

Amasino, Dianna R.; Oosterwijk, Suzanne; Sullivan, Nicolette J.; van der Weele, Joël J.

**Working Paper**

## Seeking or ignoring ethical certifications in consumer choice

Tinbergen Institute Discussion Paper, No. TI 2024-029/I

**Provided in Cooperation with:**

Tinbergen Institute, Amsterdam and Rotterdam

*Suggested Citation:* Amasino, Dianna R.; Oosterwijk, Suzanne; Sullivan, Nicolette J.; van der Weele, Joël J. (2024) : Seeking or ignoring ethical certifications in consumer choice, Tinbergen Institute Discussion Paper, No. TI 2024-029/I, Tinbergen Institute, Amsterdam and Rotterdam

This Version is available at:

<https://hdl.handle.net/10419/298036>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*

TI 2024-029/I  
Tinbergen Institute Discussion Paper

# Seeking or ignoring ethical certifications in consumer choice

*Dianna R. Amasino<sup>1</sup>*  
*Suzanne Oosterwijk<sup>2</sup>*  
*Nicolette J. Sullivan<sup>3</sup>*  
*Joël van der Weele<sup>4</sup>*

<sup>1</sup> Tilburg University and University of Amsterdam

<sup>2</sup> University of Amsterdam

<sup>3</sup> The London School of Economics and Political Science

<sup>4</sup> Amsterdam School of Economics and Tinbergen Institute

Tinbergen Institute is the graduate school and research institute in economics of Erasmus University Rotterdam, the University of Amsterdam and Vrije Universiteit Amsterdam.

Contact: [discussionpapers@tinbergen.nl](mailto:discussionpapers@tinbergen.nl)

More TI discussion papers can be downloaded at <https://www.tinbergen.nl>

Tinbergen Institute has two locations:

Tinbergen Institute Amsterdam  
Gustav Mahlerplein 117  
1082 MS Amsterdam  
The Netherlands  
Tel.: +31(0)20 598 4580

Tinbergen Institute Rotterdam  
Burg. Oudlaan 50  
3062 PA Rotterdam  
The Netherlands  
Tel.: +31(0)10 408 8900

Title: Seeking or ignoring ethical certifications in consumer choice

Authors: Dianna R. Amasino<sup>a,b\*</sup>, Suzanne Oosterwijk<sup>c</sup>, Nicolette J. Sullivan<sup>d</sup>, Joël van der Weele<sup>b,e</sup>

- a. Department of Social Psychology, Tilburg University, Tilburg, The Netherlands
- b. CREED, Amsterdam School of Economics, University of Amsterdam, Amsterdam, The Netherlands
- c. Department of Social Psychology, University of Amsterdam, Amsterdam, The Netherlands
- d. Department of Management, The London School of Economics and Political Science, London, United Kingdom
- e. Tinbergen Institute, Amsterdam, The Netherlands

**Abstract:** Consumers often encounter, and claim to care about, ethical information concerning the products they purchase. Across three studies, we investigate how the accessibility of this information impacts choice. When consumers must seek out product attribute information, the impact of ethical certifications (Fairtrade and Organic) is diminished relative to other attributes. Both positive and negative framing of certifications increase their impact on choice relative to neutral frames, with negative frames having the strongest effect. However, in contrast to theories of information demand that would predict more willful ignorance of negatively framed content, negative framing has the same impact regardless of information accessibility. Together, our findings suggest that having to seek ethical certification information leads to a small reduction in the use of certifications to guide choice, but that affective framing has a larger impact on the weight placed on certifications in consumer choices regardless of the accessibility of information.

**Keywords:** Consumer-choice, information-avoidance, information-seeking, willful ignorance, sustainability, certifications.

---

\* Corresponding author. Email: [d.r.amasino@tilburguniversity.edu](mailto:d.r.amasino@tilburguniversity.edu);  
Postal address: PO Box 90153, 5000 LE Tilburg, The Netherlands

## 1. Introduction

Information about the impacts of purchases, ranging from labor conditions to environmental footprint, is increasingly accessible with the proliferation of certifications, websites, and apps to help consumers navigate ethical and sustainable options. Such information has important worldwide consequences for efforts to combat forced labor, poverty, and climate change (International Labor Organization & Walk Free Foundation, 2017; Thøgersen & Nielsen, 2016). Indeed, agriculture is the most relevant sector for poverty reduction in low-income countries and accounts for around one quarter of greenhouse gas emissions (Ivanic & Martin, 2018; Ritchie, 2021). This indicates that a complete understanding of how and whether consumers seek out and weigh this information has critical importance.

Do consumers seek out ethical information? Although people may view ethical impact information as relevant to their decision-making, they may ignore it because it is unpleasant to contemplate or requires making difficult tradeoffs (Golman & Loewenstein, 2018; Grossman & van der Weele, 2017; Sharot & Sunstein, 2020). Indeed, even people who report caring about ethical impacts ignore this information in incentivized divisions (Dana et al., 2007; Vu et al., 2023) and hypothetical purchases (Ehrich & Irwin, 2005; Philipp-Muller et al., 2022), a phenomenon termed “strategic” or “willful” ignorance. However, the results depend on the experimental context including whether receiving or ignoring information is the default (Grossman, 2014), the presence of additional, non-ethical attributes (Woolley & Risen, 2021) and the ease of processing information (Orquin et al., 2020; Peschel et al., 2019), with some studies failing to find ignorance for environmental causes (Felgendreher, 2018; Lind et al., 2019; Momsen & Ohndorf, 2020). Thus, we still know little about consumers’ attention to or ignorance of ethical information in their daily shopping decisions.

In this paper, we investigate the influence of information accessibility and framing on consumers’ use of ethical certifications by employing realistic scenarios and incentivized product purchases. We use prominent Organic and Fairtrade certifications that have yet to be investigated in the context of willful ignorance (Rousseau, 2015; Sonntag et al., 2023). Further, we explore how behavior is influenced when consumers must actively search for ethical information in competition with information on a variety of other attributes, such as quality and price, weakening the explicit tradeoff between self and ethical impacts that is typical in lab experiments of willful ignorance (Woolley & Risen, 2021). We use an unobtrusive and comprehensive

method to precisely measure which information is revealed and for how long through MouselabWEB, where information is revealed upon hovering over an information box (Willemsen & Johnson, 2019). Moreover, we test whether the *same* person who uses ethical information when confronted with it, fails to seek it out when required to do so actively. These features reduce self-report or demand biases and study ignorance in a more naturalistic setting closer to actual consumer choices.

Because the role of affect in ignorance is not well understood, we contrast positive (e.g. “help workers”) and negative (“avoid harm to workers”) frames. While negative frames are more effective, they work by producing negative affect (Grankvist et al., 2004; Metzger & Günther, 2019; Van Dam & De Jonge, 2015). Thus, negative framing should also increase affective ignorance (Golman & Loewenstein, 2018; Sharot & Sunstein, 2020). Our in-depth exploration of consumer attention to ethical labels quantifies the net effect of such frames and sheds light on attentional processes in ethical decision-making (Song et al., 2019; Takahashi et al., 2018; Van Loo et al., 2015, 2018).

## **2. Theoretical background and hypotheses**

### *2.1 Information seeking and ignorance motives*

Information is crucial to understanding the consequences of our choices, but with a constant stream of information and limited attention, people must decide which information to seek out and which to ignore. Research across Cognitive Neuroscience, Psychology, and Economics has converged on three motives that influence information-seeking and avoidance: instrumental, affective, and curiosity motives (Golman et al., 2022; Golman & Loewenstein, 2018; Sharot & Sunstein, 2020). Instrumental motives push people to seek actionable, decision-relevant, and ignore irrelevant, information. Cognitive curiosity motivates uncertainty reduction and more broadly understanding. Affective motives lead people to seek positive, and ignore negative, information to regulate their emotions and maintain self-image. Negative content creates a tension between affective ignorance and instrumental or curiosity-driven information-seeking (Niehoff & Oosterwijk, 2020; Oosterwijk et al., 2020); for example, people may ignore potentially threatening medical test results but have an instrumental need to know this information (Hertwig & Engel, 2016). Similarly, consumers may view sustainability information

as relevant, but ignore it because it is unpleasant to contemplate or could lead to difficult tradeoffs with price (Ehrich & Irwin, 2005).

## *2.2 Information seeking and ignorance in consumer choice*

A large literature probes consumer preferences for information. One line of research directly asks participants which information they want to know or avoid. For example, one survey found the highest desire and willingness to pay to either seek or avoid health information, with lower interest in sustainability information (Reisch et al., 2021). That said, research on meat consumption has found that those who decline to learn about carbon impacts or farm animal welfare adjust their behavior when exposed to it, providing evidence of active ignorance (Edenbrandt et al., 2021; Epperson & Gerster, 2021; Onwezen & van der Weele, 2016). While directly asking participants what they want to know can be helpful, it presents concerns such as demand effects and social desirability. Creating settings where consumers can naturally seek or ignore information may measure willful ignorance that consumers prefer not to declare.

Most research on such “willful” or “strategic” ignorance, especially in Economics, focuses on tradeoffs between self-interest and another’s interest (Dana et al., 2007). A meta-analysis of such studies found that 40% of participants choose not to reveal the impact of their choice on others and make 16% more selfish choices when information is hidden (Vu et al., 2023). Ignorance in these scenarios has been attributed to self-image maintenance, conflict avoidance, or inattention, with some evidence for reduced avoidance when the impact on others is higher (Exley & Kessler, 2023; Feiler, 2014; Grossman & van der Weele, 2017). Indeed, studies on potentially more deserving environmental causes found mixed evidence for ignorance, although a recent meta-analysis found no effect of recipient type (Felgendreher, 2018; Lind et al., 2019; Momsen & Ohndorf, 2020; Moyal & Schurr, 2022; Vu et al., 2023).

Instead of the direct tradeoff between self and recipients discussed above, another strand of literature employs rich, multi-attribute scenarios with less obvious tradeoffs. One of the earliest studies required participants to request each attribute in hypothetical decisions, finding that participants under-requested ethical information relative to its weight in choice, and this effect was stronger for those who cared more about the cause (Ehrich & Irwin, 2005). Further, including additional attributes that vary between options leads to ignorance of ethical information because these extra attributes provide “cover” for willful ignorance by reducing conflict or guilt about choosing more appealing but less ethical options (Woolley & Risen,

2021). These multi-attribute decisions are also more reflective of consumer purchasing decisions which often feature many competing attributes with a less salient ethical tradeoff.

Given the broad evidence for some level of ignorance in consumer decisions, we anticipated that hidden information would reduce ethical choices. Further, since ignorance may be motivated by avoiding conflict, decisions with large price differences between options should engage more conflict and further reduce ethical choices.

**H1:** *There will be a lower weight on ethical information in hidden information trials compared to open information trials (Studies 1, 2, 3).*

**H2:** *As the price difference between options increases, the likelihood of choosing the ethical option will decrease more for hidden compared to open trials (Study 1).*

Past work on willful ignorance measured binary requests or button clicks, whereas studies that measure visual attention using eye-tracking have examined more continuous, naturalistic measures of information-seeking in consumer choice. These studies find that higher sustainability preferences may increase attention to ethical information, but also that information salience, centrality, and size all play an important role (Orquin et al., 2020; Peschel et al., 2019; Takahashi et al., 2018; Van Loo et al., 2015). However, few of these papers quantify ignorance in more realistic settings where all information is available. One exception is (Song et al., 2019) who use eye-tracking glasses in a grocery and find that only 2% of eco-labels are observed, which they attribute to habitual shopping. In our study, participants hover their mouse over boxes to reveal attribute information without requiring active requests or clicks. This enables us to cleanly identify binary reveal/ignore behavior to investigate willful ignorance as well as measuring continuous information-gathering similarly to eye-tracking to explore attention as a moderator of information use in choice (Van Loo et al., 2018; Willemsen & Johnson, 2019). Because conflict is expected to lead to more ignorance, we anticipate that larger price differences between options will induce higher conflict and reduced attention to ethical certifications.

**H3:** *As the price difference between options increases, attention to certification information will decrease in hidden information trials (Study 1).*

### *2.3 Positive and Negative Framing in information avoidance*

Research across many domains indicates that negative frames are more impactful than positive frames in choice. Framing can be purely a matter of giving reference points, in which loss framing leads to more extreme responses (Tversky & Kahneman, 1981). Similarly, emotions



related to losses weight more heavily in choice than those related to gains (Charpentier et al., 2016). Negative framing focusing on the harms of not acting ethically can also lead to stronger pro-social responses than focusing on the benefits of acting ethically as seen in negative framing of donations to “prevent deaths” leading to more or larger donations than positive “save lives” framing (Chou & Murnighan, 2013; Metzger & Günther, 2019). In consumer decisions, negative framing of ethical attributes has a stronger impacts on consumers’ use of ethical information (Philipp-Muller et al., 2022).

Consumer product certifications are usually opted-into by companies and therefore are positively framed to indicate the presence of ethical products rather than highlighting unethical products or the negative consequences of not choosing an ethical product. Government regulations focused on health have shifted toward full-spectrum traffic-light labels or negative warning labels such as Chilean stop sign labels, but these are rarer for ethical impacts (Ares et al., 2023; Thøgersen & Nielsen, 2016). Despite its rarity, negative framing by labelling the most environmentally harmful products has been shown to have a stronger impact on ethical considerations in choice compared to positive framing (Grankvist et al., 2004; Van Dam & De Jonge, 2015).

Here, we frame the impacts of choice, with negative framing focusing on the harmful impacts of failing to act ethically toward workers or the environment, similarly to the “preventing death” framing in charity decisions. The above findings suggest that negative framing will have a stronger impact than positive framing.

**H4:** *In open trials, negatively-framed Fairtrade<sup>†</sup> information will have more weight in choice compared to positive or neutral framing (Study 2).*

While negative framing often leads to stronger impacts, there is also potential for negative information to trigger affective ignorance motives, leading to it backfiring. Whether negative framing leads to stronger responses or backfires depends on many factors, including whether information is avoidable and people’s sense of efficacy to solve the issue, as studied extensively in health communication (Peters et al., 2013; Tannenbaum et al., 2015). The impact of affective framing in ethical or sustainable behavior lacks definitive evidence, with some

---

<sup>†</sup> In hypotheses 4-6, which were developed for Study 2, we focused on Fairtrade instead of both certifications because we found evidence for willful ignorance of Fairtrade certifications in Study 1. However, we discuss findings for both certifications.

suggestions that negative appeals can backfire when overly strong or explicit but are otherwise effective (Gifford & Bernard, 2004; Peloza et al., 2013; White et al., 2019). Indeed, studies on framing charitable giving found that negative frames reduced information-seeking as indicated by less time spent on the donation page or marginally lower information demand even when negative framing led to more charitable behavior, but negative framing led to increased information-seeking for carbon offsets (Metzger & Günther, 2019; Momsen & Ohndorf, 2020; Serra-Garcia & Szech, 2022).

