

Plastic Consumption: Immoral or Practical? Implementing Implicit Attitudes into a Moral Decoupling Perspective

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Plastic Consumption: Immoral or Practical? Implementing Implicit Attitudes into a Moral Decoupling Perspective

This paper examines plastic consumption from a moral decoupling perspective. It is hypothesized that moral decoupling mediates the effect of perceived individual relevance of the transgression (plastic consumption) on judgments of performance and morality which in turn have an influence on whether consumers intent to buy packaged products or not. To test the research model, two studies were conducted – one which focused on applying the moral decoupling model to this specific context, analyzing explicit attitudes in an online study and one which implemented the Implicit Association Test (IAT) to further extend research findings and to consider implicit attitudes as well. Results indicate that whether consumers buy plastic packaged products depends on their perception of plastic as practical or morally wrong. Further, implicit attitudes significantly influence whether or not consumers will morally decouple performance from moral aspects.

Keywords: plastic consumption, moral decoupling, IAT

Track: Consumer behavior

1. Introduction

Most human behavior and actions have unprecedented effects on the natural environment (White, Habib, & Hardisty, 2019). Research has widely studied behavior that is environmentally friendly and ecologically conscious, especially due to arising concerns about sustainability and environmental responsibility (Khare, 2014). Reasons for this growing awareness have been increasing concerns about the impact of the consumption culture of society on the environment and society itself, rising prominence of environmental issues within all mainstream media and the increased availability of ethical, environmentally friendly and ecologically conscious products (Carrington, Neville, & Whitwell, 2010).

Even though, data about general consumption behavior indicates that more and more consumers have internalised ethical and sustainable consumerism, their intentions and positive attitudes toward it are not likely to be actually translated into behaviour (30% of consumers stated to purchase ethical products, but only 3% actually purchased those products) (Carrington et al., 2010). However, it is also conceivable that consumers weigh costs and benefits of purchasing non-ecologically packaged products (e.g., plastic packaged fruits or vegetables) in a moral reasoning process called moral decoupling. As a psychological reasoning process moral decoupling might be superior to other reasoning processes, such as moral rationalisation, due to the ease with which it can be applied and justified (Bhattacharjee, Berman, & Reed, 2013; Haberstroh, Orth, Hoffmann, & Brunk, 2017). Nonetheless, moral decoupling is a relatively newly defined concept which has not yet been extensively studied in regard to consumption behavior of environmentally friendly and sustainable product categories. The only consumption context in which moral decoupling has been studied is the purchase of counterfeit products (Chen, Teng, & Liao, 2018; Orth, Hoffmann, & Nickel, 2019).

Thus, the first contribution of this paper is the application of consumption of plastic packaged versus unpackaged products (measured for example via purchase intention) to the context of moral decoupling. Second, we extent our research scope to include consumer implicit responses to plastic packaging which might differ from their explicit ones. Last, we include a possibly crucial construct – moral delegation – which can be described as shifting the blame to others in the context of plastic packaging.

2. Empirical Framework and Hypotheses

Literature proposes that consumers' purchases of sustainable and environmentally friendly products are strongly affected by individual lifestyle, personal knowledge about those products, social influence and pressure as well as environmental concerns (Khare, 2014). Even though, consumers are aware of environmental problems, such as plastic pollution, and they know, in theory, that plastic packaging is not an environmentally friendly packaging material, they do not think about those issues when making a consumption decision. In the supermarket consumers rather focus on their desired brand or price and pay more attention to the practicability and flexibility of plastic packaging (Heidbreder, Bablock, Drews, & Menzel, 2019). Thus, consumers weigh the performance aspects of plastic packaging – practicability – against moral aspects – environmentally unfriendly – and possibly disconnect those two judgments from each other. This phenomenon is mirrored in the moral decoupling model, which posits that consumers might, on the one hand, condone an immoral action, while, on the other hand, still appreciate the action as a good performance (Bhattacharjee et al., 2013). Hereby the relevance of the transgressive behavior (e.g., how likely is it that the action is harmful for the environment), which can be described as the perceived severity of the immoral act, plays a crucial role in whether consumers engage in moral decoupling and to what degree (Böhm & Orth, 2022). This psychological process might be applicable in the context of plastic consumption; therefore, we hypothesize:

H1: Transgression relevance has a positive effect on moral decoupling, which in turn has (a) a positive effect on judgment of performance and (b) a negative effect on judgment of morality.

