

Good eats, bad intentions? Reputational costs of organic consumption

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ABSTRACT

Previous research has shown that people tend to perceive organic consumers as more moral and higher status than conventional consumers. We propose that organic consumption might have reputational costs as well. Drawing from research on do-gooder derogation, virtue signaling, and cynicism, we suggest that people might see organic consumption as driven not only by altruistic but also by selfish – specifically, impression management – motives. In Study 1, participants rated organic (vs. conventional) consumers as having stronger altruistic concerns (for the environment, animal welfare, and social justice), as well as stronger impression management motives: organic (vs. conventional) consumers were seen as trying to appear more moral and high-status than they actually were. In Study 2, we separately assessed participants' perception of organic (vs. conventional) consumers' actual (vs. signaled) levels of morality and status. Organic consumers were perceived as trying to appear as more moral (but not more high-status) than they actually were, whereas conventional consumers were perceived as being honest in the impressions they tried to make. These results demonstrate that organic consumption might have not only positive, but also negative, reputational consequences.

1. Introduction

In recent years, the volume of the organic food market has grown substantially, partly due to the fact that environmental issues are now more prominent on the public agenda (Sahota, 2009; Willer, Schaack & Lernoud, 2017). It has been argued that individuals engage in organic consumption as a way of expressing values related to environmental preservation and animal welfare (Krystallis et al., 2012; Bartels & Reinders, 2016). As a result, several studies have shown organic consumption to have positive reputational consequences: people tend to perceive organic (vs. conventional) consumers as more moral (Bjorkrot & Ziegler, 2017; Olson et al., 2016) and higher in status (Kohlová & Urban, 2018; Puska et al., 2016).

While existing literature has focused on the reputational benefits of organic consumption, we suggest that it might also have reputational costs. Drawing from research on do-gooder derogation (Monin et al., 2008), virtue signaling (Jordan et al., 2017; Wallace et al., 2018), cynicism (Critcher & Dunning, 2011; Stavrova & Ehlebracht, 2016), and the norm of self-interest (Miller, 1999; Miller & Ratner, 1998), we explored whether people engage in cynical reconstruals of organic consumers' motives and perceive organic consumption as being driven by impression management motives. While existing research has highlighted the negative stereotypes associated with militant

environmentalists (Bashir et al., 2013; also see; Klas et al., 2019), the present studies explore potential reputational costs of a much milder, but also much more common, form of environmentally friendly behavior – organic consumption. It aims to offer a more differentiated view on social perception of organic consumption and contribute to a better understanding of its reputational consequences.

1.1. Social perception of organic consumers: previous research

Organic products (i.e., food products grown without the use of synthetic growth stimulants, fertilizers, or pesticides) are less harmful to the welfare of the planet compared to conventional products, as organic farming practices reduce pollution, conserve water, reduce soil erosion and use less energy (Rosen & Allan, 2007). Additionally, organic food is more likely than conventional food to be produced locally, requiring less transportation and reducing greenhouse gas emissions (Häring et al., 2001). Besides these environmental benefits, livestock in organic farms experience superior living conditions compared to livestock in regular farms (Sundrum, 2001), and organic farmers in developing countries are provided with better working conditions and are guaranteed fair wages (Shreck et al., 2006).

Lay people are aware of the lower environmental impact of organic products. In fact, they even overestimate the benignity of organic

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consumption – a phenomenon referred to as the “negative footprint illusion.” Specifically, people estimate the environmental damage of an organic and a conventional product combined as smaller than that of a conventional product alone (Gorissen & Weijters, 2016). People associate organic consumption with social responsibility and altruism (Mazar & Zhong, 2010), and often see organic consumption as driven by pro-environmental and altruistic motives (Noppers et al., 2014; Klas et al., 2019; Kareklaas et al., 2014). As a result, people tend to perceive organic consumers as more moral, caring, generous, and socially responsible than conventional consumers (Bjorkrot & Ziegler, 2017; Olson et al., 2016; Palomo-Vélez et al., 2021).

1.2. Do-gooder derogation and cynical attributions

Although existing empirical research has associated organic consumption with positive reputational outcomes, the social psychological literature on impression formation suggests that organic consumption might also have negative reputational consequences. Research on “do-gooder derogation” finds that sometimes individuals who engage in particularly moral and ethical behaviors are evaluated negatively by others (Monin et al., 2008). This phenomenon has been demonstrated with respect to vegetarians (Earle & Hodson, 2017; Minson & Monin, 2012), ethical consumers (e.g., consumers who avoid companies that use child labor) (Zane et al., 2016), proponents of environmentally sustainable energy use (Sparkman & Attari, 2020), and people who rebel against others’ racist decisions (O’Connor & Monin, 2016). Herein, we explore whether organic consumers are also subjected to do-gooder derogation.