One possible reason for such mixed results is that most studies examine framing in contexts where it may not be possible to ignore the information, so backfiring is viewed in terms of defensiveness or dismissiveness toward the information. To address this, we compare a setting in which participants can easily ignore information to one in which they cannot. Combining the potential for negative framing to backfire with evidence of affective ignorance from the information motives literature, we hypothesize that participants will seek ethical information less and use it less in their choices under negative framing when information is hidden (Golman et al., 2022; Sharot & Sunstein, 2020). This will help resolve the open debate on the efficacy of negative framing on ethical behavior.

**H5:** *In hidden information trials, Fairtrade information will have less weight in choice compared to positive or neutral framing (Study 2).*

**H6:** *In hidden trials, negatively-framed Fairtrade information will receive less attention compared to positive or neutral framing (Study 2).*

### 3. Methods

We ran three preregistered studies investigating information-seeking and willful ignorance in consumer choice. In Study 1, we examine how the use of certifications and other attribute information changes depending on whether information is open or hidden in an incentivized lab study. In Study 2, we additionally test how positive or negative affective framing of certification information impacts information-seeking and choice under hidden or open information in a representative online sample. Finally, in Study 3 we test the robustness of the previous studies by making price information always visible to more closely mimic shopping settings and prior studies (Dana et al., 2007; Vu et al., 2023). Because Study 3 acts as a robustness test, the results are reported in the supplementary material. We preregistered our

hypotheses for Study 1: [https://aspredicted.org/WZS\\_PJN](https://aspredicted.org/WZS_PJN), Study 2: [https://aspredicted.org/7CZ\\_ZZQ](https://aspredicted.org/7CZ_ZZQ), and Study 3: [https://aspredicted.org/2ZW\\_W1V](https://aspredicted.org/2ZW_W1V).

### *3.1 Participants*

All studies were approved by the Economics and Business Ethics Committee at the University of Amsterdam and received informed consent from participants. In Study 1, 153 participants from the University of Amsterdam CREED Lab participated. One participant was excluded due to a technical issue that prevented them from completing the post-task survey, leaving 152 participants. Participants were paid €7 for participation plus one of their decisions was randomly selected and paid out. In Study 2, 902 representative U.S. participants were recruited from the online platform Prolific. Due to a programming error, 86 of the participants assigned to the neutral frame saw both neutral and negative frames (if they went back to reread instructions). Because these participants received instructions with multiple frames, we exclude them from analysis, leaving a final sample of 816 participants, with 215 in the neutral frame, 301 in the positive frame, and 300 in the negative frame (see Supplementary Tables 12 & 13 for further robustness tests). Participants were compensated £4 for participation and had a 1% chance of a bonus payment of £8. In Study 3, 302 representative U.S. participants were recruited from Prolific. They were compensated £4 and had a 1% chance of an £8 bonus payment.

### *3.2 Task*

Participants in all studies made 42 two-alternative forced choice purchasing decisions between pairs of options. Decisions were always within a consumable item category including chocolate, tea bags, coffee beans, honey, and chocolate-hazelnut spread. For each decision, participants saw the item category and attribute information about each option. Attribute information included price, International Fairtrade certification, Organic certification, quality star rating, size, and a qualitative description. In Study 1, we used the EU Organic certification and in Studies 2 and 3 the USDA Organic certification to match the location of participants, and we dropped the qualitative description in Studies 2 and 3 as it was the attribute mostly likely to be ignored in Study 1. In the instructions, we defined each attribute including the qualifications for Fairtrade and Organic certifications. Brand information was not provided to avoid brand associations or familiarity from interfering with consideration of the other attributes.

All attribute information accurately represented actual products that participants could receive at the end of the study in Study 1 or actual products on the market in Studies 2 and 3. For

options where no rating information existed, “no rating” was displayed and these trials are excluded from analysis. Prices were unique to the experiment setup and could differ from retail prices (and participants were informed of this). Most decisions featured a tradeoff between a more expensive option with more certifications and a cheaper option with fewer certifications, but some decisions included only certified or only non-certified options. We varied price premiums on the option with more certifications across trials from -15% to 60% in 15% increments to enable an exploration of how price differences between options impacted information-seeking and choice.

In Study 1, participants had a budget of €10 for each decision. At the end of the experiment, we randomly selected one round of their 42 choices to pay out. They received the actual item corresponding to their chosen option on that round, as well as the leftover from their €10 budget after subtracting the price of the chosen option. In Studies 2 and 3, because of the constraints of maintaining privacy on Prolific, decisions were hypothetical and participants were asked to imagine they had a budget of \$10 when making their choice. However, participants received brand and item information from one randomly-selected round at the end of the study and were informed of the amount that would have been leftover in their \$10 budget.

### *3.3 Information format*

For each participant, half of the item categories (e.g., chocolate) had "Open" information where all attributes were visible on the decision screen. The other half of item categories had "Hidden" information in which the attribute information was hidden behind boxes labeled with the attribute type. To hide information, we used MouselabWEB which allows participants to reveal attribute information by hovering their mouse over a box of interest which closes when the mouse leaves the box (Willemsen & Johnson, 2019). Any box could be opened for any length of time, but only one box could be opened at a time. This enables us to quantify which information was opened, in which sequence, how many times, and for how long. In Study 3, price information was always visible even in hidden information trials in which all other attributes were hidden. To control for information order, we varied the position of ethical certifications in the list of attributes between subjects. All participants viewed price information at the top of the screen, followed by rating, size, and description information (in Study 1) in that order. Certification information (Fairtrade and Organic, counterbalanced in order) was positioned anywhere from second to the last attribute on the screen.

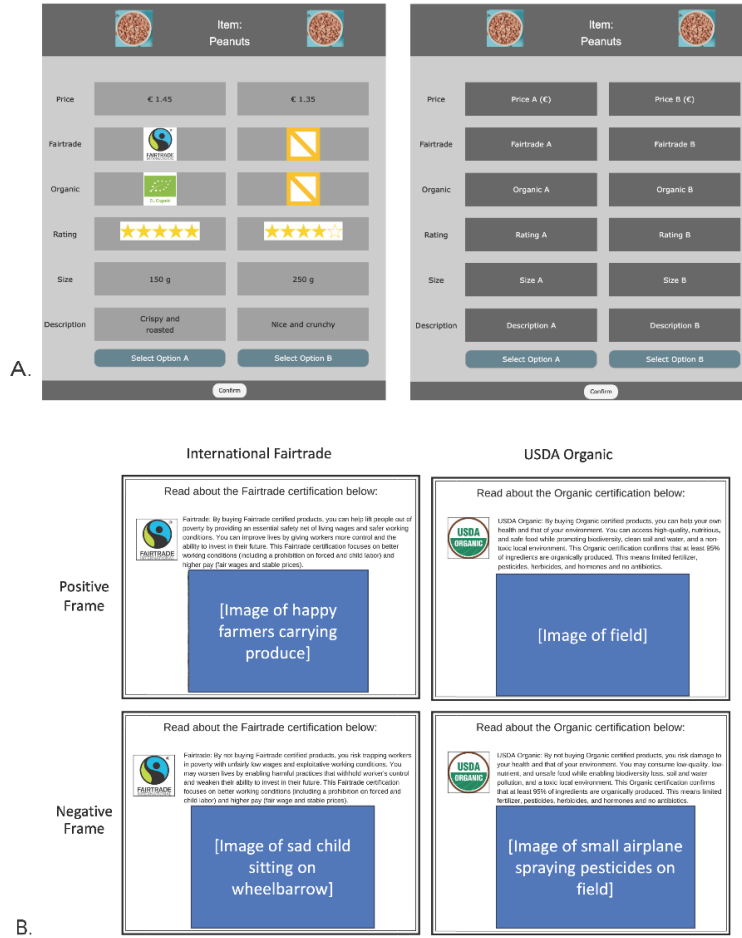


Fig. 1. A. Examples of choices with open information (left) or hidden information (right) in Study 1. Study 2 and 3 were almost identical with the Description left out and additional framing reminders next to the certification information. B. Positive and Negative frames for Fairtrade and Organic certifications from Study 2.

### 3.4 Affective Framing

Study 1 and Study 3 used neutral framing in which the instructions simply defined Fairtrade and Organic certifications. In Study 2, participants were split into three between-subjects framing conditions: neutral, positive, or negative framing. Neutral framing followed the definitions as in Studies 1 and 3. The positive and negative affective frames included additional information about the impacts of the certifications. The positive Fairtrade frame included an image of happy farmers and described the benefits to workers; in contrast, the negative Fairtrade frame included an image of a child worker and warned about the risks of harming workers by not buying Fairtrade. The positive Organic frame included an image of a field and additional information about the benefits to health and local environment whereas the negative frame included an image of an airplane spraying pesticides on a field and warned of the negative health

and environmental risks (Mie et al., 2017). The images and phrases were chosen based on a pre-test showing that they were perceived significantly differently on positive vs. negative emotions (see Supplementary Figure 1 and Supplementary Table 1). In addition, short phrases were added to the certification attributes on the choice screen. In the neutral frame, the text indicated whether the label meant certified or not certified. In the positive frame, Fairtrade was accompanied by "Improve worker protections" and Organic by "Promote benefits to your health"; for non-certified options in the positive frame the word "Don't" was added (e.g., Don't improve worker protections"). In the negative frame, Fairtrade was accompanied by "Don't risk worker exploitation" and Organic by "Don't risk harm to your health"; for non-certified options in the negative frame the word "Don't" was removed (e.g., "Risk worker exploitation").

### *3.5 Post-task surveys*

After the decision task, participants completed surveys asking about their approach to the task, attitudes toward ethical consumption and general prosocial behavior, as well as demographic information. We asked participants their strategy for making their choices, and whether it differed by hidden vs. open information. Participants rated the importance of each attribute in their decisions and their liking and consumption frequency for each item-category<sup>‡</sup>. We asked participants how likely each of two options was to be certified for price premiums of 30%, 45%, and 60% to check for associations of price and certification (Study 1 only). We also asked participants their willingness to pay over €1 (or \$1 in Studies 2 and 3) for Organic and Fairtrade certified items. To measure incentivized prosocial tendencies, participants had a small chance of receiving an extra bonus (5% chance of €2 in Study 1, 1% chance of £8 in Studies 2 and 3), and they were asked how much they would donate to charity if they received the bonus. In Study 1, they could donate up to €1 each to a charity addressing environmental issues (Coalition for Rainforest Nations) and a charity addressing poverty (Give Directly). In Studies 2 and 3, they could donate up to £8 to Give Directly. In our analyses, we examine importance ratings, price premiums, and donations.

Participants also rated familiarity, trust, associations with health, quality, and expensiveness, guilt over not buying, and moral obligation to buy Organic and Fairtrade certified

---

<sup>‡</sup> In study 1, the first 3 sessions (45 participants) contained a programming error in the difference question so that "no difference" was always recorded regardless of the choice, and the item-category question was added after, so this information is only available for the latter 107 participants.

options. In Study 2, we asked participants to rate on a scale of 1-7 how happy, hopeful, proud, sad, guilty or angry thinking about Organic and Fairtrade certifications, respectively, made them feel to examine how our affective frames impacted emotions. We included a number of surveys to measure ethical concerns and consumption habits, including ethical concerns about environment and labor, perceived consumer efficacy with regard to labor and environmental issues, and frequency of ethical purchasing as well as empathic concern (Davis, 1980; Grunert et al., 2014; Lades et al., 2020; Roberts, 1996). Finally, participants reported demographic characteristics, including age, gender, race, ethnicity, political leaning, education level, and income level. In our analyses, we focus on ratings related to the certifications and general ethical concerns, with an exploration of demographics in the supplement.

### *3.6 Analysis*

Preprocessing of the MouseLabWEB data involved filtering out attribute reveals of <200 ms (Willemssen & Johnson, 2019). Trials with multiple presses of the submit button (potentially due to issues with the server) in which the choice reversed are excluded.

R-studio was used for analysis. Regressions with clustered standard errors were run using the estimatr package, `lm_robust` function (Blair et al., 2024). Figures were created with `ggplot2` and tables were created using the `modelsummary` package (Arel-Bundock, 2022; Wickham, 2009). To standardize price and size attributes across items, the proportional instead of absolute difference was used in regressions. Note that in the preregistration for Study 1, we specified logistic regressions for the analyses; however, for ease of interpretation, we include linear probability regressions in the main text and corresponding logistic regressions are reported in the supplementary material with any differences mentioned in the main text (Gomila, 2021).

### *3.7 Data availability*

All data and code to reproduce the analysis will be made available on the Open Science Framework (OSF) platform upon acceptance.

## **4. Results**

### *4.1 Use of certifications under open vs. hidden information*

We hypothesized that the ability to ignore information would reduce the use of ethical certifications (H1). Indeed, there was a small reduction in the raw proportion of Fairtrade and Organic choices under hidden relative to open information for both Studies 1 and 2 (Figure 2). In

Study 1, in which participants made decisions in the lab, there was a significantly lower weight on Fairtrade certifications under hidden information (Table 1;  $b = -0.05$ ,  $p < 0.001$ ), but no difference for Organic certifications ( $b = -0.03$ ,  $p = 0.11$ ), so H1 was supported only for Fairtrade certifications. In Study 2, in which participants made choices online, there was no difference for Fairtrade under hidden information ( $b = -0.01$ ,  $p = 0.11$ ), but a significant reduction in weight on Organic certifications ( $b = -0.02$ ,  $p = 0.003$ ). Supplementary Table 2 confirms these findings with logistic regressions. Further, Study 3 replicates the findings from Study 2 in a setting where price information was always available (Supplementary Figure 11 and Supplementary Table 15). All studies showed a reduction in certification use under hidden information, but only significantly for Fairtrade certifications in Study 1 and only significantly for Organic certifications in Studies 2 and 3, so the reduction was not universal or specific to one certification. We discuss potential reasons for these mixed findings in the discussion.

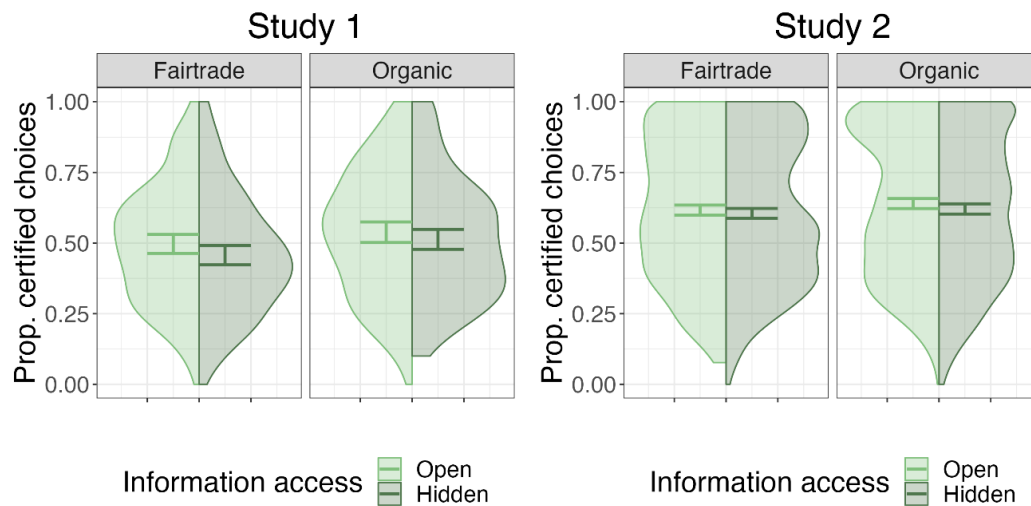


Fig. 2. The proportion of Fairtrade and Organic certified choices under open and hidden information conditions in Studies 1 and 2. The error bars indicate the 95% confidence intervals, and the shaded areas show the distribution.