Further, consumer judgments on morality and performance aspects have a significant influence on behavioral intention, such as purchase intention (Böhm & Orth, 2022; Haberstroh et al., 2017). Research has proposed, that the higher an individual's level of moral judgment, the less likely are they to engage in the immoral action (Chen et al., 2018). We propose, that consumers rating plastic consumption as a good performance, for example due to its practicability, are more likely to purchase plastic packaged products and that consumers rating plastic consumption as morally wrong, are less likely to purchase. Formally, we propose:

H2: Judgment of performance has a positive effect on purchase intention (a), while judgment of morality influences purchase intention negatively (b).

3. Study 1: Testing the Moral Decoupling Model in the Context of Plastic Consumption

Study 1 employed a two-factorial (transgression relevance high vs. low) between-subjects experimental design. Data were collected via an online-survey between March and April 2020.

3.1 Methods

The total sample consisted of 217 ($M_{\text{age}} = 27.22$ years, $SD = 8.79$; 69.1% females) German consumers, who were screened to shop for groceries at least occasionally. Participants were instructed to read one of two randomly assigned short vignettes (transgression relevance_{high} = 102; transgression relevance_{low} = 115) and to answer the subsequent questions regarding their purchase intention (Putrevu & Lord, 1994; $\alpha = .94$, $M = 4.74$, $SD = 1.75$), transgression relevance ($\alpha = .82$, $M = 3.56$, $SD = 1.71$), judgment of performance¹ ($M = 4.67$, $SD = 1.53$), judgment of morality¹ ($M = 5.01$, $SD = 1.51$), and moral decoupling (Bhattacharjee et al., 2013; $\alpha = .86$, $M = 2.99$, $SD = 1.47$). Further information was collected regarding environmentally friendly consumer behavior (ECCB; Roberts & Bacon, 1997; $\alpha = .90$, $M = 5.22$, $SD = 1.04$), age, and gender.

3.2 Analyses and results

To test the mediating effect of moral decoupling, judgment of performance and judgment of morality we employed serial-parallel mediation analyses (Hayes, 2018; CUSTOM model, number of bootstrap samples 5000). Transgression relevance was the independent variable, moral decoupling, judgment of performance and judgment of morality were serial mediators, with the two judgment variables serving as parallel mediators, and purchase intention was the dependent variable. ECCB scores were included as a control variable. All variables were mean centered.

Results indicated that transgression relevance significantly influenced moral decoupling ($B = .19$, $SE = .05$, $p = .001$), which in turn had a significant effect on judgment of performance ($B = .22$, $SE = .08$, $p = .006$), supporting H1a. Judgment on performance further had a significant effect on purchase intention ($B = .63$, $SE = .07$, $p = .001$), thus confirming H2a. There was no significant effect of moral decoupling on judgment of morality, which also did not have a significant influence on purchase intention, therefore, H1b and H2b could not

¹ For single-item measures only mean and standard deviation are reported.

be confirmed. ECCB showed significant effects on moral decoupling ($B = -.66$, $SE = .08$, $p = .001$) and judgment of morality ($B = .72$, $SE = .10$, $p = .001$). Indirect effects of transgression relevance on purchase intention through moral decoupling and judgment of performance were significant ($B = .03$, $SE = .01$, 95% CI [.01; .06]), supporting the hypothesized mediation effects. Indirect effects through moral decoupling and judgment of morality were non-significant.

3.3 Discussion

Study 1 gives a first insight into the dilemma of morality versus performance in the context of plastic consumption. Results imply that consumers' judgment of performance (e.g., plastic is a convenient method of packaging) plays an important role in their decision to purchase packaged products, while simultaneously condoning plastic as an environmental threat. However, in this study additional constructs are missing, which might be crucial in getting a deeper understanding of the underlying mechanisms of moral decoupling in this context, such as consumers' implicit attitudes, diffusion of responsibility (i.e., it is the seller that already packaged the products in plastic) or the inclusion of the stimulus (transgression relevance high vs. low) in the analyses.