Why might people dislike others’ displays of moral behaviors? Do-gooder derogation has been mainly explained by anticipated moral reproach [people anticipate that morally superior others will dislike them (Minson & Monin, 2012)] and social comparison processes [morally superior others represent a threat to individuals’ moral identities (Bolderdijk et al., 2018; Monin, 2007; Zane et al., 2016)]. In addition, do-gooder derogation might represent an example of social sanctioning of norm-violating behavior. People reward conformity and sanction deviance (Christensen et al., 2004; Fehr & Fischbacher, 2004), even when deviant behavior benefit the group (Herrmann et al., 2008; Parks & Stone, 2010). Finally, most recently, it has been speculated that people perceive overtly generous and moral behaviors as motivated by impression management goals, such as the desire to stand out and look better than others (Cramwinckel et al., 2015; Irwin & Horne, 2013).

The tendency to explain moral behaviors by impression management motives has been documented in the literature on cynical attributions and the norm of self-interest (Critcher & Dunning, 2011; Miller, 1999). Many people believe in self-interest as a powerful motive behind most human behavior. For example, people overestimate the extent to which the decision to donate blood is motivated by financial compensation (Ratner & Miller, 2001), and they show surprise and anger when people take action for causes in which they have no personal stakes (Ratner & Miller, 2001). Further, when people do learn about the prevalence of selfless behaviors, they reinterpret those behaviors as being not so selfless after all; rather, they are seen as reflecting egoistic motives (Critcher & Dunning, 2011).

These findings hint at the possibility that organic consumption – as a behavior that is largely believed to be prosocial and beneficial for humanity (Gorissen & Weijters, 2016) – may be subject to cynical attributions as well. In fact, organic consumers are motivated by a combination of environmental and reputational concerns (Griskevicius et al., 2010; Elliott, 2013; Hwang, 2016).

People might use organic consumption to appear in a more desirable light, otherwise known as ‘impression management’ or ‘image motivation’ (Ariely et al., 2009). People may use organic consumption to improve their image along two dimensions, morality and status, which roughly correspond to the two basic dimensions of social perception of individuals and groups: morality (or warmth, or communion) and

agency (or dominance, or competence) (Abele et al., 2008; Fiske et al., 2002). Morality describes how honest, good-natured, and well-intentioned somebody is. Agency describes how dominant, powerful, and influential somebody is, reflecting their status within a group’s hierarchy.

Given its positive environmental impact, people can buy organic products to appear more moral: more ethical, caring, and selfless. Indeed, studies showed ethical self-identity to be associated with consumers’ purchase intention of organic products (at least, in younger individuals; Hwang, 2016); and environmentalist identity is more strongly related to pro-environmental behaviors that are high (vs. low) in visibility (Brick et al., 2017).

As organic products are usually more costly than conventional products, and are even thought of as being a symbolic means of marking class boundaries (Beagan et al., 2015), organic purchases can be used to signal status as well. Indeed, status considerations were found to motivate the purchase of organic products (Griskevicius et al., 2010; Elliott, 2013; Puska et al., 2018); and individuals scoring higher (vs. lower) on status seeking motives were shown to be more attracted to products with an organic label (Lee et al., 2015; Miller, 2009; Nelissen & Meijers, 2011; Saad, 2007).

Although these findings hint at the possibility that organic consumers might be attributed selfish, impression management motives, this hypothesis has never been empirically tested. The current research was designed to fill in this gap by focusing explicitly on the perspective of observers of organic consumption. We explored potential reputational costs of organic consumption by testing whether it is subject to cynical attributions. Specifically, we examined whether people see organic consumers as being motivated by impression management goals, such as trying to appear as more moral and high-status than they actually are, compared to conventional consumers.

1.3. Overview of the studies

In Study 1, we explored whether people perceive organic (vs. conventional) consumers to be driven by both altruistic and impression management/social signaling motives, such as the motive to appear more moral and high-status than they really are. Study 2 focused on impression management motives, and sought to test whether people believe organic consumption to represent an exaggerated/inflated or an honest signal of morality and status by separating perceptions of actual and signaled morality and status.

