001$), validating the product-choice task.

2.3 | Results/Discussion

The analysis consisted of a hierarchical linear regression, treating the ethical choice index as the dependent variable (see Table 3, top left panel). Step 1 included only implicit ethical consumerism as a predictor, and results support its predictive validity via a positive significant effect ($\beta = 0.23$, $p < 0.001$). At step 2, we added implicit *neutral* consumerism ($\beta = 0.11$, $p = 0.08$), and implicit ethical consumerism remained significant ($\beta = 0.18$, $p = 0.003$). At step 3, we added two method factors ("set" and "type") pertaining to the randomization of Chinese pictographs (both $ps > 0.15$) as well as social desirability ($p = 0.79$), and implicit ethical consumerism's effect remained ($\beta = 0.17$, $p = 0.004$). Lastly, at step 4, we added explicit ethical consumerism ($\beta = 0.50$, $p < 0.001$), and the implicit measure's effect remained significant ($\beta = 0.11$, $p = 0.03$).

Results suggest that our implicit measure predicts ethical choices in a consequential choice task, and that this effect is robust to method factors and socially desirable responding. Moreover, our implicit measure explained additional unique variance beyond effects of explicit consumerism. This reinforces our theorizing around the attitude-behavior gap, showing that explicit consumerism only partially explains ethical consumption, and that an implicit measure may provide additional predictive power when administered alongside an explicit scale. One limitation was the hypothetical nature of the product-choice task (i.e., the prices "paid" were nominal deductions from a bonus). Study 2 was designed to address this by including a more behavioral measure of ethical consumption. In addition, Study 2 tests our measure's cross-cultural robustness among Italian consumers.

3 | Study 2

3.1 | Pretest

We repeated the pretest procedure from Study 1 among Italian consumers, translated into Italian and using eight ethical labels found in Italy. As before, the five labels rated most ethical and familiar were retained for the main study.

3.2 | Methods

This study implemented a survey (translated into Italian) containing two seemingly unrelated parts, similar to Study 1. Part 1 was again described as a symbol-rating task and included our modified AMP, the explicit ethical consumerism scale ($\alpha = 0.87$), and the Social Desirability Scale ($\alpha = 0.46$), in randomized order. Part 2 was described as a product-search task in which participants imagined themselves considering options of a European food delivery service, Just Eat. They were told that six service options would be displayed, one at a time, ordered least to most environmentally friendly (see Supporting Information). For each option, participants chose whether to continue learning about subsequent options or to select the current option and end the search. Because participants knew that the latter options were more ethical, their search effort (operationalized as the number of times they chose to continue searching, ranging from 0 to 5) represented a behavioral measure of ethical consumption. Search effort was especially consequential in this context because Prolific participants are motivated to complete each study as quickly as possible. Participants were not asked to make a final service selection but rather were debriefed that the task was assessing search effort upon its completion.

3.3 | Results/Discussion

The analysis consisted of a hierarchical linear regression treating search effort as the dependent variable. Validating our measure, implicit ethical consumerism had a positive significant effect at each step of the model ($ps < 0.05$; see top right panel of Table 3 for details). At the final step, we added the explicit ethical consumerism scale which had a marginally significant effect ($\beta = 0.09$, $p = 0.09$), whereas our implicit measure remained significant ($\beta = 0.10$, $p = 0.049$). Results therefore replicate the predictive validity of implicit ethical consumerism on a consequential measure of ethical consumption behavior, in a different cultural context.

4 | Study 3

4.1 | Pretest

We repeated the pretest procedure among British consumers, using 20 ethical labels found in the UK. As before, the five labels rated most ethical and familiar were retained for the main study.

4.2 | Methods

Study 3 followed the procedure of our prior studies with two notable exceptions. First, to ensure that completing our modified AMP did not bias participants' responses to subsequent dependent variables, we used a time-separated design. Second, for robustness, we included both the product-choice task from Study 1 (with US dollars converted into British pounds) and the product-search task from Study 2 (translated into English). Thus, Part 1 of the study was again described as a symbol-rating task and included our modified AMP, the explicit ethical consumerism scale ($\alpha = 0.93$), and the Social Desirability Scale ($\alpha = 0.67$). An attention check, language proficiency question, and demographics were also included. Ten days after completing Part 1, participants who passed the attention check and did not indicate Chinese proficiency were re-contacted to participate in Part 2, which included the two tasks containing the two dependent variables (i.e., an ethical choice index as in Study 1 and a search effort index as in Study 2) and a second attention check. Regarding the product-choice task, a check item was included as in Study 1, and the item strongly correlated with the ethical choice index ($r = 0.89$, $p < 0.001$).