4. Study 2: Replicating Study 1 Results by using Implicit Association Testing

In order to replicate and extend findings of Study 1, we set up a two-factorial (transgression relevance low vs. high) between-subjects experimental design. Data were collected between August and September 2021. This study made use of the Implicit Association Test (IAT). Research shows that consumers tend to present a positive image of themselves by giving answers that conform with socially accepted values and to avoid criticism. This is called social desirability bias and can be observed most frequently in contexts that are socially sensitive or controversial (Van de Mortel, 2008). When it comes to plastic consumption consumers might automatically evaluate plastic packaging as negative and risky, however, they often fail to connect their own consumption behavior with problems associated with plastic consumption (Menzel, Brom, & Heidbreder, 2021). Further, it has not yet been investigated what the specific effect of implicit attitudes is in moral reasoning and, more specifically, in moral decoupling in the context of plastic consumption. Therefore, we

include participants' IAT *d* scores (representing consumers' implicit preference for or against plastic) in our analyses and propose:

H3: IAT *d* scores moderate the effect of transgression relevance on moral decoupling, such that the effects will be stronger (weaker) at increasing (decreasing) *d* score values.

Research has emphasised that even though people's concerns towards environmental issues have substantially increased over the past decade, they believe most responsibility lies with the government, not themselves. Studies have shown that a person might delegate his or her decisions to another one in order for them to take self-interested or immoral actions, which one might be hesitant to take directly. Due to the delegation – which is based on the phenomenon of “diffusion of responsibility” (Hamman, Loewenstein, & Weber, 2010) – it is possible to feel detached from the consequences of the action and feel less responsible and avoid possible punishment (Bartling & Fischbacher, 2012). Thus, we hypothesize:

H4: Moral delegation moderates the moral decoupling x (a) judgment of performance and (b) judgment of morality relationships, such that effects will be (a) stronger / (b) weaker at increasing levels of moral delegation.

4.1 Methods and procedure

Participants ($n = 103$, $M_{\text{age}} = 33.04$, $SD = 11.20$; 78.6% females) completed the IAT online and subsequently filled in psychometric scales. INQUISIT Web by millisecond was used to present the IAT stimuli and collect data. To assess the implicit association strength between plastic consumption and attitude (positive vs. negative) the IAT examined six plastic context (e.g., packaged fruit) and six non-plastic context (e.g., loose fruit) images as target categories and employed eight words representing positive (e.g., healthy, sustainable) versus eight negative (e.g., unhealthy, unecological) words representing the attribute categories. IAT effects (the *d* score) indicate participants' implicit preference for either the predicted direction (e.g., plastic packaging is considered to be harmful and unecological) or not the predicted direction (e.g., plastic packaging is considered healthy and sustainable). For the former the *d* score would be positive, while for the latter it would be negative.

First, participants were asked to complete the IAT online, to examine their implicit attitudes. Subsequently, we assessed their explicit attitudes regarding environmental behavior (Haan et al., 2018; $\alpha = .79$, $M = 5.69$, $SD = 1.02$) and participants were randomly assigned to read a short text describing plastic consumption either in a positive way ($N = 53$) or in a

negative way ($N = 50$). Then participants had to fill in questions regarding their behavioral intention (Putrevu & Lord, 1994; $\alpha = .91$, $M = 3.96$, $SD = 1.90$), transgression relevance ($\alpha = .66$, $M = 2.45$, $SD = .1.33$), judgment of performance² ($M = 3.94$, $SD = 1.33$), judgment of morality² ($M = 3.58$, $SD = 1.61$), and moral decoupling (Bhattacharjee et al., 2013; $\alpha = .62$, $M = 3.79$, $SD = 1.10$). Further information was collected regarding participants' tendency to delegate morality² (moral delegation; $M = 3.23$, $SD = 1.85$), age and gender.

4.2 Analyses and results

We employed moderated serial-parallel mediation analyses (Hayes, 2018; CUSTOM model, number of bootstrap samples 5000) to investigate the mediating effect of moral decoupling, judgment of performance and judgment of morality. Transgression relevance served as the independent variable, moral decoupling and the two judgments (functioning as parallel mediators) were serial moderators, and behavioral intention served as the dependent variable. Moral delegation and participants' IAT d scores were included as moderators. Explicit environmental attitudes and the condition (transgression relevance high vs. low) were included as control variables.