The present research adheres to the APA ethics code and the Dutch ethics guidelines. We have no conflict of interest to declare. Our materials, data and scripts can be accessed at: https://osf.io/cksqt/?view_only=dae1817ca540480f983cee93f4062813.

2. Study 1

In Study 1, we compared perceptions of organic and conventional consumers in terms of their altruistic and impression management motives. We expected participants to believe organic consumers (compared to conventional consumers) to be more likely to be guided by both altruistic (environmental, animal welfare and social justice) motives, as well as the motives to signal morality and status.

2.1. Method

2.1.1. Participants

The sample consisted of 311 ($M_{age} = 20.02$, $SD_{age} = 0.12$, 80% female) first year undergraduate psychology students from a Dutch university. Following the lab’s standard practice, participants were given a two-week time period to take part in the study and were compensated with course credits. A sensitivity power analysis has shown that the sample size of 311 would allow us to detect a small-to-medium sized difference between the conditions ($d = 0.32$, two-tailed test, alpha .05)

with an 80% power.

2.1.2. Procedure and measures

The study used a between-subjects design with two (consumer type: organic, $n = 156$, vs. conventional, $n = 155$) conditions. Participants were shown a shopping receipt of an unfamiliar other and responded to a series of questions about the receipt owner. In both conditions, the receipt contained seven items. In the organic consumer condition, five out of seven items were labelled as organic. In the control condition, the receipt contained the same items, but none of them were labelled as organic (the receipts are shown in the Appendix). The prices listed on the receipts did not differ between the conditions.

After making themselves familiar with the receipt, participants were asked to indicate to what extent they believed that in their everyday life, the receipt owner "tries to appear as more well-intentioned, more honest and more sincere than he or she actually is" (three items, averaged into a measure of *signaled morality*, $\alpha = 0.80$) and "as having a higher (social) status, a higher income level and as being wealthier than he or she actually is" (three items, averaged into a measure of *signaled status*, $\alpha = 0.78$). Participants responded on a scale ranging from 1 (strongly disagree) to 7 (strongly agree).

As indicators of altruistic motives, participants were asked to rate the target consumer's concerns for the environment, social justice, and animal welfare. Specifically, participants were asked to indicate to what extent they believed the receipt owner "cares about global warming, soil pollution, deforestation, use of pesticides and chemical spillage" (5 items, averaged into a measure of *environmental concern*, $\alpha = 0.90$), "cares about unfair trading, bad labor conditions, low pay rates and child labor" (4 items, averaged into a measure of *social justice concern*, $\alpha = 0.90$) and "cares about the treatment of animals in the agriculture industry" (1 item, *animal welfare concern*). As a manipulation check, participants indicated the number of organic products they saw on the receipt (open question).

For exploratory purposes, we included a number of additional measures. Specifically, in addition to signaled morality and status, participants rated the target consumer on their signaled sociability, competence and education level; concern for personal health and deal proneness; participants were also asked to "guess" the target's gender and the total amount on the receipt. We did not have specific hypotheses and summarize the details regarding these measures and the respective analyses in the Supplementary materials.

3. Results

3.1. Manipulation check

As expected, participants in the organic consumer condition reported having seen more organic products on the shopping receipt ($M = 4.79$, $SD = 1.65$) than participants in the control condition ($M = 2.16$, $SD = 2.11$), $t(291.28) = 12.24$, $p < .001$, $d = 1.39$, 95%CI [1.14; 1.64].

Table 1
Descriptive statistics and correlations, Study 1.

		<i>M</i>	<i>SD</i>	1	2	3	4	5
1	Condition	0.50	0.50	–	–	–	–	–
2	Signaled morality	3.90	1.10	.171** [.06, .28]	–	–	–	–
3	Signaled status	3.72	1.13	.171** [.06, .28]	.606*** [.53, .67]	–	–	–
4	Environmental motive	4.18	1.27	.587*** [.51, .66]	.087 [.02, .20]	.092 [.02, .20]	–	–
5	Social justice motive	4.01	1.18	.354*** [.25, .45]	-.031 [-.10, .12]	.012 [-.14, .08]	.625*** [.55, .69]	–
6	Animal welfare motive	4.46	1.67	.568*** [.49, .64]	.028 [-.07, .15]	.038 [-.08, .14]	.664*** [.60, .72]	.500*** [.41, .58]

Note. *** $p < .001$, ** $p < .01$, * $p < .05$. Condition: 1 = organic consumer, 0 = conventional consumer. Values in brackets indicate 95% confidence intervals.