4.3 | Results/Discussion

The analysis consisted of two separate hierarchical linear regressions, one for each dependent variable (ethical choice and search effort). At each step of both models, implicit ethical consumerism had a positive significant effect ($ps < 0.05$; see bottom panels of Table 3 for details). At the final step of the ethical choice model, the effect of our implicit measure remained significant ($\beta = 0.12$, $p = 0.03$) though explicit ethical consumerism's effect was stronger ($\beta = 0.43$, $p < 0.001$). This closely replicates Study 1 results. Similarly, at the final step of the search effort model, our implicit measure had a strong, significant effect ($\beta = 0.15$, $p = 0.01$) whereas the explicit measure was null ($\beta = 0.08$, $p = 0.19$). This replicates Study 2 results.

5 | General Discussion

Consumers tend to overreport ethical product attitudes, complicating marketers' efforts to incorporate social responsibility into their products. Although the literature has offered several

explanations, this attitude-behavior gap persists. The current research, informed by literatures in ethical consumption and attitude formation, addresses this issue from a measurement perspective. Through adapting an existing AMP paradigm, our research offers a novel measurement tool aimed at capturing *implicit* ethical consumerism which has otherwise evaded practitioners and researchers. Findings show that our measure is cross-culturally robust and predicts ethical consumption behavior beyond the effects of explicit ethical consumerism.

5.1 | Theoretical Contributions

Our research illuminates the theoretical nature of the ethical attitude-behavior gap. The literature primarily focuses on explaining obstacles to ethical consumption behavior (e.g., Belk et al. 2005), with only a minority critically examining explicit measures in this context (e.g., Carrington et al. 2014). Our work builds on this foundation by showing that ethical consumption may be better explained by a combination of explicit and implicit ethical consumerism measures, rather than predominantly one or the other.

Adding nuance, findings suggest that our implicit measures' predictive role may be secondary to explicit consumerism for certain ethical behaviors (e.g., product choice), while primary for others (e.g., search effort). Although not formally hypothesized, this finding suggests that theories of ethical consumption may be augmented to differentiate between types of ethical behavior when attempting to explain its psychological causes. Specifically, more subtle ethical consumption behaviors, such as information search, may have a more pronounced implicit basis relative to more deliberative ethical behaviors, such as product choice.

Similarly, our research contributes to theories of attitudes by showing interrelationships between implicit and explicit consumerism measures. Our findings show that both implicit and explicit measures may predict an expected outcome, albeit to different degrees. This extends predominant models of attitudes that typically focus on differentiating implicit from explicit effects. However, consistent other domains of socially acceptable behavior (e.g., alcohol consumption; Dovidio et al. 2001), we demonstrate an area in which the implicit–explicit combination is more predictive of behavior than either attitude type alone. Moreover, follow-up analyses showed weak, positive implicit–explicit correlations ($r = 0.18$, 0.19, and 0.18 in Study 1, 2, and 3, respectively; all $ps < 0.01$). The significant correlations support the concurrent validity of our implicit measure, yet the effect sizes are weaker than implicit–explicit correlations in most other domains (Nosek 2007). These weak correlations challenge existing assumptions and suggest the need for a more comprehensive theoretical framework of implicit versus explicit measures leading to ethical consumption (Dimofte 2010).

5.2 | Practical Implications

Our findings suggest that practitioners should cautiously interpret market research that solely relies on explicit measures of ethical consumerism. Our research provides a simple, practitioner-friendly implicit measurement tool (along with a guiding framework for adapting it internationally) that may be implemented alongside explicit measures. Our work therefore, provides a more precise metric for identifying ethically-minded consumer segments, answering calls for the further development of implicit consumer metrics (Dimofte 2010). Likewise, our implicit measure reduces the inaccuracies in demand forecasting for ethical products caused by the attitude-behavior gap (Devinney et al. 2010), adding to the predictive toolkit of marketers.

5.3 | Limitations and Future Directions

One limitation of this study is that our studies were not conducted in a field setting. Although the measures of ethical consumption behavior were consequential, participants were aware that they were participating in a research study. Future research should validate the effects of implicit ethical consumerism in a more ecologically valid setting.