#### 4.2 Impact of price differences on information-seeking and use of certified information

Next, we tested whether increasing price difference between options led to ethical purchases decreasing more under hidden versus open information (H2). There was a significant negative interaction between price and hidden for Organic choices ( $b = -0.14$ ,  $p = 0.02$ ), but not for Fairtrade choices, and not for either certification in 3-way interactions predicting left versus right choices (Supplementary Table 3). This suggests that there was not a robust steeper decrease in the weight on certified information for higher price differences under hidden information.



**Table 1** Linear probability regressions of choice

	<i>Study 1</i>			<i>Study 2</i>		
	Choice LR (1)	Choice FT (2)	Choice Org (3)	Choice LR (4)	Choice FT (5)	Choice Org (6)
Intercept	0.47*** (0.02)	0.67*** (0.06)	0.64*** (0.06)	0.50*** (0.01)	0.71*** (0.03)	0.69*** (0.03)
Price	-0.79*** (0.04)	-0.87*** (0.04)	-0.76*** (0.04)	-0.78*** (0.02)	-0.75*** (0.02)	-0.74*** (0.02)
Hidden	0.01 (0.01)	-0.05*** (0.01)	-0.03 (0.02)	0.01 (0.00)	-0.01 (0.01)	-0.02** (0.01)
Rating	0.10*** (0.01)	0.11*** (0.01)	0.08*** (0.01)	0.17*** (0.01)	0.15*** (0.01)	0.13*** (0.01)
Fairtrade	0.20*** (0.01)		0.16*** (0.02)	0.26*** (0.01)		0.17*** (0.01)
Organic	0.14*** (0.02)	0.11*** (0.01)		0.25*** (0.01)	0.18*** (0.01)	
Size	0.29*** (0.02)	0.27*** (0.02)	0.21*** (0.02)	0.62*** (0.04)	0.54*** (0.04)	0.66*** (0.04)
Hidden x Price	-0.07 <sup>+</sup> (0.04)			0.02 (0.02)		
Hidden x Rating	0.00 (0.02)			0.00 (0.01)		
Hidden x Fairtrade	-0.04** (0.02)			-0.01 (0.01)		
Hidden x Organic	-0.01 (0.02)			-0.02** (0.01)		
Hidden x Size	-0.08** (0.03)			0.03 (0.06)		
Negative				0.01 (0.01)	0.05** (0.02)	0.08*** (0.02)
Neutral				0.00 (0.01)	-0.08*** (0.02)	-0.07*** (0.02)
Fairtrade x Negative				0.04* (0.02)		
Fairtrade x Neutral				-0.07*** (0.02)		
Negative x Organic				0.06*** (0.02)		
Neutral x Organic				-0.06** (0.02)		
Obs., Grps	4935, 152	2729, 152	2729, 152	31052, 816	16951, 816	17320, 816
R2 Adj.	0.312	0.307	0.251	0.293	0.237	0.231

All models are linear probability regressions with standard errors clustered at the individual level (Study 1: N = 152; Study N = 816). Choice LR compares left versus right options; Choice FT compares Fairtrade versus not certified options; Choice Org compares Organic vs. not certified options. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

We also hypothesized that as the price difference between options increased, participants would seek certification information less (H3). To test this, we examine three attention metrics, including time spent on attributes, the number of times information was revealed, and ignorance (not revealing either option for a given attribute). In accordance with H3, higher price differences led to a reduction in information-seeking for Fairtrade and Organic information in terms of time spent on the attributes and the number of times the information was opened and an increase in ignorance (Supplementary Figure 2, Supplementary Table 4). That said, we see a similar pattern for all attributes such that as the price difference goes up, attributes are sought less, except for price which garners more attention with increasing difference and is almost never ignored, so this pattern is not unique to ethical attributes.

#### 4.3 Framing and open vs. hidden information on the use of certified information

In Study 2, we manipulated the affective framing (positive, negative, or neutral) of the certifications to probe the role of affect in the use of certification information. We tested this when participants were either confronted with open information or when it was hidden and they could ignore it. We hypothesized that negative framing would increase the weight on Fairtrade information in choice under open information, (H4) but decrease its weight under hidden information (H5). We find that negative framing leads to higher weights on both certifications compared to positive framing (Fairtrade  $b = 0.05$ ,  $p = 0.004$ ; Organic  $b = 0.08$ ,  $p < 0.001$ ) whereas neutral framing reduces the weight on certifications relative to positive framing (Fairtrade  $b = -0.08$ ,  $p < 0.001$ ; Organic  $b = -0.07$ ,  $p < 0.001$ ; Figure 3, Table 1, Columns 5,6).

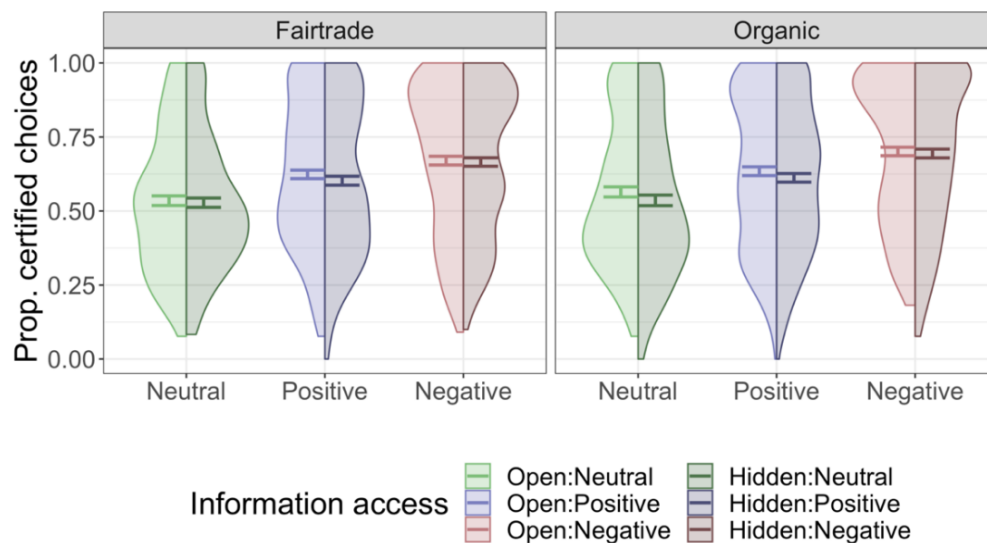


Fig. 3. The proportion of Fairtrade and Organic certified choices under neutral, positive, or negative framing and open or hidden information. Error bars indicate 95% confidence intervals and shaded areas show the distribution.

However, there are no significant differences in weights on certifications between open and hidden information; rather, negative framing increases the weight on certifications regardless of open or hidden information (Supplementary Table 5). Therefore, the evidence supports H4 that negative frames increase the weight on certifications under open information, but this also holds for hidden information, contradicting H5 and suggesting that the ability to ignore hidden information does not reduce the weight on negatively-framed information.

#### 4.4 The effect of framing on information-seeking and ignorance

To test whether negative framing reduces attention to Fairtrade certifications under hidden information (H6), we examine how framing impacts our attentional measures. We find that negative framing leads to significantly *more* seeking of Fairtrade and Organic information as measured by dwell time and the proportion of times each box was opened (Figure 4, Supplementary Table 6). This is consistent with our finding that negative framing increases the weight on Fairtrade and Organic regardless of open or hidden information. Further, we find similar levels of ignorance for positive and negative frames, but higher ignorance under neutral framing, also contradicting H6 (significant difference for Organic and marginally significant for Fairtrade; Supplementary Table 6). Overall, we find that negative framing increases seeking of certification information and both positive and negative frames reduce ignorance relative to neutral framing.

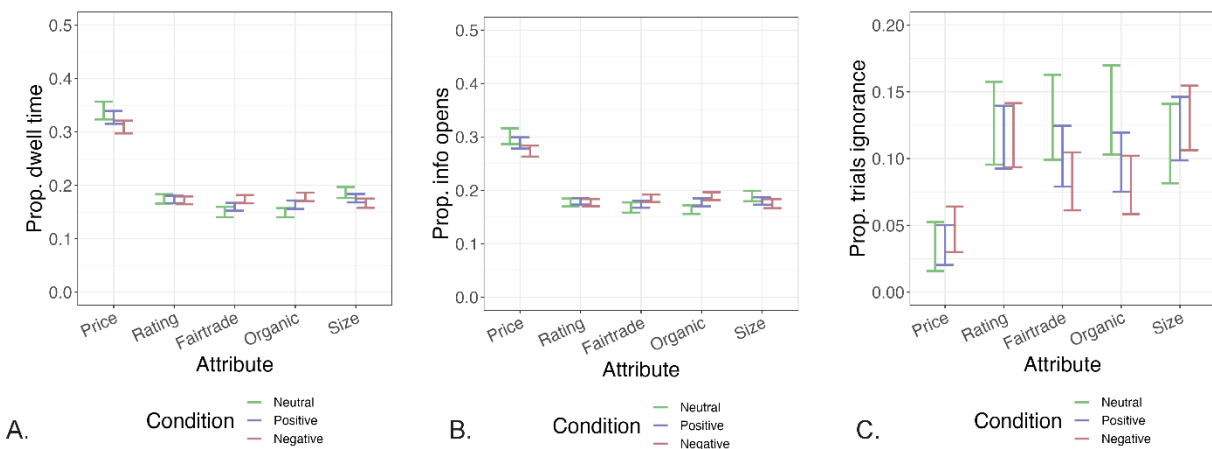


Fig. 4. Average A. Proportion of dwell time on each attribute, B., Proportion of times attribute information boxes were revealed, and C. ignorance of each attribute for Neutral, Positive, and Negative framing under hidden information. Error bars represent 95% confidence intervals.

#### 4.5 Impact of information-seeking on use of certified information in choice

In addition to investigating how price differences and affective framing impact information-seeking and ignorance, we can also explore the role of attention in choice. Attention can act as a moderator, with more attention amplifying the impact of attributes in choice. Including information-seeking and ignorance as moderators of certification information in our linear probability regressions of choice provides evidence that these attention measures significantly influence the weight on certification information (Study 1 Fairtrade dwell time  $b = 1.37$ ,  $p < 0.001$ ; Fairtrade info opens  $b = 1.13$ ,  $p < 0.001$ ; Organic dwell time  $b = 1.13$ ,  $p < 0.001$ ; Organic info opens  $b = 1.34$ ,  $p < 0.001$ ; Supplementary Tables, 7 & 8). In Figure 5, we plot the proportion of certified choices in relation to the price premium, comparing open and hidden trials based on whether participants revealed certification information. This illustrates the impact of ignorance on choice, showing a dramatic reduction in certified choices and a stronger price-sensitivity in trials where certification information is ignored (Study 1 Fairtrade ignorance  $b = -0.21$ ,  $p < 0.001$ ; Organic ignorance  $b = -0.21$ ,  $p < 0.001$ ).

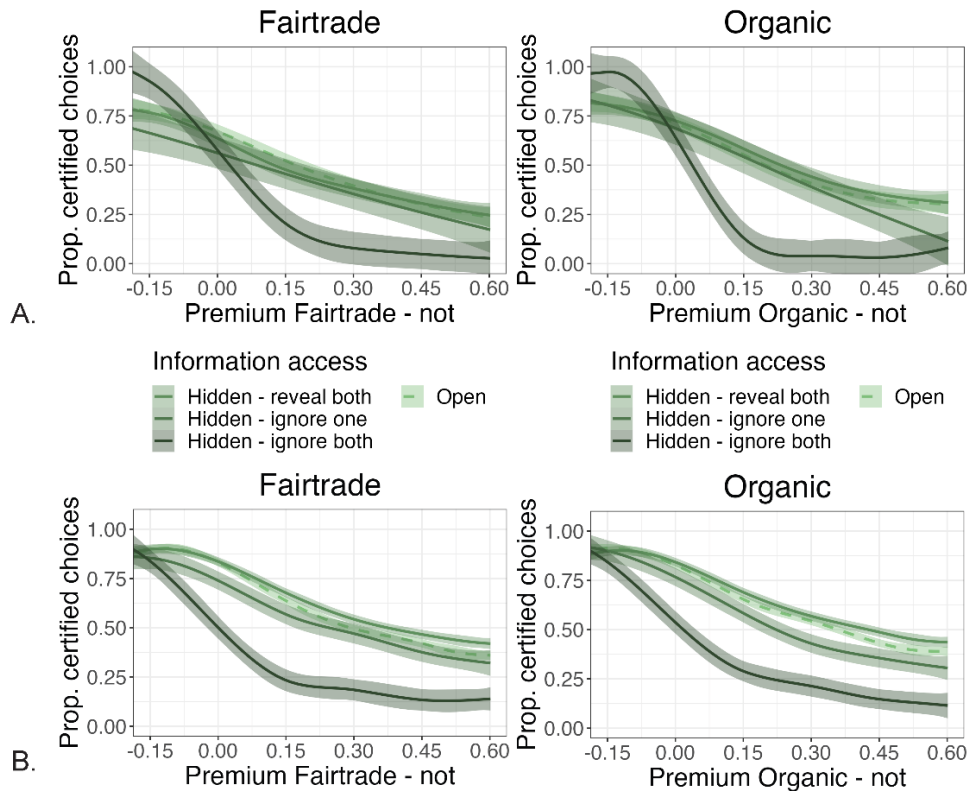


Fig. 5. Smoothed raw data of the proportion of certified choices A., Study 1 and B., Study 2, depending on the price premium. The colors indicate open information and hidden information split into fully revealed, partially revealed and partially ignored, fully ignored. The shaded bands represent 95% confidence intervals.

#### *4.6 Perceptions of Fairtrade and Organic labels*

While both Fairtrade and Organic labels could be viewed as ethically relevant, we find evidence in Study 1 that Organic certifications are viewed as more personally beneficial whereas Fairtrade certifications are viewed as more morally-relevant (Figure 6A). In post-task surveys, participants associated Organic labels more with health ( $p < 0.001$ ) and quality ( $p < 0.001$ ) than Fairtrade, suggesting they perceive it as beneficial to themselves (Supplementary Table 9). On the other hand, participants rate feeling more guilt ( $p < 0.001$ ), and a higher moral obligation to buy Fairtrade ( $p = 0.003$ ) and donate more to a poverty-focused charity than an environmental one in the study ( $p < 0.001$ ). All differences reported pass Bonferroni correction for other survey item comparisons (11 survey items,  $\alpha = 0.0045$ ). This finding led us to emphasize the impact of Fairtrade certifications on workers and the impact of Organic certifications on one's own health and local environment to compare the impact of framing on information-seeking for these different motives in Study 2.

