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11 Studying Ambivalence in Environmental Psychology: Unsustainable Dietary Practices Are Maintained by Moral Disengagement

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Abstract

Many attitudes towards pro-environmental behaviors are ambivalent, that is, they simultaneously consist of positive and negative evaluations towards the same object. According to psychological consistency theories, the experience of such ambivalence is aversive—being the basis for behavioral change if the ambivalence is reconciled. In the present chapter, we will examine how ambivalence may influence pro-environmental behaviors in general, and we will try to validate these claims by reviewing an article about meat-related ambivalence in specific. That is, ambivalence is particularly present in attitudes towards meat: On the one hand, meat is perceived as something positive as it provides traditions and enjoyment to many people; on the other hand, meat is perceived as negative as its production is detrimental for the environment, for health, and causes the death of millions of animals. By studying meat-related ambivalence, it is therefore possible to examine how omnivores (i.e., meat-eaters) and non-omnivores deal with the so-called meat paradox — a prime example of the state of ambivalence. In fact, the reviewed article demonstrates that omnivores generally experience more meat-related ambivalence than non-omnivores, indicating that most non-omnivores reconciled their ambivalence while refraining from meat. More importantly, omnivores who experience high levels of ambivalence towards meat seem to cope with their conflict via moral disengagement, allowing them to maintain their dietary practices. This bears strong implications for attitudinal and behavioral change regarding pro-environmental and consumer behavior.

11.1 Ambivalence in Environmental Psychology: An Often Overlooked Phenomenon

Overlooked by many attitude-behavior models (e.g., the theory of planned behavior; Ajzen, 1991) environmental attitudes are often inherently ambivalent involving positive and negative evaluations at the same time. A prominent example for ambivalence in environmental psychology is recycling behavior: On the one hand, most people believe that recycling is positive because it is good for our environment; on the other hand, the same people evaluate recycling negatively because the behavior involves effort and does not provide a direct personal benefit. Thus, especially young adults do not belief that recycling fits to their lifestyle, although they belief that it is important for the society and the environment (Ojala, 2008).

In many cases, ambivalence towards pro-environmental behaviors can be traced back to a goal conflict between hedonic and gain goals versus normative goals. Whereas hedonic and gain goals describe motives to “improve your mood” or to “protect and accumulate your resources” respectively, normative goals refer to motives about what is “right to do” (Steg, Bolderdijk, Keizer, & Perlaviciute, 2014). As these goals can be active simultaneously, goal conflicts may emerge, and ambivalence towards behaviors may arise. Conflicting goals, thereby, constitute the basis for ambivalent attitudes towards pro-environmental behaviors.

Problematically, ambivalence weakens the attitude-intention and attitude-behavior link: If people are ambivalent towards a behavior, they are less likely to act in accordance with a normative goal (Van Harreveld, Nohlen, & Schneider, 2015). This is because ambivalence elicits discomfort, and people are able to cope with this discomfort in a variety of ways that does not include the normative behavior. For example, they may delay their decisions, rationalize their behavior or avoid the behavior all together (Van Harreveld et al., 2015). It may be argued, however, that ambivalence may also be a starting point for behavioral change if it is resolved in a normative way (i.e., refraining from an unsustainable behavior). Thus, studying ambivalence and investigating how people cope with ambivalence is important to understand why people do or do not engage in pro-environmental behaviors.

11.2 Ambivalence and Sustainable Dietary Practices

A specific pro-environmental behavior that has often been discussed as being highly conflicted is meat consumption. In fact, researchers already created a term for the conflict that arises from meat consumption: the *meat paradox* (Loughan, Haslam, & Bastian, 2010). The meat paradox describes that people like to eat meat due to sensory pleasure, but they also do not want to be associated with the negative consequences of it (e.g., the suffering of animals, the detrimental consequences of the environment, or associated health issues). Interestingly, many people continue to eat meat despite the negative consequences of meat consumption and the resulting ambivalence towards meat. Thus, in recent decades a lot of researchers investigated how people cope with the meat paradox, helping them to maintain their dietary practices (for a review see Bastian & Loughnan, 2017).

Their research shows that people developed a variety of coping strategies to maintain their meat-eating practices (Bastian & Loughnan, 2017). These strategies may be considered as moral disengagement, and include, among other strategies, the denial of harm, and the diffusion of responsibility. To deny the harm of their dietary practices, people may attribute less emotion and mind to animals (e.g., Bilewicz, Imhoff, & Drogosz, 2011), and to diffuse their responsibility they may use rationalizations and render meat consumption, for example, as necessary, natural, normal, and nice (e.g., Piazza et al., 2015).

Although there is plenty of evidence that triggering the meat paradox results in a variety of moral disengagement strategies (e.g., Loughnan et al., 2010; Rothgerber, 2014), ambivalence, as a crucial process variable underlying the meat paradox, has rarely been measured. In the rare occasions that meat-related ambivalence has been subject to research, these studies have been inconclusive, however, because they did not include measures of moral disengagement (e.g., Berndsen & van der Pligt, 2004).