Another notable limitation is that we relied on Chinese pictographs to represent ambiguous imagery. While this was informed by extant AMP research (Payne et al. 2005), it limits generalizability and precludes the measure's use among sinophonic consumers. Future research should seek to test our measure's effectiveness while using an alternative set of ambiguous symbols, such as inkblots. Furthermore, while our studies showed consistent results across three cultural contexts, all are considered "Western" cultures. Future research should attempt to replicate our implicit measures' effects across broader cultural differences. For instance, in cultures where ethical consumption is not as socially desirable, implicit and explicit measures may intercorrelate more highly and predict ethical consumption to similar degrees.

Relatedly, post-hoc supplemental analyses showed that, in Study 1, mean ratings of the ethical and neutral labels were statistically equivalent to each other (see Supporting Information for details), and the ethical label ratings were significantly above the mid-point in all studies. We interpret this to mean that the samples overall are not biased in favor of ethical consumerism per se, but that the AMP in part captures a general tendency toward liking of the pictographs' aesthetics. Nonetheless, the significant effects of the ethical (but not neutral) ratings on downstream ethical consumption suggest that it is also capturing implicit ethical consumerism. This also reinforces the need for future research to test our measure's effectiveness using alternative ambiguous symbols that may be more aesthetically neutral.

Lastly, our implicit measure was only tested against one explicit measure of ethical consumerism. This explicit measure was selected for several reasons: (1) it was the most highly-cited result when searching for "ethical consumerism scale," suggesting its relevance to the field; (2) it was validated cross-nationally, making it a good fit to our cross-cultural research; (3) it incorporates a variety of ethical consumption domains, as does our measure. Nonetheless, future research should incorporate additional explicit measures as a more conservative test of our measure's effects.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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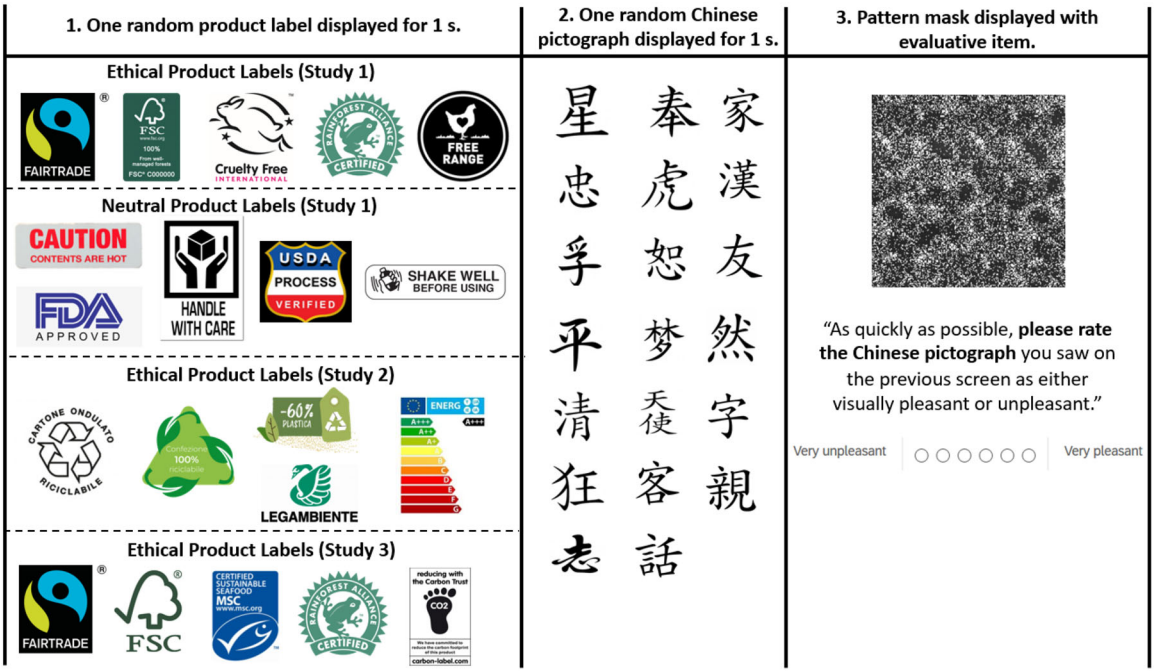
Supporting Information

Additional supporting information can be found online in the Supporting Information section.

Appendix
Procedure for Implicit Ethical Consumerism Measure.



Note: Text-based portions of the procedure translated into Italian in Study 2.