In Study 2, we examine the same survey items for Fairtrade and Organic as in Study 1, with the exclusion of differences in donations as we only offer one donation option in Study 2. We robustly replicate our findings from Study 1 that Organic certification is perceived as healthier ( $p < 0.001$ ) and higher quality ( $p < 0.001$ ) than Fairtrade, and that participants rate a higher sense of guilt ( $p < 0.001$ ) and moral obligation ( $p < 0.001$ ) to buy Fairtrade compared with Organic, and unlike Study 1, we also find higher concerns about labor vs. environment ( $p < 0.001$ ) (Supplementary table 10; all results pass Bonferroni correction for 10 survey items,  $\alpha = 0.005$ ). Further, in Study 2 we collected additional specific emotion ratings when thinking about each of the certifications, including sadness, anger, and guilt as negative emotions, and happiness, hope, and pride as positive emotions to better understand the influence of framing. We find that negative framing leads to significantly higher sadness ratings ( $p < 0.001$ ), but all other emotions are not significantly different between frames when correcting for multiple comparisons ( $\alpha = 0.0083$ ) (Supplementary Table 11). In Study 2, we can further explore the impact of affective framing perceptions of certifications. We find that negative framing leads to higher importance ratings for Organic and Fairtrade ( $p < 0.001$ ) relative to positive framing (Figure 6B; Supplementary Table 10). This suggests that negative framing in particular emphasizes the importance of the certifications, a finding that fits with the attentional data showing that negative framing leads to more certification information-seeking.

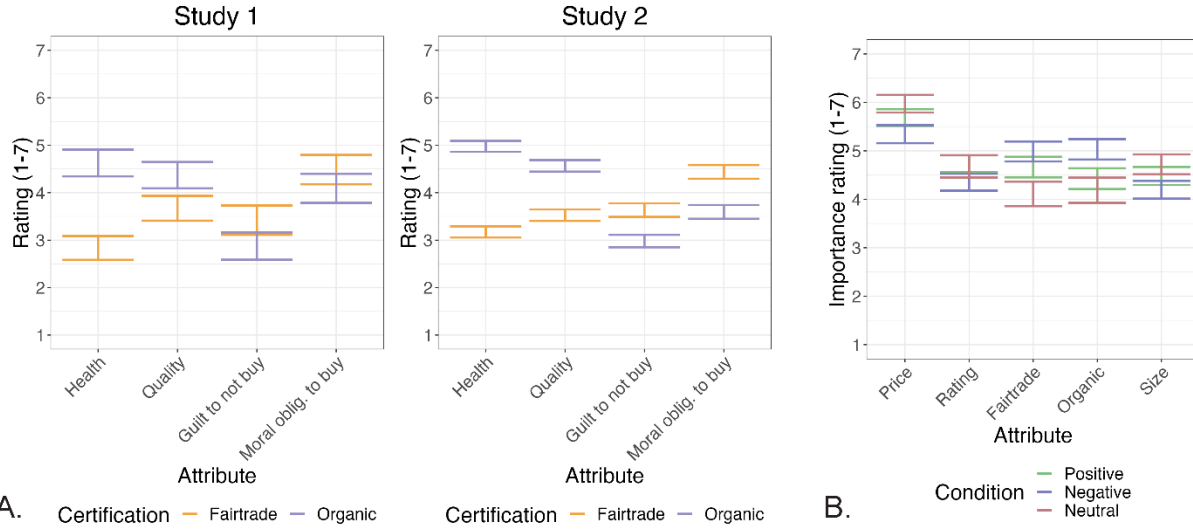


Fig. 6. Average ratings of A. health, quality, guilt over not buying, and moral obligation to buy certified items in both Studies 1 and 2. B. Study 2 importance ratings of each attribute for different frames. Error bars represent 95% confidence intervals.

## 5. Discussion

Across three studies, we examine information-seeking and ignorance in a realistic setting in which participants choose products that involve tradeoffs between multiple attributes, including actual Organic and Fairtrade certifications. Including multiple attributes reduced the obviousness of direct tradeoffs, providing “cover” to ignore ethical information and reducing any demand effects to focus solely on ethical attributes. Further, information is hidden using MouseLabWEB which allows participants free and easy access to information by hovering their mouse, making the choice of whether to reveal less explicit, while also enabling more precise measures of attention. In this setting, we find that hidden information leads to a reduction in the use of certified information, but the effects are relatively small and which certification is statistically significantly impacted differs between studies. In Study 1, there is a greater reduction in the use of Fairtrade certifications whereas in Studies 2 and 3 there is a greater reduction in using Organic certifications under hidden information. These differences may be due to differences in samples or incentives, with students making incentivized choices in Study 1 compared to hypothetical choices of a representative U.S. sample in Studies 2 and 3. Further, in Study 2, we emphasized the health impacts of Organic more explicitly which could align with survey studies that find health information is avoided more than consumer information (Reisch et al., 2021). In addition, Study 1 was conducted in a laboratory setting with an experimenter present, which may have induced different socially-oriented behavior than online participants in

their own settings, as in Studies 2 and 3. Further research across samples, incentives, and frames can help pinpoint the reason for these mixed findings. That said, the magnitude of reduction in use of Organic certifications is similar across all studies, and our attention process data suggests that people engage in a similar process across studies with price information the most used and least ignored, even in hypothetical choices. Taken together, these findings suggest that in more realistic settings, hidden information may lead to a reduction in certified choices, but the effect is quite small and depends to some extent on the sample and context. Thus, our data suggest that willful ignorance does not play a major role in depressing ethical consumer choices.

In commercial contexts, ethical information is predominantly framed positively, although research suggests that negative framing could be more impactful but could also trigger avoidance. In Study 2, we explore the impact of affective framing on the use of certified information to better understand the mechanisms of information-seeking and ignorance. Negative framing leads to the highest weight on certifications, followed by positive framing, and finally neutral framing regardless of open or hidden information. This is further supported by our attention measures showing that negative framing leads to more, not less, certification-seeking and both frames reduce ignorance compared to neutral framing. There are several reasons we did not find a backfire effect of negative framing under hidden information. First, both frames emphasize the importance and impact of the certifications which is reflected in higher importance ratings. Such importance may increase curiosity or instrumental motives such that participants are more curious about whether options are certified or find it more relevant and important in their choice, which may outweigh the negative affect associated with the certifications. This aligns with the moral ignorance studies finding less ignorance for environmental causes in more abstract economic games (Lind et al., 2019; Momsen & Ohndorf, 2020). Finally, participants are provided with an immediate, concrete solution to the negative emotion because they can choose a (potentially more expensive) certified option. This sense of efficacy to solve issues is a factor known to play a role in action in health and sustainability domains (Tannenbaum et al., 2015; White et al., 2019).

Across all studies, our fine-grained measures of attention allow us to show that attention moderates the use of certification information in terms of extent of information gathered (dwell time, number of reveals), and binary information-seeking versus ignorance. This fits with the attention literature finding that ethical motivations relate to use of labels, and that the design of

labels matters whereby larger and more salient labels that grab attention have more impact (Orquin et al., 2020; Peschel et al., 2019; Van Loo et al., 2015). While ignorance may not be a large driver, failing to view labels may undermine their efficacy, so designing labels to capture attention may also increase their impact.

In terms of practical implications, our findings suggest that negatively framed labels are most effective in increasing ethical consumption. Negative labelling is seen in the health domain in warning labels on unhealthy foods first introduced in Chile. Warning labels have led to a reduction in the choice of labelled foods and a price increase that further cements the switch away from the most unhealthy foods (Ares et al., 2023; Pachali et al., 2023). Negative framing of ethical certifications is rarer and usually developed out of public controversy, as seen in labels declaring the absence of a problematic practice (e.g., dolphin-free tuna or slave-free chocolate) implicitly casting doubt on non-certified competitors (Teisl et al., 2002). However, there is little evidence on how such labels impact consumer choices. We also find that price is the attribute that received the most attention and weight in choice. Therefore, policies that act on price such as taxation or subsidies are likely most effective, but in the absence of political support or will to enact such policies, negative labelling and increasing labels' visual prominence may promote more ethical considerations in choice.

One limitation of our setting is that by defining the certifications in the instructions, we may prime participants to think about the ethical impacts of their choices, making certifications more salient than in typical consumer settings. We define all attributes to avoid highlighting ethical impacts exclusively, but if ethical attributes are more rarely considered, this still may have an impact. This is important because previous research shows that people may use sustainability more if they directly seek it out rather than coming across it (O'Rourke & Ringer, 2016).

Finally, there are many additional factors that may undermine ethical consumption in real-world settings that should be explored in future research. As mentioned above, simply not thinking about ethical impacts in shopping settings may undermine the impact of labels, especially when habits and brand information take prominence and there is an absence of social norms to seek such information (Song et al., 2019). Other potential factors include financial barriers, a lack of trust in certifications with the prevalence of "greenwashing," and justifying unethical behavior in market settings (White et al., 2019; Ziegler et al., 2024).



### *5.1 Conclusion*

We study information-seeking and avoidance in a more realistic consumer setting with many attributes and easy access to ethical certifications. In this context, we find a discernible but relatively small reduction in the use of certification information when it is hidden. The type of certification information that is avoided varies across studies, suggesting that while willful ignorance may play a small role, it is likely not the primary mechanism of intention-behavior gaps.

Further, we test theories of affective information avoidance by framing certification information either positively or negatively, finding that negative framing increases certification use in choice regardless of whether information is open or hidden and even increases certification-seeking under hidden information. This finding confirms that negative framing does not backfire, so affective ignorance motives may be overridden by the higher importance and potentially instrumental motives attributed to the certification. Further, the ability to choose certified options may reduce avoidance because the issue is straightforward to solve. Finally, bridging work on ethical ignorance with the consumer attention literature on attracting attention to labels in choice, we show that variation in attention, both in what is revealed but also in the extent to which attributes are attended moderates the use of attributes in choice. By integrating research on ethical ignorance and framing with consumer attention literature, we underscore the moderating role of attention in shaping attribute utilization in choice, thus contributing to a comprehensive understanding of consumer decision-making processes in ethical choices.

**Acknowledgements:** We thank Rafaela Antunes Pinto for excellent research assistance.

**Funding:** This project was supported by grants from the Amsterdam Brain and Cognition platform at the University of Amsterdam and the "A Sustainable Future" research platform of the Faculty of Economics and Business at the University of Amsterdam. Funding sources had no involvement in the research design, collection, or analysis and interpretation, or writing of the report.

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

**Author contributions:**

DRA: Conceptualization, methodology, investigation, software, formal analysis, data curation, visualization, funding acquisition, writing-original draft.

SO: Conceptualization, methodology, writing-review & editing, funding acquisition.

NJS: Conceptualization, methodology, writing-review & editing.

JW: Conceptualization, methodology, writing-review & editing, funding acquisition.

## References

- Arel-Bundock, V. (2022). modelsummary: Data and Model Summaries in R. *Journal of Statistical Software*, 103(1), 1–23.
- Ares, G., Antúnez, L., Curutchet, M. R., & Giménez, A. (2023). Warning labels as a policy tool to encourage healthier eating habits. *Current Opinion in Food Science*, 51, 101011. <https://doi.org/10.1016/j.cofs.2023.101011>
- Blair, G., Cooper, J., Coppock, A., Humphreys, M., & Sonnet, L. (2024). *estimatr: Fast Estimators for Design-Based Inference*. (1.0.2).
- Charpentier, C. J., De Neve, J. E., Li, X., Roiser, J. P., & Sharot, T. (2016). Models of Affective Decision Making: How Do Feelings Predict Choice? *Psychological Science*, 27(6), 763–775. <https://doi.org/10.1177/0956797616634654>
- Chou, E. Y., & Murnighan, J. K. (2013). Life or Death Decisions: Framing the Call for Help. *PLoS ONE*, 8(3), 1–6. <https://doi.org/10.1371/journal.pone.0057351>
- Dana, J., Weber, R. A., & Kuang, J. X. (2007). Exploiting moral wiggle room: Experiments demonstrating an illusory preference for fairness. *Economic Theory*, 33(1), 67–80. <https://doi.org/10.1007/s00199-006-0153-z>
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. *JSAS Catalog of Selected Documents in Psychology*, 10(85).
- Edenbrandt, A. K., Lagerkvist, C. J., & Nordström, J. (2021). Interested, indifferent or active information avoiders of carbon labels: Cognitive dissonance and ascription of responsibility as motivating factors. *Food Policy*, 101(January). <https://doi.org/10.1016/j.foodpol.2021.102036>
- Ehrich, K. R., & Irwin, J. R. (2005). Willful ignorance in the request for product attribute information. *Journal of Marketing Research*, 42(3), 266–277. <https://doi.org/10.1509/jmkr.2005.42.3.266>
- Epperson, R., & Gerster, A. (2021). Information Avoidance and Moral Behavior: Experimental Evidence from Food Choices. *SSRN Electronic Journal*, 224. <https://doi.org/10.2139/ssrn.3938994>
- Exley, C. L., & Kessler, J. B. (2023). Information avoidance and image concerns. *The Economic Journal*, 133(November), 3153–3168.
- Feiler, L. (2014). Testing models of information avoidance with binary choice dictator games. *Journal of Economic Psychology*, 45, 253–267. <https://doi.org/10.1016/j.joep.2014.10.003>
- Felgendreher, S. (2018). Do consumers choose to stay ignorant? The role of information in the purchase of ethically certified products. *University of Gothenburg Working Paper in Economics*, 2473(717), 1403–2473.
- Gifford, K., & Bernard, J. C. (2004). The impact of message framing on organic food purchase likelihood. *Journal of Food Distribution Research*, 35(3), 20–28.
- Golman, R., & Loewenstein, G. (2018). Information gaps: A theory of preferences regarding the presence and absence of information. *Decision*, 5(3), 143–164. <https://doi.org/10.1037/dec0000068>