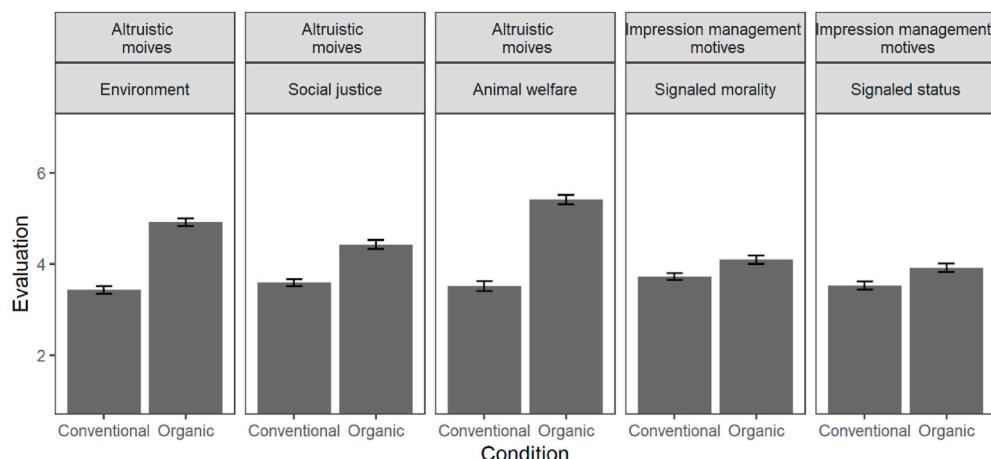


Fig. 1. Perceptions of status- and morality-signaling in the organic versus control conditions. Y-axis shows actual means per outcome measure per condition. Error bars are standard errors.

5. Study 2

Study 1 showed that people see organic consumers as trying to appear more moral and high status than they actually are. However, it remains unclear whether people think that organic consumers' actual level of morality and status exceeds that of conventional consumers. In other words, do people see organic consumption as an honest (although inflated) signal of superior morality and status? Study 2 was designed to answer these questions by using separate scales to assess individuals' beliefs about organic and conventional consumers' actual and signaled level of morality and status.

5.1. Method

5.1.1. Participants

The sample consisted of 482 (69% female, 31% male) participants ($M_{age} = 50.68$, $SD_{age} = 15.31$) from the online panel JijBentBelangrijk.nl (about 100,000 members) belonging to the market research company Markteffect. A sensitivity power analysis showed that this sample size would allow us to detect a small ($f = 0.05$) effect (2-way interaction in a mixed ANOVA) with an 80% power (two-tailed test, $\alpha = 0.05$). Most respondents (92%) were originally from the Netherlands. 26% of the sample had a university or a higher vocational degree, 32% had a community college degree and 42% a high school diploma. Participants were invited to participate via an email containing a link to the survey. The survey took about 5 min to complete and participants were compensated with € 0.30.

5.1.2. Procedure and measures

Study 2 had a 2 (between-subjects, consumer type: organic, $n = 247$, vs. conventional consumer, $n = 235$) \times 2 (within-subjects, rating type: actual vs. signaled trait) design. That is, participants rated either an organic or a conventional consumer; and all participants rated the target consumer on the dimensions of actual and signaled levels of morality and status. We used the same manipulation of the consumer type as in Study 1 (see the Appendix).

Participants saw a shopping receipt with seven items on it. In the organic consumer condition, five out of seven items were organic; in the control condition, no organic items were included. Participants were asked to indicate how moral (well-intentioned, honest and sincere, $\alpha = 0.86$) the consumer tried to appear, using a 7-point scale (1 = not at all, 7 = very much). We refer to this measure as *signaled morality*. Using the same scale, participants also indicated how moral (well-intentioned, honest and sincere, $\alpha = 0.86$) they thought the consumer actually was (1 = not at all, 7 = very much). We refer to this measure as *actual morality*. The same procedure was used to obtain participants' ratings of the consumer's *signaled status* (social status, wealth and income, $\alpha = 0.89$) and *actual status* (social status, wealth and income, $\alpha = 0.89$). The order in which participants made ratings of the actual versus signaled trait items was counterbalanced. As the effect of the consumer type on the perceived discrepancy between the actual and the signaled morality ($F(1, 478) = 1.20, p = .27$) and status ($F(4, 478) = 1.15, p = .28$) did not significantly depend on the order factor, we did not consider the order factor in the main analyses.