Results showed that transgression relevance had a significant effect on moral decoupling ($B = .39$, $SE = .07$, $p = .001$), which in turn had no significant effect on judgment of performance. However, Johnson-Neyman regions of significance revealed that the effect of moral decoupling on judgment of performance turned significant at intermediate levels of the moderator moral delegation ($MDel > .78$), thus H1a and H4a could be partially confirmed. Further, moral decoupling had a significant influence on judgment of morality ($B = -.42$, $SE = .17$, $p = .014$), supporting H1b. Moral delegation showed a marginally significant moderating effect on the moral decoupling – judgment of morality relationship ($B = .13$, $SE = .07$, $p = .067$). Johnson-Neyman analysis revealed that a significant effect was only present at low to intermediate ($MDel < .47$) level of moral delegation, partially supporting H4b. Participants' IAT d scores showed a significant moderating effect on the transgression – moral decoupling relationship ($B = .21$, $SE = .11$, $p = .048$), with Johnson-Neyman regions of significance indicating that this effect could be seen at intermediate and high IAT d scores, but not at low levels (d score $< -.83$), in support of H3. Behavioral intention was influenced significantly by judgment of performance ($B = .29$, $SE = .10$, $p = .005$), but not by judgment of morality. Participants' explicit environmental attitudes had a marginally significant effect

² For single-item measures only mean and standard deviation are reported.

on moral decoupling ($B = -.18$, $SE = .10$, $p = .062$). The condition had a marginally significant effect on moral decoupling ($B = -.33$, $SE = .18$, $p = .077$) and a significant effect on behavioral intention ($B = -2.65$, $SE = .26$, $p = .001$). No indirect effects were found.

5. General Discussion

Results indicate that the more convinced consumers are that plastic consumption does not harm the environment, the more likely they are to engage in moral decoupling. Further, as moral decoupling tendencies increase the more consumers judge plastic packaging as a good performance (e.g., due to its' practicability and flexibility) and the less morally wrong they consider plastic consumption to be. Behavioral intention, such as purchase intention, increases when plastic consumption is considered a good performance, but decreases the more morally transgressive consumers perceive it to be. Finally, we showed two important moderators to the model, implicit attitudes which influence the effect of perceived severity and consumers' tendency to morally decouple, and moral delegation which plays a crucial role in the influence of moral decoupling and judging plastic consumption as morally wrong or a good performance. Those findings are in line with previous research on moral decoupling (i.e., Böhm & Orth, 2022; Chen et al., 2018; Haberstroh et al., 2017) and further in line with general research on plastic consumption and consumer (implicit) attitudes towards it (i.e., Heidbreder et al., 2019; Menzel et al., 2021). This study extends previous research by implementing the moral decoupling perspective in the context of plastic consumption and showing the importance of considering not only explicit attitudes, but also implicit attitudes when aiming to reduce plastic consumption.

5.1 Implications

The findings can help marketers to further reduce plastic consumption and fight plastic pollution. Hereby, they should focus on making it clear for consumers that their personal plastic consumption is directly related to general plastic waste and pollution (in line with findings of Menzel et al., 2021). Many consumers might feel like it is not their responsibility since the supermarkets provide fruits and vegetables in plastic containers, so providing more unpackaged options should be a priority. Further, consumers should be aided in acting according to their attitudes, even when they are confronted with the advantages of plastic packaging (e.g., practicability, flexibility) in stores. This could be achieved by making

alternative packaging solutions more available and communicating their environmental advantages, for example by giving short, comprehensive information on advantages of bio-degradable packaging at the point-of-sale.

5.2 Limitations and future research

The moderating effects of consumers' IAT *d* scores seems to be promising, however, since plastic consumption and especially the negative consequences of plastic waste has been a widely discussed topic using the conventional IAT might not produce novel insights. A solution to that could be to follow the study conducted by Menzel et al. (2021) and apply the single-category IAT in order to investigate implicit attitudes on different kinds of plastic packaging and, since consumers might differentiate the harm of different packaging, to emphasize the connection between consumption and plastic waste. Further, Study 2 sample size (N = 103) might be too small to detect generalizable differences in perception.

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