- Golman, R., Loewenstein, G., Molnar, A., & Saccardo, S. (2022). The Demand for, and Avoidance of, Information. *Management Science*, 68(9), 6454–6476. <https://doi.org/10.1287/mnsc.2021.4244>
- Gomila, R. (2021). Logistic or linear? Estimating causal effects of experimental treatments on binary outcomes using regression analysis. *Journal of Experimental Psychology: General*, 150(4), 700–709. <https://doi.org/10.1037/xge0000920>
- Grankvist, G., Dahlstrand, U., & Biel, A. (2004). The Impact of Environmental Labelling on Consumer Preference : Negative vs . Positive Labels. *Journal of Consumer Policy*, 27, 213–230.
- Grossman, Z. (2014). Strategic ignorance and the Robustness of Social preferences. *Management Science*, 60(November), 2659–2665. <https://doi.org/10.1287/mnsc.2014.1989>
- Grossman, Z., & van der Weele, J. J. (2017). Self-image and willful ignorance in social decisions. *Journal of the European Economic Association*, 15(1), 173–217. <https://doi.org/10.1093/jeea/jvw001>
- Grunert, K. G., Hieke, S., & Wills, J. (2014). Sustainability labels on food products: Consumer motivation, understanding and use. *Food Policy*, 44, 177–189. <https://doi.org/10.1016/j.foodpol.2013.12.001>
- Hertwig, R., & Engel, C. (2016). Homo Ignorans: Deliberately Choosing Not to Know. *Perspectives on Psychological Science*, 11(3), 359–372. <https://doi.org/10.1177/1745691616635594>
- International Labor Organization, & Walk Free Foundation. (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*.
- Ivanic, M., & Martin, W. (2018). Sectoral Productivity Growth and Poverty Reduction: National and Global Impacts. *World Development*, 109, 429–439. <https://doi.org/10.1016/j.worlddev.2017.07.004>
- Lades, L. K., Laffan, K., & Weber, T. O. (2020). Do economic preferences predict pro-environmental behaviour? *Ecological Economics*, 183(February), 106977. <https://doi.org/10.1016/j.ecolecon.2021.106977>
- Lind, J. T., Nyborg, K., & Pauls, A. (2019). Save the planet or close your eyes? Testing strategic ignorance in a charity context. *Ecological Economics*, 161(February), 9–19. <https://doi.org/10.1016/j.ecolecon.2019.02.010>
- Metzger, L., & Günther, I. (2019). Is it what you say or how you say it? The impact of aid effectiveness information and its framing on donation behavior. *Journal of Behavioral and Experimental Economics*, 83(September 2018), 101461. <https://doi.org/10.1016/j.socec.2019.101461>
- Mie, A., Andersen, H. R., Gunnarsson, S., Kahl, J., Kesse-Guyot, E., Rembiałkowska, E., Quaglio, G., & Grandjean, P. (2017). Human health implications of organic food and organic agriculture: A comprehensive review. *Environmental Health: A Global Access Science Source*, 16(1), 1–22. <https://doi.org/10.1186/s12940-017-0315-4>

- Momsen, K., & Ohndorf, M. (2020). When do people exploit moral wiggle room? An experimental analysis of information avoidance in a market setup. *Ecological Economics*, 169(March 2019), 106479. <https://doi.org/10.1016/j.ecolecon.2019.106479>
- Moyal, A., & Schurr, A. (2022). The effect of deliberate ignorance and choice procedure on pro-environmental decisions. *Ecological Economics*, 200(May), 107512. <https://doi.org/10.1016/j.ecolecon.2022.107512>
- Niehoff, E., & Oosterwijk, S. (2020). To know, to feel, to share? Exploring the motives that drive curiosity for negative content. *Current Opinion in Behavioral Sciences*, 35, 56–61. <https://doi.org/10.1016/j.cobeha.2020.07.012>
- Onwezen, M. C., & van der Weele, C. N. (2016). When indifference is ambivalence: Strategic ignorance about meat consumption. *Food Quality and Preference*, 52, 96–105. <https://doi.org/10.1016/j.foodqual.2016.04.001>
- Oosterwijk, S., Snoek, L., Tekoppele, J., Engelbert, L., & Scholte, H. S. (2020). Choosing to view morbid information involves reward circuitry. *Scientific Reports*, 10(1), 15291.
- O'Rourke, D., & Ringer, A. (2016). The Impact of Sustainability Information on Consumer Decision Making. *Journal of Industrial Ecology*, 20(4), 882–892. <https://doi.org/10.1111/jiec.12310>
- Orquin, J. L., Bagger, M. P., Lahm, E. S., Grunert, K. G., & Scholderer, J. (2020). The visual ecology of product packaging and its effects on consumer attention. *Journal of Business Research*, 111(January 2019), 187–195. <https://doi.org/10.1016/j.jbusres.2019.01.043>
- Pachali, M. J., Kotschedoff, M. J. W., van Lin, A., Bronnenberg, B. J., & van Herpen, E. (2023). How Do Nutritional Warning Labels Affect Prices? *Journal of Marketing Research*, 60(1), 92–109. <https://doi.org/10.1177/00222437221105014>
- Pelozo, J., White, K., & Shang, J. (2013). Good and guilt-free: The role of self-accountability in influencing preferences for products with ethical attributes. *Journal of Marketing*, 77(1), 104–119. <https://doi.org/10.1509/jm.11.0454>
- Peschel, A. O., Orquin, J. L., & Mueller Loose, S. (2019). Increasing consumers' attention capture and food choice through bottom-up effects. *Appetite*, 132(August 2018), 1–7. <https://doi.org/10.1016/j.appet.2018.09.015>
- Peters, G. J. Y., Ruiter, R. A. C., & Kok, G. (2013). Threatening communication: A critical re-analysis and a revised meta-analytic test of fear appeal theory. *Health Psychology Review*, 7(SUPPL1). <https://doi.org/10.1080/17437199.2012.703527>
- Philipp-Muller, A., Teeny, J. D., & Petty, R. E. (2022). Do consumers care about morality? A review and framework for understanding morality's marketplace influence. *Consumer Psychology Review*, 5(1), 107–124. <https://doi.org/10.1002/arcp.1072>
- Reisch, L. A., Sunstein, C. R., & Kaiser, M. (2021). What do people want to know? Information avoidance and food policy implications. *Food Policy*, 102, 102076. <https://doi.org/10.1016/j.foodpol.2021.102076>
- Ritchie, H. (2021). *How much of global greenhouse gas emissions come from food?* OurWorldInData.Org. <https://ourworldindata.org/greenhouse-gas-emissions-food>

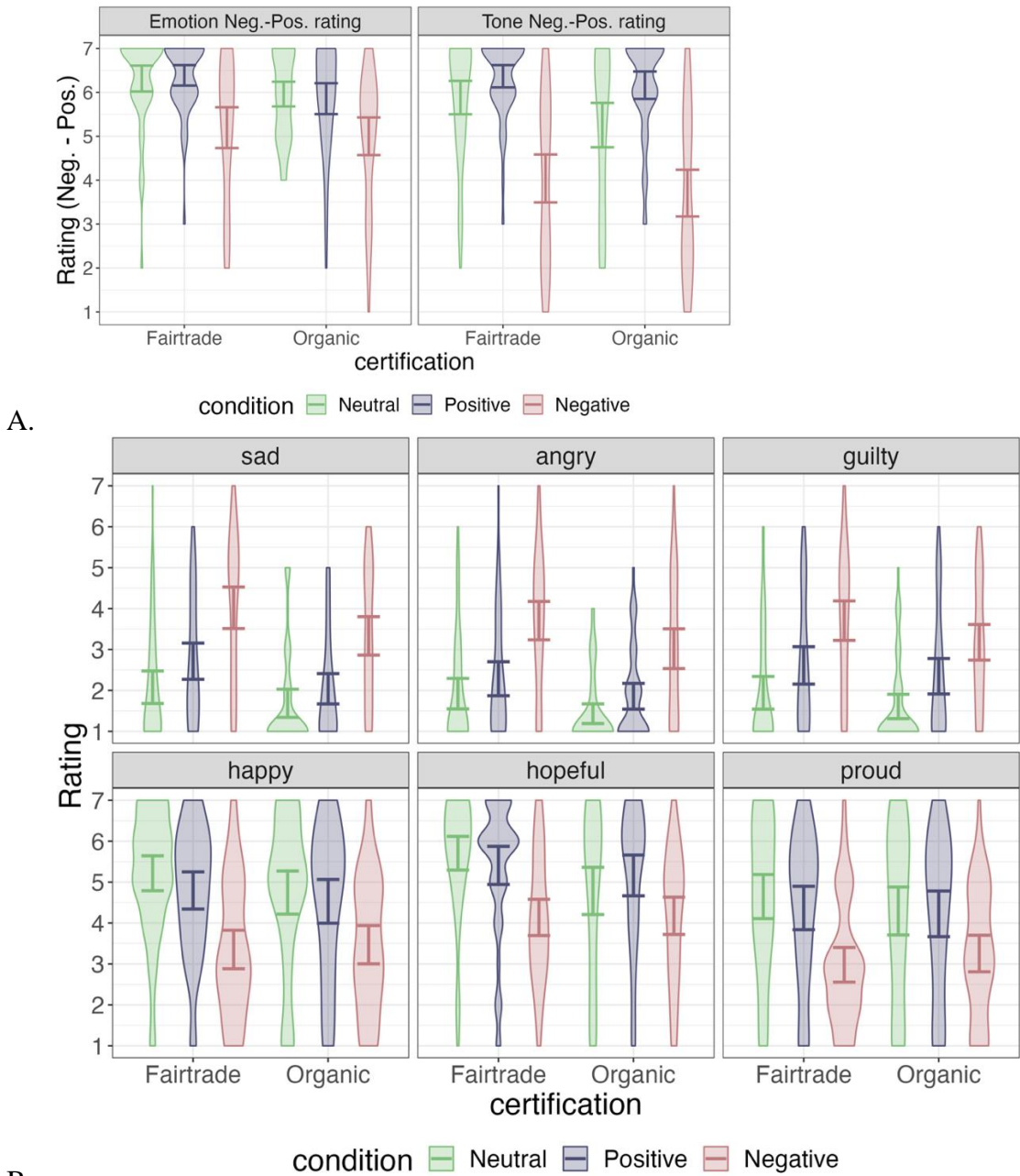
- Roberts, J. A. (1996). Green consumers in the 1990s: Profile and implications for advertising. *Journal of Business Research*, 36(3), 217–231. [https://doi.org/10.1016/0148-2963\(95\)00150-6](https://doi.org/10.1016/0148-2963(95)00150-6)
- Rousseau, S. (2015). The role of organic and fair trade labels when choosing chocolate. *Food Quality and Preference*, 44, 92–100. <https://doi.org/10.1016/j.foodqual.2015.04.002>
- Serra-Garcia, M., & Szech, N. (2022). The (In)Elasticity of Moral Ignorance. *Management Science*, 68(December), 4815–4834. <https://doi.org/10.2139/ssrn.3357132>
- Sharot, T., & Sunstein, C. R. (2020). How people decide what they want to know. *Nature Human Behaviour*, 4(1), 14–19. <https://doi.org/10.1038/s41562-019-0793-1>
- Song, L., Lim, Y., Chang, P., Guo, Y., Zhang, M., Wang, X., Yu, X., Lehto, M. R., & Cai, H. (2019). Ecolabel's role in informing sustainable consumption: A naturalistic decision making study using eye tracking glasses. *Journal of Cleaner Production*, 218, 685–695. <https://doi.org/10.1016/j.jclepro.2019.01.283>
- Sonntag, W. I., Lemken, D., Spiller, A., & Schulze, M. (2023). Welcome to the (label) jungle? Analyzing how consumers deal with intra-sustainability label trade-offs on food. *Food Quality and Preference*, 104(April 2022), 104746. <https://doi.org/10.1016/j.foodqual.2022.104746>
- Takahashi, R., Todo, Y., & Funaki, Y. (2018). How Can We Motivate Consumers to Purchase Certified Forest Coffee? Evidence From a Laboratory Randomized Experiment Using Eye-trackers. *Ecological Economics*, 150(October 2016), 107–121. <https://doi.org/10.1016/j.ecolecon.2018.04.010>
- Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracín, D. (2015). Appealing to Fear: A Meta-Analysis of Fear Appeal Effectiveness and Theories. *Psychological Bulletin*, 141(6), 1178–1204. <https://doi.org/10.1037/a0039729.supp>
- Teisl, M. F., Roe, B., & Hicks, R. L. (2002). Can eco-labels tune a market? Evidence from dolphin-safe labeling. *Journal of Environmental Economics and Management*, 43(3), 339–359. <https://doi.org/10.1006/jeem.2000.1186>
- Thøgersen, J., & Nielsen, K. S. (2016). A better carbon footprint label. *Journal of Cleaner Production*, 125, 86–94. <https://doi.org/10.1016/j.jclepro.2016.03.098>
- Tversky, A., & Kahneman, D. (1981). The Framing of Decisions and the Psychology of Choice. *Science*, 211(4481), 453–458. <https://doi.org/10.1126/science.1130453>
- Van Dam, Y. K., & De Jonge, J. (2015). The Positive Side of Negative Labelling. *Journal of Consumer Policy*, 38(1), 19–38. <https://doi.org/10.1007/s10603-014-9274-0>
- Van Loo, E. J., Caputo, V., Nayga, R. M., Seo, H. S., Zhang, B., & Verbeke, W. (2015). Sustainability labels on coffee: Consumer preferences, willingness-to-pay and visual attention to attributes. *Ecological Economics*, 118, 215–225. <https://doi.org/10.1016/j.ecolecon.2015.07.011>

- Van Loo, E. J., Nayga, R. M., Campbell, D., Seo, H. S., & Verbeke, W. (2018). Using eye tracking to account for attribute non-attendance in choice experiments. *European Review of Agricultural Economics*, 45(3), 333–365. <https://doi.org/10.1093/erae/jbx035>
- Vu, L., Soraperra, I., Leib, M., van der Weele, J., & Shalvi, S. (2023). Ignorance by Choice : A Meta-Analytic Review of the Underlying Motives of Willful Ignorance and Its Consequences. *Psychological Bulletin*, 149(9–10), 611–635.
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22–49. <https://doi.org/10.1177/0022242919825649>
- Wickham, H. (2009). *ggplot2: Elegant Graphics for Data Analysis*. Springer Verlag New York. <http://ggplot2.org>
- Willemsen, M. C., & Johnson, E. J. (2019). (Re)visiting the decision Factory: Observing Cognition with MouselabWEB. In *A Handbook of Process Tracing Methods* (Vol. 6, pp. 76–95).
- Woolley, K., & Risen, J. L. (2021). Hiding from the Truth: When and How Cover Enables Information Avoidance. *Journal of Consumer Research*, 47(5), 675–697. <https://doi.org/10.1093/jcr/ucaa030>
- Ziegler, A. G. B., Romagnoli, G., & Offerman, T. (2024). Morals in multi-unit markets. *Journal of the European Economic Association*, 00(0), 1–36.

## **Supplementary material: Seeking or ignoring ethical certifications in consumer choice**



Before running Study 2, we pretested to emotional responses to our positive and negative frames. A separate group of participants (N=151, divided between negative, neutral, and positive frames) viewed one type of frame and were asked to rate their emotional response and the emotional tone of the message from negative to positive and specific emotions (Supplementary Figure 1).



**B.**  
Notes: Emotion ratings of Fairtrade and Organic certified choices under neutral, positive, and negative framing. The error bars indicate the 95% confidence intervals, and the shaded areas shows the distribution of choices.

In regressions of the emotional ratings in Supplementary Table 4, we find that overall negative frames were rated as significantly more negative than positive frames on in overall emotional valence and tone, our main measures of interest. Further, negative frames were rated as

significantly more negative than positive frames on all specific negative and positive emotions. This shows that there is a significant difference in the affective impact of positive and negative frames. Additionally, neutral frames are rated as significantly less positive compared with positive frames in overall emotion and tone. However, positive frames show moderately (significant and marginally significant) higher ratings of negative emotions relative to neutral framing and show no significant differences on specific positive emotions. This may be because positive framing still introduces and emphasizes the impacts of buying certified with makes the downsides of not buying it more salient compared to neutral framing. Finally, we find significantly more negative ratings of Organic compared to Fairtrade (more toward the center), and less strong ratings of specific negative and positive emotions, suggesting that Fairtrade issues and certifications may evoke stronger emotional responses.