As a manipulation check, participants indicated the number of organic products they saw on the receipt (open question). Like in Study 1, participants were asked to guess the consumer's gender and the total amount on the receipt (we did not have specific hypotheses and summarize the details regarding these measures in the Supplementary materials).

6. Results

6.1. Manipulation check

As expected, participants in the organic consumer condition reported having seen more organic products on the shopping receipt ($M = 10.33$, $SD = 19.05$) than participants in the control condition ($M = 4.47$, $SD = 13.05$), $t(436.80) = 3.96, p < .001, d = 0.36, 95\%CI [0.18; 0.54]$.

6.2. Associations between morality and status

Like in Study 1, participants' perception of signaled morality and status were strongly and positively correlated ($r = 0.51, p < .001$), as were perceptions of actual morality and status ($r = 0.50, p < .001$), see Table 2.

6.3. Impression management motive: morality

A mixed ANOVA with a 2 (between-subjects: organic (coded as '1')

Table 2

Descriptive statistics and correlations, Study 2.

		<i>M</i>	<i>SD</i>	1	2	3	4
1	Condition	0.51	0.50	–	–	–	–
2	Actual status	4.47	1.10	.219*** [.13, .30]	–	–	–
3	Signaled status	4.46	1.26	.172*** [.08, .26]	.713*** [.67, .75]	–	–
4	Actual morality	4.74	1.07	.126*** [.04, .21]	.503*** [.43, .57]	.296*** [.21, .38]	–
5	Signaled morality	4.93	1.12	.209*** [.12, .29]	.462*** [.39, .53]	.514*** [.45, .58]	.708*** [.66, .75]

Note. *** $p < .001$, ** $p < .01$, * $p < .05$. Condition: 1 = organic consumer, 0 = conventional consumer. Values in brackets indicate 95% confidence intervals.



Fig. 2. Perceptions of actual versus signaled morality of the organic vs. conventional consumer, Study 2. Y-axis shows actual means per outcome measure per condition. Error bars are standard errors.

vs. conventional consumer (coded as '0') \times 2 (within-subjects: actual vs. signaled morality) design revealed significant main effects of the consumer type, $F(1, 482) = 16.40, p < .001, \eta^2_{\text{partial}} = 0.03, 95\%CI [0.01; 0.07]$, rating type (signaled vs. actual) ($F(1, 482) = 26.38, p < .001, \eta^2_{\text{partial}} = 0.05, 95\%CI [0.02; 0.05]$) and their interaction, $F(1, 482) = 6.76, p = .01, \eta^2_{\text{partial}} = 0.01, 95\%CI [0.001; 0.04]$. The pattern of the results is presented in Fig. 2.

The organic consumer was perceived as trying to appear as more moral ($M = 5.16, SD = 1.13$) than they actually were ($M = 4.87, SD = 1.03$), $F(1, 480) = 30.68, b = 0.29, p < .001, \eta^2_{\text{partial}} = 0.06, 95\%CI [0.03; 0.11]$, whilst the conventional consumer was not: participants' perception of actual ($M = 4.60, SD = 1.10$) and signaled ($M = 4.70, SD = 1.06$) morality did not differ from each other, $F(1, 480) = 3.14, b = 0.10, p = .077, \eta^2_{\text{partial}} = 0.01, 95\%CI [0.000; 0.03]$.

6.4. Impression management motive: status

A mixed ANOVA with a 2 (between-subjects: organic (coded as '1') vs. conventional consumer (coded as '0')) \times 2 (within-subjects: actual vs. signaled status) revealed a significant effect of the consumer type, $F(1, 482) = 22.06, b = 0.45, p < .001, \eta^2_{\text{partial}} = 0.04, 95\%CI [0.02; 0.08]$. Participants rated the organic consumer as higher in status (on average across actual and signaled status: $M = 4.69, SD = 1.20$) than the conventional consumer ($M = 4.23, SD = 1.11$). However, neither the effect of the rating type (signaled vs. actual) ($F(1, 482) = 0.000, p > .10$) nor the interaction between the consumer type- and the rating type ($F(1, 482) = 0.323, p > .10$) reached significance. These results are shown in Fig. 3.