### Supplementary Table 1

Study 2 emotional frame pretest linear regressions of emotional ratings

	Neg. to Pos.	Tone	Sad	Angry	Guilty	Happy	Hopeful	Proud
Intercept	6.46*** (0.14)	6.46*** (0.14)	2.67*** (0.20)	2.34*** (0.18)	2.67*** (0.20)	4.77*** (0.23)	5.47*** (0.23)	4.33*** (0.26)
Negative	-2.39*** (0.28)	-2.39*** (0.28)	1.30*** (0.28)	1.29*** (0.26)	0.96*** (0.28)	-1.25*** (0.31)	-1.13*** (0.31)	-1.18*** (0.31)
Neutral	-0.70** (0.23)	-0.70** (0.23)	-0.50* (0.23)	-0.39 <sup>+</sup> (0.21)	-0.71** (0.25)	0.32 (0.32)	-0.04 (0.31)	0.17 (0.36)
Organic	-0.39*** (0.11)	-0.39*** (0.11)	-0.58*** (0.12)	-0.54*** (0.11)	-0.38** (0.12)	-0.21 <sup>+</sup> (0.12)	-0.38** (0.12)	-0.07 (0.13)
Obs.	302	302	302	302	302	302	302	302
R2 Adj.	0.299	0.299	0.222	0.232	0.182	0.134	0.090	0.091

Notes: Data are from a Study 2 pretest on a separate sample. All models are linear regressions with clustered standard errors at the individual level (N = 151). The ratings ranged from 1-7. The Positive frame is the reference condition.

<sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 2**

Logistic regressions of choice.

	<i>Study 1</i>			<i>Study 2</i>		
	Choice LR (1)	Choice FT (2)	Choice Org (3)	Choice LR (4)	Choice FT (5)	Choice Org (6)
Intercept	-0.17 (0.10)	0.94** (0.35)	0.71* (0.32)	-0.02 (0.05)	1.11*** (0.16)	1.02*** (0.16)
Price	-4.52*** (0.28)	-4.76*** (0.28)	-3.86*** (0.26)	-4.37*** (0.11)	-4.07*** (0.13)	-3.99** (0.11)
Hidden	0.05 (0.07)	-0.29*** (0.08)	-0.15 <sup>+</sup> (0.09)	0.04 (0.03)	-0.06 <sup>+</sup> (0.05)	-0.10** (0.04)
Rating	0.60*** (0.08)	0.63*** (0.08)	0.45*** (0.07)	0.98*** (0.06)	0.86*** (0.05)	0.77*** (0.05)
Fairtrade	1.16*** (0.09)		0.84*** (0.09)	1.48*** (0.08)		0.94*** (0.04)
Organic	0.80*** (0.09)	0.57*** (0.09)		1.45*** (0.07)	1.00*** (0.04)	
Size	1.78*** (0.17)	1.59*** (0.15)	1.15*** (0.14)	3.65*** (0.23)	3.08*** (0.21)	3.72*** (0.22)
Negative				0.03 (0.03)	0.33** (0.11)	0.43*** (0.11)
Neutral				0.01 (0.03)	-0.44*** (0.11)	-0.38*** (0.12)
Hidden x Price	-0.22 (0.33)			0.27* (0.11)		
Hidden x Rating	-0.02 (0.10)			-0.04 (0.07)		
Hidden x Fairtrade	-0.28** (0.10)			-0.10* (0.04)		
Hidden x Organic	-0.13 (0.12)			-0.16*** (0.05)		
Hidden x Size	-0.54** (0.20)			0.04 (0.32)		
Fairtrade x Neg.				0.27* (0.11)		
Fairtrade x Neut.				-0.41*** (0.10)		
Organic x Neg.				0.41*** (0.11)		
Organic x Neut.				-0.33** (0.11)		
Obs., Grps.	4935, 152	2729, 152	2729, 152	31052, 816	16951, 816	17320, 816

Notes: Data are from Studies 1 & 2. All models are logistic regressions with standard errors clustered at the individual level. Choice LR compares left versus right options; Choice FT compares Fairtrade versus not certified options; Choice Org compares Organic vs. not certified options. The Positive frame is the reference for Study 2. Gender and age are included as controls, but not displayed. <sup>+</sup>  $p < 0.1$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

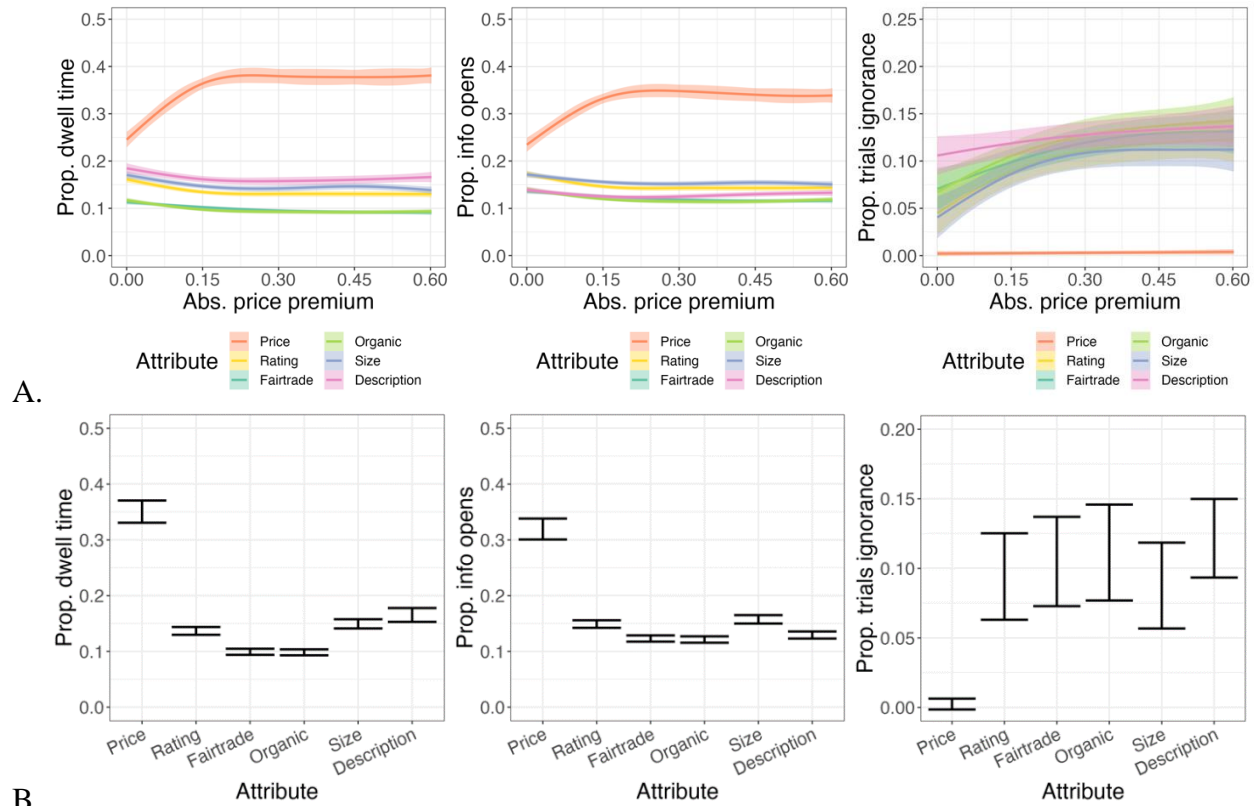
**Supplementary Table 3**

Regressions of the interaction between certifications and price on choice.

	Choice LR (1)	Choice FT (2)	Choice Org (3)	Choice LR (4)	Choice FT (5)	Choice Org (6)
Intercept	0.47*** (0.02)	0.66*** (0.06)	0.63*** (0.06)	-0.22* (0.11)	0.92** (0.34)	0.62+ (0.32)
Price	-0.79*** (0.04)	-0.84*** (0.04)	-0.69*** (0.05)	-4.53*** (0.28)	-4.66*** (0.31)	-3.45*** (0.29)
Hidden	0.02 (0.01)	-0.04* (0.02)	0.00 (0.02)	0.14+ (0.08)	-0.24* (0.12)	0.03 (0.11)
Rating	0.20*** (0.01)		0.16*** (0.02)	0.60*** (0.08)	0.63*** (0.08)	0.45*** (0.07)
Fairtrade	0.14*** (0.02)	0.11*** (0.01)		1.17*** (0.08)		0.84*** (0.09)
Organic	0.10*** (0.01)	0.11*** (0.01)	0.08*** (0.01)	0.80*** (0.09)	0.57*** (0.09)	
Size	0.29*** (0.02)	0.27*** (0.02)	0.21*** (0.02)	1.79*** (0.17)	1.59*** (0.15)	1.15*** (0.14)
Hidden x Price	-0.07+ (0.04)	-0.05 (0.05)	-0.14* (0.06)	-0.21 (0.33)	-0.21 (0.36)	-0.91* (0.36)
Hidden x Rating	0.07+ (0.04)			-0.02 (0.10)		
Hidden x Fairtrade	-0.04** (0.02)			-0.29** (0.10)		
Hidden x Organic	-0.01 (0.04)			-0.13 (0.12)		
Hidden x Size	-0.01 (0.02)			-0.54** (0.20)		
Price x Fairtrade	0.00 (0.02)			0.53* (0.26)		
Price x Organic	-0.08** (0.03)			-0.14 (0.24)		
Hidden x Price x FT	-0.04 (0.06)			-0.28 (0.39)		
Hidden x Price x Org	-0.07 (0.05)			-0.38 (0.39)		
Obs.	4935	2729	2729	4935	2729	2729
R <sup>2</sup> Adj.	0.312	0.306	0.252	N/A	N/A	N/A

Notes: Data are from Study 1. Columns 1-3 are linear probability regressions and columns 4-6 are logistic regressions, all with standard errors clustered at the individual level (N = 152). Choice LR compares left versus right options; Choice FT compares Fairtrade versus not certified options; Choice Org compares Organic vs. not certified options. Gender and age are included as controls, but not displayed. + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

Supplementary Figure 2 displays the proportion of dwell time, proportion of times information boxes were opened, and proportion of trials with ignorance. In A., these attention metrics are displayed in response to increasing price differences between options. Price information is sought more as the price differences between options increases, while information-seeking of all other attributes decreases slightly. Ignorance of all attributes except price increase as the price differences between options increases. In B., the averages of the attention metrics are displayed, showing that price is the most sought and least ignored attribute, whereas certifications are the least sought.



Supp. Fig. 2. Smoothed raw data of the A. proportion of dwell time on each attribute, the proportion of times an attribute was revealed, and ignorance of each attribute depending on the price premium for hidden information. The shaded bands represent 95% confidence intervals. B. the average proportion of dwell time on each attribute, the proportion of times an attribute was revealed, and ignorance of each attribute with error bars representing 95% confidence intervals.

**Supplementary Table 4**

Linear regressions of attention and interactions with price.

	Prop. dwell time (1)	Prop. info opens (2)	Full ignorance (3)	Partial ignorance (4)
Intercept	0.15*** (0.00)	0.16*** (0.00)	-0.05 (0.09)	0.13*** (0.02)
Price	-0.04*** (0.01)	-0.04*** (0.01)	0.12*** (0.03)	0.04 <sup>+</sup> (0.02)
Att. Price	0.16*** (0.01)	0.13*** (0.01)	-0.06*** (0.01)	-0.06*** (0.01)
Att. Fairtrade	-0.04*** (0.00)	-0.03*** (0.00)	0.02 (0.01)	0.03* (0.01)
Att. Organic	-0.04*** (0.00)	-0.03*** (0.00)	0.02 (0.01)	0.03* (0.01)
Att. Size	0.01* (0.01)	0.01 (0.01)	0.00 (0.01)	-0.03** (0.01)
Att. Description	0.02** (0.01)	-0.03*** (0.01)	0.04*** (0.01)	0.09*** (0.02)
Price x Att. Price	0.21*** (0.02)	0.16*** (0.02)	-0.11*** (0.03)	-0.06* (0.02)
Price x Att. Fairtrade	0.00 (0.01)	0.00 (0.01)	-0.02 (0.02)	-0.01 (0.04)
Price x Att. Organic	0.01 (0.01)	0.01 (0.01)	0.00 (0.02)	-0.02 (0.03)
Price x Att. Size	0.00 (0.01)	0.01 (0.01)	-0.01 (0.02)	-0.03 (0.03)
Price x Att. Description	0.02 (0.01)	0.03** (0.01)	-0.06* (0.03)	-0.04 (0.04)
Obs.	18468	18468	18468	18468
R <sup>2</sup> Adj.	0.373	0.342	0.034	0.033

Notes: Data are from Study 1. All models are linear regressions with standard errors clustered at the individual level (N = 152). Each column has a different attention metric: Prop. dwell time is the proportion of time spent on each attribute, Prop. info opens the proportion of times an attribute was revealed. Full ignorance means an attribute was not revealed and Partial ignorance means 1 of the 2 options was revealed. Rating is the reference attribute. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 5**

Regressions of the interaction between hidden information and certifications on choice.

	Choice LR (1)	Choice FT (2)	Choice Org (3)	Choice LR (4)	Choice FT (5)	Choice Org (6)
Intercept	0.49*** (0.01)	0.71*** (0.03)	0.69*** (0.03)	-0.06 (0.05)	1.13*** (0.16)	1.02*** (0.16)
Price	-0.78*** (0.02)	-0.75*** (0.02)	-0.74*** (0.02)	-4.37*** (0.11)	-4.07*** (0.12)	-3.99*** (0.11)
Hidden	0.02** (0.01)	-0.02 (0.01)	-0.02 <sup>+</sup> (0.01)	0.12* (0.05)	-0.09 (0.06)	-0.11 <sup>+</sup> (0.06)
Rating	0.17*** (0.01)	0.15*** (0.01)	0.13*** (0.01)	0.98*** (0.06)	0.86*** (0.05)	0.77*** (0.05)
Fairtrade	0.26*** (0.01)		0.17*** (0.01)	1.50*** (0.08)		0.94*** (0.04)
Organic	0.25*** (0.01)	0.18*** (0.01)		1.45*** (0.08)	1.00*** (0.04)	
Size	0.62*** (0.04)	0.54*** (0.04)	0.66*** (0.04)	3.65*** (0.23)	3.08*** (0.21)	3.72*** (0.22)
Negative	0.02* (0.01)	0.05* (0.02)	0.07*** (0.02)	0.10* (0.05)	0.29* (0.12)	0.42*** (0.12)
Neutral	0.01 (0.01)	-0.08*** (0.02)	-0.07** (0.02)	0.07 (0.05)	-0.45*** (0.12)	-0.38** (0.12)
Hidden x Price	0.02 (0.02)			0.27* (0.11)		
Hidden x Rating	0.00 (0.01)			-0.04 (0.07)		
Hidden x Fairtrade	-0.01 (0.01)			-0.14* (0.07)		
Hidden x Organic	-0.02 <sup>+</sup> (0.01)			-0.16* (0.07)		
Hidden x Size	0.06 (0.02)			0.05 (0.33)		
Fairtrade x Neg.	0.03 <sup>+</sup> (0.02)			0.25* (0.12)		
Fairtrade x Neut.	-0.07*** (0.02)			-0.44*** (0.11)		
Organic x Neg.	0.06*** (0.02)			-0.40*** (0.12)		
Organic x Neut.	-0.05** (0.02)			-0.33** (0.12)		
Hidden x Neg.	-0.03* (0.01)	0.01 (0.01)	0.01 (0.01)	-0.14* (0.07)	0.06 (0.09)	0.04 (0.08)
Hidden x Neut.	-0.02 <sup>+</sup> (0.01)	0.00 (0.02)	0.00 (0.02)	-0.13 <sup>+</sup> (0.07)	0.03 (0.09)	-0.01 (0.09)
Hidden x FT x Neg.	0.01 (0.02)			0.05 (0.09)		

	Choice LR (1)	Choice FT (2)	Choice Org (3)	Choice LR (4)	Choice FT (5)	Choice Org (6)
Hidden x FT	0.01			0.06		
x Neut.	(0.02)			(0.09)		
Hidden x	0.01			0.01		
Org. x Neg.	(0.01)			(0.09)		
Hidden x	-0.01			-0.00		
Org. x Neut.	(0.02)			(0.09)		
Obs.	31052	16951	17320	31052	16951	17320
R <sup>2</sup> Adj.	0.294	0.237	0.231	N/A	N/A	N/A

Notes: Data are from Study 2. Columns 1-3 are linear probability regressions and columns 4-6 are logistic regressions, all with standard errors clustered at the individual level (N=816). Choice LR compares left versus right options; Choice FT compares Fairtrade versus not certified options; Choice Org compares Organic vs. not certified options. The Positive frame is the reference. Gender and age are included as controls, but not displayed. + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.



**Supplementary Table 6**

Linear regressions of attention including framing condition.

	Prop. dwell FT (1)	Prop. dwell Org (2)	Prop. info opens FT (3)	Prop. info Opens Org (4)	Ignore FT (5)	Ignore Org (6)
Intercept	0.14*** (0.01)	0.14*** (0.01)	0.16*** (0.01)	0.16*** (0.01)	0.13*** (0.02)	0.13*** (0.02)
Cond. Neut.	-0.01* (0.01)	-0.01* (0.01)	-0.01 <sup>+</sup> (0.01)	-0.01* (0.01)	0.04 <sup>+</sup> (0.02)	0.04* (0.02)
Cond. Neg.	0.02** (0.01)	0.02** (0.01)	0.01* (0.00)	0.01** (0.01)	-0.02 (0.02)	-0.02 (0.02)
Obs.	16540	16540	16540	16540	16540	16540
R <sup>2</sup> Adj.	0.015	0.015	0.012	0.014	0.006	0.008

Notes: Data are from Study 2. All models are linear regressions with standard errors clustered at the individual level (N = 816). Prop. dwell time is proportion of time spent on each attribute, Prop. info opens is proportion of times an attribute was revealed, Ignore means an attribute wasn't revealed at all. FT stands for Fairtrade and Org for Organic. The Positive frame is the reference condition. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 7**

Linear probability regressions including interactions with attention in choice.

	Prop. dwell time LR (1)	Prop. dwell time FT (2)	Prop. dwell time Org (3)	Prop. info opens LR (4)	Prop. info opens FT (5)	Prop. info opens Org (6)	Ignore LR (7)	Ignore FT (8)	Ignore Org (9)
Intercept	0.51*** (0.03)	0.44*** (0.06)	0.45*** (0.08)	0.52*** (0.03)	0.43*** (0.06)	0.38*** (0.07)	0.52*** (0.03)	0.58*** (0.05)	0.57*** (0.07)
Price	-0.85*** (0.04)	-0.86*** (0.05)	-0.80*** (0.05)	-0.85*** (0.04)	-0.87*** (0.05)	-0.80*** (0.05)	-0.86*** (0.04)	-0.87*** (0.05)	-0.81*** (0.05)
Rating	0.10*** (0.01)	0.13*** (0.02)	0.06*** (0.02)	0.10*** (0.01)	0.13*** (0.02)	0.06*** (0.02)	0.10*** (0.01)	0.13*** (0.02)	0.06*** (0.02)
Fairtrade	0.03 (0.02)		0.14*** (0.02)	0.04 (0.03)		0.13*** (0.02)	0.17*** (0.02)		0.13*** (0.02)
Organic	0.03 (0.02)	0.11*** (0.02)		-0.01 (0.03)	0.11*** (0.02)		0.14*** (0.02)	0.10*** (0.02)	
Size	0.21*** (0.02)	0.24*** (0.03)	0.17*** (0.03)	0.21*** (0.02)	0.24*** (0.03)	0.17*** (0.03)	0.21*** (0.02)	0.24*** (0.03)	0.17*** (0.03)
Fairtrade x Att. FT	1.22*** (0.18)			0.93*** (0.20)			-0.15*** (0.03)		
Organic x Att. Org. Att. FT	0.091*** (0.21)			1.14*** (0.20)			-0.16*** (0.03)		
		1.37*** (0.19)			1.13*** (0.20)			-0.21*** (0.03)	
Att. Org.			1.13*** (0.23)			1.34*** (0.21)			-0.21*** (0.03)
Obs.	2370	1306	1305	2370	1306	1305	2370	1306	1305
R <sup>2</sup> Adj.	0.339	0.343	0.273	0.338	0.334	0.281	0.328	0.328	0.269

Notes: Data are from Study 1. All models are linear probability regressions with standard errors clustered at the individual level (N = 152). Prop. dwell time is proportion of time spent on each attribute, Prop. info opens is proportion of times an attribute was revealed, Ignore means an attribute wasn't revealed at all. LR stands for Left – Right, FT for Fairtrade – not, and Org for Organic – not. Gender and age are included as controls, but not displayed. + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 8**

Linear probability regressions including interactions with attention in choice

	Prop. dwell time LR (1)	Prop. dwell time FT (2)	Prop. dwell time Org (3)	Prop. info opens LR (4)	Prop. info opens FT (5)	Prop. info opens Org (6)	Ignore LR (7)	Ignore FT (8)	Ignore Org (9)
Intercept	0.51*** (0.01)	0.56*** (0.03)	0.53*** (0.03)	0.51*** (0.01)	0.53*** (0.03)	0.51*** (0.03)	0.51*** (0.01)	0.72*** (0.03)	0.70*** (0.03)
Price	-0.76*** (0.02)	-0.71*** (0.02)	-0.72*** (0.02)	-0.76*** (0.02)	-0.72*** (0.02)	-0.72*** (0.02)	-0.76*** (0.02)	-0.72*** (0.02)	-0.72*** (0.02)
Rating	0.17*** (0.01)	0.16*** (0.01)	0.14*** (0.01)	0.17*** (0.01)	0.16*** (0.01)	0.14*** (0.01)	0.17*** (0.01)	0.16*** (0.01)	0.14*** (0.01)
Fairtrade	0.10*** (0.01)		0.18*** (0.01)	0.08*** (0.01)		0.17*** (0.01)	0.27*** (0.01)		0.17*** (0.01)
Organic	0.09*** (0.01)	0.18*** (0.01)		0.07*** (0.01)	0.18*** (0.01)		0.27*** (0.01)	0.18*** (0.01)	
Size	0.66*** (0.04)	0.58*** (0.05)	0.67*** (0.05)	0.66*** (0.04)	0.59*** (0.05)	0.67*** (0.05)	0.66*** (0.04)	0.58*** (0.05)	0.67*** (0.05)
Neutral	-0.01 (0.01)	-0.06** (0.02)	-0.06** (0.02)	-0.01 (0.01)	-0.07*** (0.02)	-0.06** (0.02)	-0.01 (0.01)	-0.07*** (0.02)	-0.06** (0.02)
Negative	0.00 (0.01)	0.05** (0.02)	0.07*** (0.02)	-0.01 (0.01)	0.05** (0.02)	0.07*** (0.02)	-0.01 (0.01)	0.06** (0.02)	0.08*** (0.02)
Fairtrade x Att. FT	0.88*** (0.06)			0.93*** (0.06)			-0.26*** (0.02)		
Organic x Att. Org.	0.91*** (0.06)			0.97*** (0.06)			-0.24*** (0.02)		
Att. FT		0.86*** (0.06)			0.93*** (0.07)			-0.29*** (0.02)	
Att. Org.			0.87*** (0.06)			0.95*** (0.07)			-0.26*** (0.02)
Obs.	15179	8277	8458	15179	8277	8458	15179	8277	8458
R <sup>2</sup> Adj.	0.325	0.271	0.273	0.322	0.270	0.271	0.305	0.262	0.256

Notes: Data are from Study 2. All models are linear probability regressions with standard errors clustered at the individual level (N = 816). The column names are the same as in Supplementary Table 7. The Positive frame is the reference condition. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 9**

Linear regressions of survey ratings in Study 1.

	Importance (1)	Premium WTP (2)	Familiarity (3)	Trust (4)	Expensive (5)	Health (6)	Quality (7)	Guilt (8)	Moral Obligation (9)	Concern (10)	Donations (11)
Intercept	3.83*** (0.59)	1.09*** (0.11)	1.38*** (0.15)	4.70*** (0.33)	5.95*** (0.39)	2.90*** (0.66)	4.12*** (0.57)	2.87*** (0.60)	4.01*** (0.60)	18.35*** (1.14)	0.95*** (0.12)
Organic	0.05 (0.12)	0.07* (0.03)	-0.01 (0.06)	-0.04 (0.09)	0.11 <sup>+</sup> (0.06)	1.79*** (0.14)	0.70*** (0.13)	-0.55*** (0.13)	-0.39** (0.13)	-0.74* (0.31)	-0.10*** (0.03)
Obs.	304	304	304	304	304	304	304	304	304	304	304
R <sup>2</sup> Adj.	-0.009	0.012	-0.005	0.003	0.013	0.219	0.040	0.084	0.071	0.087	0.036

Notes: Data are from Study 1. All models are linear regressions with clustered standard errors at the individual level (N = 152). The ratings ranged from 1-7 with the exception of Premium WTP which ranges from 0-2 where any value over 1 is additional willingness to pay for certified options and Concern which ranged from 3-21. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 10**

Linear regressions of survey ratings in Study 2.

	Importance (1)	Premium WTP (2)	Familiarity (3)	Trust (4)	Expensive (5)	Health (6)	Quality (7)	Guilt (8)	Moral Obligation (9)	Concern (10)
Intercept	3.88*** (0.20)	1.16*** (0.05)	4.09*** (0.19)	4.90*** (0.15)	5.14*** (0.16)	2.76*** (0.17)	3.67*** (0.18)	3.28*** (0.21)	4.11*** (0.23)	16.08*** (0.45)
Negative	0.48*** (0.14)	0.06 (0.04)	-0.12 (0.12)	0.07 (0.11)	0.10 (0.10)	0.24* (0.11)	0.28* (0.13)	0.38* (0.15)	0.23 (0.16)	-0.24 (0.31)
Neutral	-0.40* (0.16)	-0.08 <sup>+</sup> (0.04)	-0.02 (0.13)	0.01 (0.12)	-0.05 (0.12)	-0.09 (0.13)	-0.11 (0.14)	-0.30 <sup>+</sup> (0.16)	-0.22 (0.17)	-0.59 (0.36)
Organic	-0.05 (0.05)	0.03 <sup>+</sup> (0.02)	0.81*** (0.05)	0.03 (0.04)	0.21*** (0.03)	1.80*** (0.06)	1.04*** (0.06)	-0.65*** (0.05)	-0.84*** (0.05)	-0.86*** (0.11)
Obs.	1632	1632	1632	1632	1632	1632	1632	1632	1632	1632
R <sup>2</sup> Adj.	0.052	0.016	0.082	0.005	0.009	0.231	0.103	0.058	0.055	0.038

Notes: Data are from Study 2. All models are linear regressions with clustered standard errors at the individual level (N = 816). The ratings ranged from 1-7 with the exception of Premium WTP which ranged from 0-2 where any value over 1 is additional willingness to pay for certified options and Concern ranged from 3-21. The Positive frame is the reference condition. Gender and age are included in as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

**Supplementary Table 11**

Linear regressions of emotional ratings

	Sad (1)	Angry (2)	Guilty (3)	Happy (4)	Hopeful (5)	Proud (6)
Intercept	3.74*** (0.21)	3.23*** (0.21)	3.97*** (0.21)	3.13*** (0.22)	3.82*** (0.21)	3.11*** (0.23)
Negative	0.45*** (0.14)	0.32* (0.14)	0.16 (0.14)	-0.06 (0.15)	0.07 (0.14)	-0.04 (0.15)
Neutral	0.03 (0.14)	-0.04 (0.15)	-0.11 (0.15)	-0.24 (0.17)	-0.27 (0.16)	-0.24 (0.17)
Organic	-1.12*** (0.06)	-0.75*** (0.05)	-0.95*** (0.05)	-0.15** (0.05)	-0.33*** (0.04)	-0.26*** (0.04)
Obs.	1632	1632	1632	1632	1632	1632
R <sup>2</sup> Adj.	0.117	0.066	0.109	0.030	0.047	0.025

Notes: Data are from Study 2. All models are linear regressions with clustered standard errors at the individual level (N = 816). The ratings ranged from 1-7. The Positive frame is the reference condition. Gender and age are included in as controls, but not displayed. + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

## Study 2 Robustness check

In the main results reported, we exclude a subset of participants who were assigned to the neutral frame but saw both neutral and negative frames due to a programming error if they went back to the instructions from the comprehension questions. Because those who needed to go back to the instructions after reading them before may be a selective group, we test the robustness of our results to excluding participants from all frames (neutral, positive, and negative) who went back to the instructions from the same set of comprehension questions to ensure that excluding these participants from the neutral group but not the positive and negative is not driving the results. We show that excluding all participants who had to repeat instructions leads to the same results as reported in the main text in terms of choice (Supplementary Table 12) and attention (Supplementary Table 13). This suggests that these exclusions did not bias the results.

### Supplementary Table 12

Linear probability model of choice excluding those who re-read instructions.

	Choice LR (1)	Choice FT (2)	Choice Org (3)
Intercept	0.50*** (0.01)	0.70*** (0.03)	0.68*** (0.03)
Price	-0.79*** (0.02)	-0.76*** (0.02)	-0.74*** (0.02)
Hidden	0.01 (0.01)	-0.01 (0.01)	-0.02** (0.01)
Rating	0.17*** (0.01)	0.15*** (0.01)	0.14*** (0.01)
Fairtrade	0.26*** (0.01)		0.17*** (0.01)
Organic	0.25*** (0.01)	0.18*** (0.01)	
Size	0.61*** (0.04)	0.53*** (0.04)	0.69*** (0.04)
Negative	0.01 (0.01)	0.07** (0.02)	0.09*** (0.02)
Neutral	0.00 (0.01)	-0.08*** (0.02)	-0.06** (0.02)
Hidden x Price	0.01 (0.02)		
Hidden x Rating	0.00 (0.01)		
Hidden x Fairtrade	-0.01 (0.01)		
Fairtrade x Negative	0.05* (0.02)		
Fairtrade x Neutral	-0.07*** (0.02)		
Hidden x Organic	-0.02*		

	Choice LR (1)	Choice FT (2)	Choice Org (3)
Organic x Negative	(0.01) 0.08***		
Organic x Neutral	(0.02) -0.05**		
Hidden x Size	(0.02) 0.06		
Obs.	(0.06) 28574	15604	15945
R <sup>2</sup> Adj.	0.299	0.244	0.239

Notes: Data are from Study 2, excluding participants in all conditions who repeated instructions after specific comprehension questions. All models are linear probability regressions with standard errors clustered at the individual level (N=751). Choice LR compares left versus right options; Choice FT compares Fairtrade versus not certified options; Choice Org compares Organic vs. not certified options. The Positive frame is the reference condition. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

### Supplementary Table 13

Linear regressions of attention excluding those who re-read instructions.