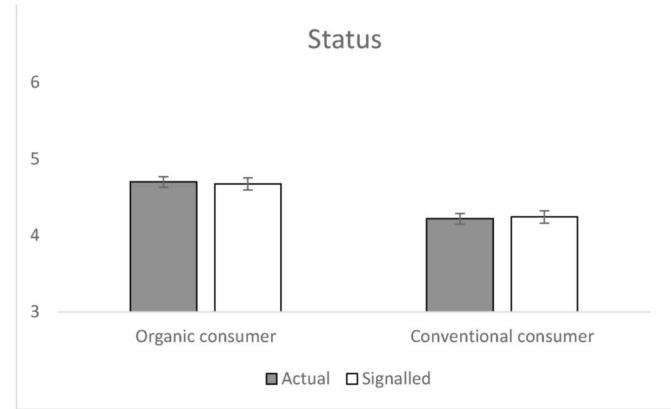


Fig. 3. Perceptions of actual versus signaled status of the organic vs. conventional consumer, Study 2. Y-axis shows actual means per measure per condition. Error bars are standard errors.

Hence, even though participants believed the organic (vs. conventional) consumers to have a higher status and a stronger desire to appear as being high in status, they did not perceive either the organic or the conventional consumer to engage in fake signaling, that is, to try to appear better than they actually were.

6.5. Comparing morality and status

The separate analyses for morality and status presented above suggest that organic consumption is seen as a way to manage one's image along the dimension of morality but not status. To test whether the effect of the consumer type on participants' perception of signaled versus actual trait was indeed significantly different for morality versus status, we ran a mixed ANOVA with a 2 (between-subjects: organic vs. conventional consumer) \times 2 (within-subjects: actual vs. signaled trait) \times 2 (within-subjects: morality vs. status) design. This analysis showed a significant three-way interaction, $F(1, 480) = 8.86, p = .003, \eta^2_{\text{partial}} = 0.02, 95\%CI [0.002; 0.05]$, suggesting that the extent to which organic (vs. conventional) consumers were perceived as engaging in impression management differed depending on the trait in question. In case of morality, organic (but not conventional) consumers were perceived as trying to appear as more moral than there actually were; whereas in case of status, neither organic nor conventional consumers were perceived as trying to appear as more high-status than they actually were. The simple effects are reported in Sections 6.3 and 6.4.

7. Discussion

Study 2 showed that organic consumers are perceived as more moral and more high-status than conventional consumers. At the same time, they were considered as more likely to engage in impression management by trying to appear as moral and high-status. Comparing the perception of actual and signaled status and morality revealed that organic consumers are perceived as trying to appear as more moral than they actually are. Hence, people consider organic consumption as an exaggerated or inflated signal of high moral standards. In contrast, for status, people believed that organic consumers' actual level of status truly reflected the image they were trying to create by engaging in organic consumption, suggesting that organic consumption is likely seen as an honest signal of a higher status.

8. Individual differences in dispositional cynicism and organic consumption: studies 1 and 2

Both studies included an exploratory measure of individual differences in dispositional cynicism and organic consumption. Participants reported how frequently they bought organic products themselves and completed a Cynical Distrust scale (Greenglass & Julkunen, 1989). Details about these measures and the respective analyses are presented in Supplementary materials and briefly summarized below.

Cynicism. Dispositional cynicism is defined as the general belief that most human actions, even the seemingly altruistic ones, are in reality driven by self-interest (Stavrova & Ehlebracht, 2019). Given that definition, cynical individuals can be expected to believe that most people – organic and conventional consumers – would engage in some signaling and try to appear better than they are. Indeed, across both studies, more (vs. less) cynical individuals were more likely to believe that the target consumer's behavior was driven by impression management motives. In addition, in Study 1 (but not in Study 2), individuals with higher (vs. lower) cynical distrust scores were more likely to perceive organic than conventional consumers as trying to signal morality and status.

Organic consumption. We explored whether the extent to which participants inferred altruistic and impression management motives from the organic (vs. conventional) consumer was associated with participants' own organic consumption. A series of moderated regression analyses showed that it was not the case: participants attributed stronger altruistic and impression motives to organic (vs. conventional) consumers regardless of their own frequency of organic food consumption. It is noteworthy however that the manipulation affected participants' self-reports of organic consumption (participants reported higher organic consumption in the control than in the organic condition), which limits our ability to draw conclusions from the analyses involving this measure.

9. General discussion

Several studies have shown organic consumption to have positive reputational consequences: people tend to perceive organic (vs. conventional) consumers as driven by pro-environmental and altruistic motives (Noppers et al., 2014; Karekla et al., 2014) and tend to attribute them a higher status (Kohlová & Urban, 2018; Puska et al., 2016) and morality (Bjorkrot & Ziegler, 2017; Olson et al., 2016; Palomo-Vélez et al., 2021). Across two experiments, we found that organic consumption also has reputational costs. Individuals believed organic (vs. conventional) consumption to be driven by a combination of altruistic and impression management motives: organic (vs. conventional) consumers were seen as having a stronger desire to appear more moral than they

actually were.