	Prop. dwell FT (1)	Prop. dwell Org (2)	Prop. info opens FT (3)	Prop. info Opens Org (4)	Ignore FT (5)	Ignore Org (6)
Intercept	0.14*** (0.01)	0.14*** (0.01)	0.15*** (0.01)	0.15*** (0.01)	0.14*** (0.02)	0.15*** (0.03)
Negative	0.02** (0.01)	0.02*** (0.01)	0.01** (0.01)	0.02*** (0.01)	-0.02 (0.02)	-0.02 (0.02)
Neutral	-0.01* (0.01)	-0.01 <sup>+</sup> (0.01)	-0.01 (0.01)	-0.01 <sup>+</sup> (0.01)	0.04 <sup>+</sup> (0.02)	0.04* (0.02)
Obs.	15244	15244	15244	15244	15244	15244
R <sup>2</sup> Adj.	0.016	0.018	0.013	0.017	0.008	0.010

Notes: Data are from Study 2, excluding participants in all conditions who repeated instructions after specific comprehension questions. All models are linear regressions with standard errors clustered at the individual level (N = 751). Prop. dwell time is proportion of time spent on each attribute, Prop. info opens is proportion of times an attribute was revealed, Ignore means an attribute wasn't revealed at all. FT stands for Fairtrade and Org for Organic. The Positive frame is the reference condition. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

A representative US sample along the dimensions of gender, race, and age participated in Study 2, along with reporting ethnicity, education level, income level, and political leanings. Therefore, we can examine how demographics impact use of certifications. We find that older participants, women (relative to men), and those with more left-leaning political views are more likely to purchase Fairtrade and Organic certified options with education level and ethnicity having no impact. Higher incomes are related to a marginal increase in Fairtrade purchases and a significant increase in Organic purchases. Finally, Black participants (relative to White) are more likely to make Organic, but not Fairtrade purchases.

**Supplementary Table 14**

Linear probability regressions of choice with demographics.

	Choice FT (1)	Choice Org (2)
Intercept	0.76*** (0.07)	0.63*** (0.07)
Price	-0.76*** (0.02)	-0.74*** (0.02)
Rating	0.15*** (0.01)	0.14*** (0.01)
Organic	0.18*** (0.01)	
Fairtrade		0.17*** (0.01)
Size	0.55*** (0.04)	0.66*** (0.04)
Hidden	-0.01 <sup>+</sup> (0.01)	-0.02* (0.01)
Negative	0.06*** (0.02)	0.08*** (0.02)
Neutral	-0.07*** (0.02)	-0.07** (0.02)
Age	0.00** (0.00)	0.00*** (0.00)
Gender - Female	0.05** (0.02)	0.04* (0.02)
Gender - other	0.11 (0.10)	0.09 (0.09)
Gender - unknown	0.03 (0.19)	-0.11 (0.17)
Asian	-0.01 (0.03)	0.00 (0.04)
Black	0.03 (0.02)	0.10*** (0.02)
Hispanic/Latino	-0.01 (0.03)	0.01 (0.04)
Income	0.00 <sup>+</sup>	0.00*



	Choice FT (1)	Choice Org (2)
	(0.00)	(0.00)
Years education	0.00	0.00
	(0.00)	(0.00)
Political leaning	-0.05***	-0.03***
	(0.01)	(0.01)
Obs.	16308	16664
R <sup>2</sup> Adj.	0.256	0.240

Notes: All models are linear probability regressions with standard errors clustered at the individual level (N = 785). Age is age in year, the reference gender is Male. The reference race is White, with racial categories with <10 members excluded (Mixed, Other, Native American/American Indian). The reference ethnicity is non-Hispanic/Latino. Income levels are approximated from income category (using the middle of the range). Years of education are approximated from education level. Political leaning is measured on a scale from 1 = very left to 5 = very right.

### Study 3: Robustness of results to open price information

In Studies 1 and 2, all information is either open or hidden on a given trial. In contrast, in many of the studies on information avoidance, the self-relevant information is always available, and only the impact information is hidden (Vu et al., 2023). Further, what could be viewed as the most self-relevant information, price information, is almost always prominently displayed in grocery settings. Such a difference could account for our low levels of ignorance and relatively small reductions in use of certifications under hidden information if also hiding price information changes the implicit default of whether information should be revealed (Grossman, 2014; Moyal & Schurr, 2022). Therefore, in Study 3 we made price information always open on the screen, even in hidden trials, to test the robustness of our information seeking and ignorance patterns and weight on certifications in choice.

In Study 3, we find very similar results on use of certification as in the other studies, suggesting that making price information always open does not drastically change decisions. The proportion of certified choices (Supplementary Figure 11) and the weight on Fairtrade and Organic certifications decreases slightly under hidden versus open information, but the decrease is not significant for Fairtrade ( $b = -0.01$ ,  $p = 0.175$ ) and is significant for Organic certifications ( $b = -0.02$ ,  $p = 0.049$ ) confirming H1 only for Organic certifications (Supplementary Figure 11, Supplementary Table 15). Further, making price information available does not lead to a stronger impact of hidden information as the reduction in weight on Organic and Fairtrade certifications is the same magnitude across Studies 2 and 3. This is in accordance with our process data from Study 1 and Study 2 in which we find very low avoidance of price information, evidence that participants are already using price in almost all trials and ruling out the alternative possibility that making price information always open leads to a different default norm, changing the way in which the other attributes are used.

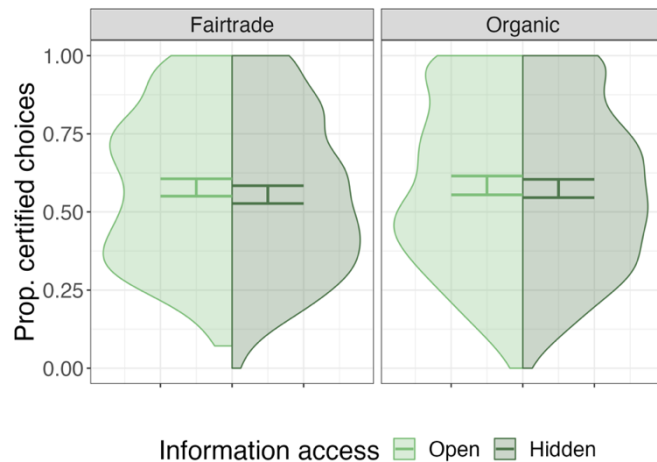
#### References:

- Grossman, Z. (2014). Strategic ignorance and the Robustness of Social preferences. *Management Science*, 60(November), 2659–2665. <https://doi.org/10.1287/mnsc.2014.1989>
- Moyal, A., & Schurr, A. (2022). The effect of deliberate ignorance and choice procedure on pro-environmental decisions. *Ecological Economics*, 200(May), 107512. <https://doi.org/10.1016/j.ecolecon.2022.107512>
- Vu, L., Soraperra, I., Leib, M., van der Weele, J., & Shalvi, S. (2023). Ignorance by Choice : A Meta-Analytic Review of the Underlying Motives of Willful Ignorance and Its Consequences. *Psychological Bulletin*, 149(9–10), 611–635.

**Supplementary Table 15**  
Regressions of choice Study 3.

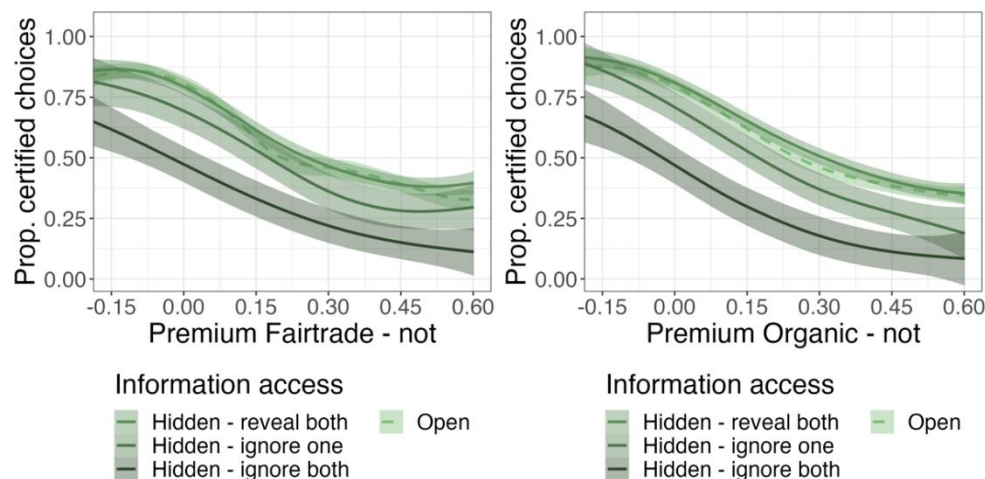
	Choice LR (1)	Choice FT (2)	Choice Org (3)	Choice LR (4)	Choice FT (5)	Choice Org (6)
Intercept	0.51*** (0.01)	0.70*** (0.04)	0.71*** (0.04)	0.06 (0.08)	1.03*** (0.22)	1.10*** (0.23)
Price	-0.80*** (0.03)	-0.76*** (0.03)	-0.79*** (0.03)	-4.20*** (0.19)	-3.84*** (0.19)	-4.03*** (0.18)
Hidden	-0.01 (0.01)	-0.01 (0.01)	-0.02* (0.01)	-0.05 (0.04)	-0.08 (0.06)	-0.12* (0.06)
Rating	0.20*** (0.01)	0.20*** (0.02)	0.18*** (0.01)	1.12*** (0.09)	1.03*** (0.09)	0.95*** (0.08)
Fairtrade	0.23*** (0.01)		0.16*** (0.01)	1.25*** (0.07)		0.83*** (0.07)
Organic	0.23*** (0.01)	0.15*** (0.01)		1.23*** (0.07)	0.80*** (0.07)	
Size	0.68*** (0.07)	0.53*** (0.07)	0.64*** (0.07)	3.76*** (0.39)	2.81*** (0.37)	3.49*** (0.38)
Hidden x Price	-0.02 (0.02)			-0.05 (0.16)		
Hidden x Rating	0.01 (0.02)			0.03 (0.11)		
Hidden x Fairtrade	-0.01 (0.01)			-0.07 (0.07)		
Hidden x Organic	-0.02 <sup>+</sup> (0.01)			-0.14 <sup>+</sup> (0.07)		
Hidden x Size	-0.07 (0.10)			-0.41 (0.54)		
Obs.	11588	6305	6440	11588	6305	6440
R <sup>2</sup> Adj.	0.273	0.219	0.238	N/A	N/A	N/A

Notes: Data are from Study 3. Columns 1-3 are linear probability regressions and columns 4-6 are logistic regressions, all with standard errors clustered at the individual level (N = 302). Choice LR compares left versus right options; Choice FT compares Fairtrade versus not certified options; Choice O compares Organic vs. not certified options. Gender and age are included as controls, but not displayed. <sup>+</sup> p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.



Supp. Fig. 11. The proportion of Fairtrade and Organic certified choices under open and hidden information conditions in Study 3. The error bars indicate the 95% confidence intervals, and the shaded areas shows the distribution of choices.

As in Studies 1 and 2, we find that whether certification information is revealed or ignored impacts the proportion of certified choices (Supplementary Figure 13). Further quantifying the role of attention in Supplementary Table 16 confirms that attention metrics of information seeking and avoidance act as moderators on the use certifications. This shows that even when price information is fully available, the other information that participants seek out or ignore matters in their choices in a similar way to when they also must seek price information.



Supp. Fig. 13. Smoothed raw data of the proportion of certified choices A. Fairtrade and B. Organic, depending on the price premium. The colors indicate open information and hidden information split into fully revealed, partially revealed and partially ignored, fully ignored. The shaded bands represent 95% confidence intervals.

**Supplementary Table 16**

Linear probability regressions of attention in choice.

	Prop. dwell time LR (1)	Prop. dwell time FT (2)	Prop. dwell time Org (3)	Prop. info opens LR (4)	Prop. info opens FT (5)	Prop. info opens Org (6)	Ignore LR (7)	Ignore FT (8)	Ignore Org (9)
Intercept	0.51*** (0.02)	0.60*** (0.04)	0.56*** (0.05)	0.50*** (0.02)	0.57*** (0.05)	0.54*** (0.05)	0.51*** (0.02)	0.73*** (0.04)	0.71*** (0.04)
Price	-0.82*** (0.03)	-0.77*** (0.04)	-0.82*** (0.03)	-0.82*** (0.03)	-0.77*** (0.04)	-0.82*** (0.03)	-0.81*** (0.03)	-0.77*** (0.04)	-0.81*** (0.03)
Rating	0.21*** (0.02)	0.21*** (0.02)	0.18*** (0.02)	0.21*** (0.02)	0.21*** (0.02)	0.18*** (0.02)	0.21*** (0.02)	0.20*** (0.02)	0.18*** (0.02)
Fairtrade	0.11*** (0.02)		0.17*** (0.01)	0.09*** (0.02)		0.16*** (0.02)	0.24*** (0.01)		0.16*** (0.01)
Organic	0.08*** (0.02)	0.14*** (0.02)		0.05* (0.02)	0.14*** (0.02)		0.23*** (0.01)	0.13*** (0.02)	
Size	0.60*** (0.07)	0.47*** (0.10)	0.66*** (0.09)	0.60*** (0.07)	0.46*** (0.10)	0.67*** (0.09)	0.59*** (0.07)	0.45*** (0.10)	0.67*** (0.09)
Fairtrade x Att. Fairtrade	0.50*** (0.07)			0.57*** (0.08)			-0.20*** (0.03)		
Organic x Att. Organic	0.57*** (0.07)			0.65*** (0.09)			-0.27*** (0.03)		
Att. Fairtrade		0.48*** (0.07)			0.57*** (0.08)			-0.24*** (0.03)	
Att. Organic			0.56*** (0.08)			0.64*** (0.09)			-0.30*** (0.03)
Obs.	5548	3009	3083	5548	3009	3083	5548	3009	3083
R <sup>2</sup> Adj.	0.302	0.238	0.279	0.301	0.239	0.277	0.294	0.234	0.278

Notes: Data are from Study 3. All models are linear probability regressions with standard errors clustered at the individual level (N = 302). Prop. dwell time is proportion of time spent on each attribute, Prop. info opens is proportion of times an attribute was revealed, Ignore means an attribute wasn't revealed at all. LR stands for Left – Right, FT for Fairtrade – not, and Org for Organic – not. Gender and age are included in as controls, but not displayed. + p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.