People sometimes dislike overtly moral and ethical others – a phenomenon referred to as do-gooder derogation (Monin et al., 2008). For example, people sometimes derogate acts of civil courage (Monin et al., 2008) and ethical consumption (Zane et al., 2016). The present studies extend these findings by showing that people might also respond negatively to organic consumers: they attribute organic consumers' choices to selfish reasons, such as the desire to appear more moral than they actually are.

In both studies, individuals perceived organic consumption as a strategic behavior signaling a superior moral character. Do people see organic consumption as a signal of a superior stratus as well? In Study 1, participants rated organic consumers as *trying to appear* more high-status than they actually were, compared to conventional consumers. In Study 2, participants perceived organic consumers as having higher status and having a stronger desire to signal high status, compared to conventional consumers. Interestingly, their perceptions of organic consumers' actual and signaled status matched: participants believed organic consumers to be as high-status as they wanted to appear.

We speculate that the reason for this inconsistency between the studies is that the manipulation had a stronger effect in Study 1 than in Study 2. Specifically, in both studies, participants in the organic consumer condition saw a shopping receipt that included organic products and participants in the conventional consumer condition saw a shopping receipt that did not include organic products. The items (e.g., organic milk vs. just milk) and the prices listed on the receipts were the same (in both studies). Yet, additional analyses (presented in the Supplementary materials) showed that participants in both studies remembered the receipt containing organic products to have a higher total amount paid than the receipt with only the conventional products. Importantly, this effect was stronger in Study 1 ($d = 0.61$) than in Study 2 ($d = 0.40$). Hence, in Study 2, participants were less likely to infer a higher status (ability to pay more) from organic consumption than in Study 1. In other words, Study 2 participants were less likely to consider organic consumption as a status-enhancing trait and consequently, were less likely to believe that the target would buy organic food to appear as having a higher status. We speculate that the differences in the samples we used in Study 1 and Study 2 explain this discrepancy. Study 1 participants were first-year undergraduate students from a Dutch university and Study 2 participants were Dutch adults with diverse socioeconomic backgrounds. Hence, it is possible that organic consumption is more likely to represent a signal of status among students (given their more limited budget) than among adults.

The present studies have limitations. In real life, people do not get to see other people's grocery receipts very often. Hence, our shopping receipt-manipulation, while generally effective (as indicated by manipulation check), might be lacking in external validity. Therefore, we hope that future research will replicate our findings using different manipulations of consumer types (e.g., descriptions of the target's consumption habits or pictures of the content of their grocery baskets). In addition, the items listed on the shopping receipt in the present studies were mostly healthy foods, which could have created the impression that the target consumer – organic or conventional – has an elevated concern for their health and fitness. Indeed, additional analyses presented in the Supplementary materials showed that participants saw both organic and conventional consumer as strongly caring about their personal health. Hence, it might be advisable for future research employing the same manipulation technique to vary the content of the shopping receipt.

Our findings could be at least partially driven by demand effects. We attempted to conceal our research goal and thus reduce potential

demand effects by providing the participants with more additional information about the target: specifically, the shopping receipt included the information about what specific items the target bought, their quantities, and how much they paid. Still, we emphasize the need to replicate our findings using more subtle manipulations. Finally, even though the present results suggest that people perceive organic and conventional consumers differently in terms of impression management motives, it remains unclear whether this dimension of social perception is salient or important when judging organic consumers. We encourage future studies to explore whether people would mention impression management motives when describing organic (vs. conventional) consumers without any prompts.

Critically, participants saw organic consumers as driven by a combination of altruistic and impression management motives. Comparing the effect sizes across altruistic and impression management motives shows that organic consumers were primarily perceived as driven by altruistic rather than impression management motives. In Study 1, participants' perception of impression management motives was not significantly related to participants' perception of altruistic motives, suggesting that one interpretation does not make the other one less likely. Also, the effect of the condition (organic vs. conventional) on impression management motives was robust against controlling for altruistic motives. These results add to the literature on co-existence of different motives in the same person. Past research showed that individuals who are more self-interested are not necessarily also less altruistic (Gerbasi & Prentice, 2013). Hence, self-interest and altruistic concerns are not mutually exclusive not only in how people see themselves (e.g., Gerbasi & Prentice, 2013) but also in how they see others.

While we have shown that people see organic consumption as driven by impression management motives, the specific mechanism of this effect remains less clear. Others' organic consumption might represent a threat to perceivers' own moral identity. For example, when exposed to vegetarians, meat-eaters often experience dissonance and engage in dissonance-reducing strategies (e.g., denial of animal mind or pain) (Rothgerber, 2014). Trying to attribute others' altruistic behaviors, for example, organic consumption, to hidden selfish motives might be another way to deal with the moral identity threat. Even though, in our studies, participants saw organic consumers as driven by impression management motives regardless of whether they themselves usually purchased organic or not, we encourage future studies to test this possibility using more fine-grained procedures and measures (e.g., manipulate target organic consumption relative to the level of organic consumption reported by the participant).

Individuals' tendency to attribute impression management motives to organic consumers could be partially driven by their own impression management motives. Explaining others' seemingly altruistic behaviors by hidden selfish (i.e., impression management) motives represents a display of cynicism (e.g., Stavrova et al., 2020). Lay people often associate cynicism with wisdom and experience and believe cynical individuals to be smarter and more competent than less cynical individuals (Stavrova & Ehlebracht, 2019; also see; Evans & van de Calseyde, 2018). Hence, people might endorse a cynical view of organic consumers' motives as a way to appear more competent. This hypothesis

could be tested in future studies by comparing perceptions of organic consumers in private versus public settings.

Is the difference in the perception of organic and conventional consumers driven by the perceived presence of impression management motives in organic consumers or the perceived absence thereof in their conventional counterparts? Compared to conventional products, organic consumption is a relatively novel development in the food industry. Therefore, we considered the conventional consumer as the control condition, against which this more novel and innovative consumer type can be compared. However, given the rising popularity of organic products, purchasing organic at least sometimes might represent the new norm (indeed, up to 85% of our participants reported to purchase organic at least sometimes). We speculate that considering organic consumption as a continuum (rather than a dichotomy) and introducing more experimental conditions describing targets who never, sometimes, or always buy organic would increase the study's external validity and answer the question of whether an above-average organic consumption is associated with more impression management or a below-average organic consumption is associated with less impression management, compared to the average.

Another important question for future studies is whether people's cynicism regarding the organic consumers' motives is actually justified. On the one hand, previous research suggested that people are correct in assuming organic consumers to be motivated by selfish reasons, as organic consumers were found to be motivated by image concerns in public settings (Ariely et al., 2009; Griskevicius et al., 2010; Elliott, 2013; Hwang, 2016), suggesting that people's perceptions are accurate. Other streams of literature however suggest that organic consumers are motivated by unselfish reasons (Krystallis et al., 2012; Bartels & Reinders, 2016; Thøgersen, 2011), at least when they start to buy the organic produce (Thøgersen, 2011). In sum, the question of whether organic consumers are actually motivated by signaling morality remains unanswered. We hope that future research will explore the accuracy of the social perception of organic consumers, for example, by directly comparing lay beliefs about with the actual impact of others' presence on their choice of organic items.

10. Conclusion

The findings of the current studies show that the motives of organic consumers are not fully trusted. Organic consumers are perceived as driven by the desire to appear as high status and even as more moral than they actually are. Overall, the current research suggests that besides reputational benefits, organic consumption might also have reputational costs.

Author statement

Laura van de Grint: Conceptualization, Methodology, Data curation, Formal analysis, Writing-Original Draft. **Anthony M. Evans:** Conceptualization, Methodology, Writing - Review & Editing. **Olga Stavrova:** Conceptualization, Methodology, Formal analysis, Writing-Original Draft, Writing - Review & Editing, Supervision.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jenvp.2021.101622>.

Appendix. Shopping receipts used in Study 1 and 2

Experimental condition

Store number: 2046		
Amount	Article	Price
2	Full fat organic milk	2.49
1	Full fat organic yoghurt	1.99
1	Whole grain bread	2.39
1	Box of six organic eggs	1.69
1	Organic broccoli - 487 grams	1.29
1	Peanutbutter	2.19
4	Organic tomatoes	0.99
Customer card 2620991212688		

Control condition

Store number: 2046		
Amount	Article	Price
2	Full fat milk	2.49
1	Full fat yoghurt	1.99
1	Whole grain bread	2.39
1	Box of six eggs	1.69
1	Broccoli - 487 grams	1.29
1	Peanutbutter	2.19
4	Tomatoes	0.99
Customer card 2620991212688		

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