11.3 Measuring the Meat Paradox: An Empirical Investigation

To close this research gap, a study was conducted in our research group, aiming to validate the assumptions regarding the meat paradox and its coping strategies while providing an unobtrusive measure of meat-related ambivalence (Buttlar & Walther, 2018). Thus, based on the work of Schneider and colleagues (2015), a behavioral measure of ambivalence was adopted. To be more precise, this measure may help to examine meat-related ambivalence by measuring the response conflict elicited by meat and plant-based dishes in an evaluation task called the Mouse-Tracker paradigm (Freeman & Ambady, 2010).

During the Mouse-Tracker paradigm, omnivorous and non-omnivorous participants were, thus, asked to indicate if different objects are either negative or positive for them by clicking with a computer mouse on one of two response buttons. These response buttons were located in the upper right and upper left corner of the computer screen. As the computer mouse started at a fixed position in every trial (i.e., the lower middle of the screen), ambivalence could be quantified by measuring the geometrical pull of the mouse trajectory towards the non-chosen option. That is, during the evaluation of ambivalent objects the path of the mouse takes a bigger curve—being drawn stronger towards the non-chosen option—compared to non-ambivalent objects (Schneider et al., 2015). It was hypothesized that omnivores experience more ambivalence (i.e., greater curve towards the non-chosen option) in trials depicting meat dishes than non-omnivores. In trials with plant-based dishes no differences were expected between groups. Figure 18 depicts two exemplary trials for plant-based and meat dishes in the Mouse-Tracker paradigm.

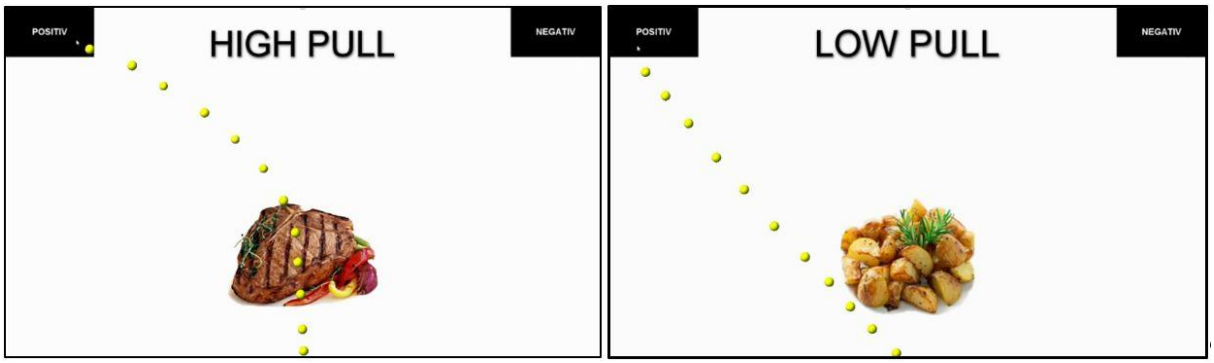

Figure 18: Depiction of two trials in the Mouse-Tracker paradigm depicting meat and plant-based food pictures taken from the food pics data base (Blechert, Meule, Busch, & Ohla, 2015). The yellow dots were not visible for the participants; they were inserted to illustrate the expected mouse trajectories for omnivores.

After participants completed the mouse-tracker paradigm, they were asked to estimate the emotions and mental capacities that they would attribute to animals (Rothgerber, 2014), and they were asked to indicate their agreement with statements regarding rationalizations that render meat consumption as necessary, natural, normal, and nice (Piazza et al., 2015). It was hypothesized that only people who feel ambivalence about meat, would need to cope with this conflict and endorse these moral disengagement strategies.

Regarding the first hypothesis, the results showed that omnivores, indeed, feel more ambivalence towards meat dishes than non-omnivores; for plant-based dishes there were no differences between the groups (for a depiction of the averaged mouse trajectories see Figure 19). Regarding the second hypothesis, the results indicated that omnivores attributed less emotions and mental capacities to animals if they experienced greater ambivalence; for rationalizations of meat consumption, no moderation was found (for detailed statistics see Buttlar & Walther, 2018).

The reviewed article (Buttlar & Walther, 2018), thus, supports crucial assumptions about the meat paradox. That is, omnivores are more strongly conflicted about meat-products than non-omnivores, and they morally disengage from their harmful practices if they experience ambivalence. It has to be noted, however, that there were differences regarding the use of

coping strategies: while omnivores seemed to disengage morally by denying the harm of their practices by attributing less mind and emotions to animals if they were conflicted, the results indicated that they did not use more explicit strategies like rationalizations of meat consumption to resolve their conflict.

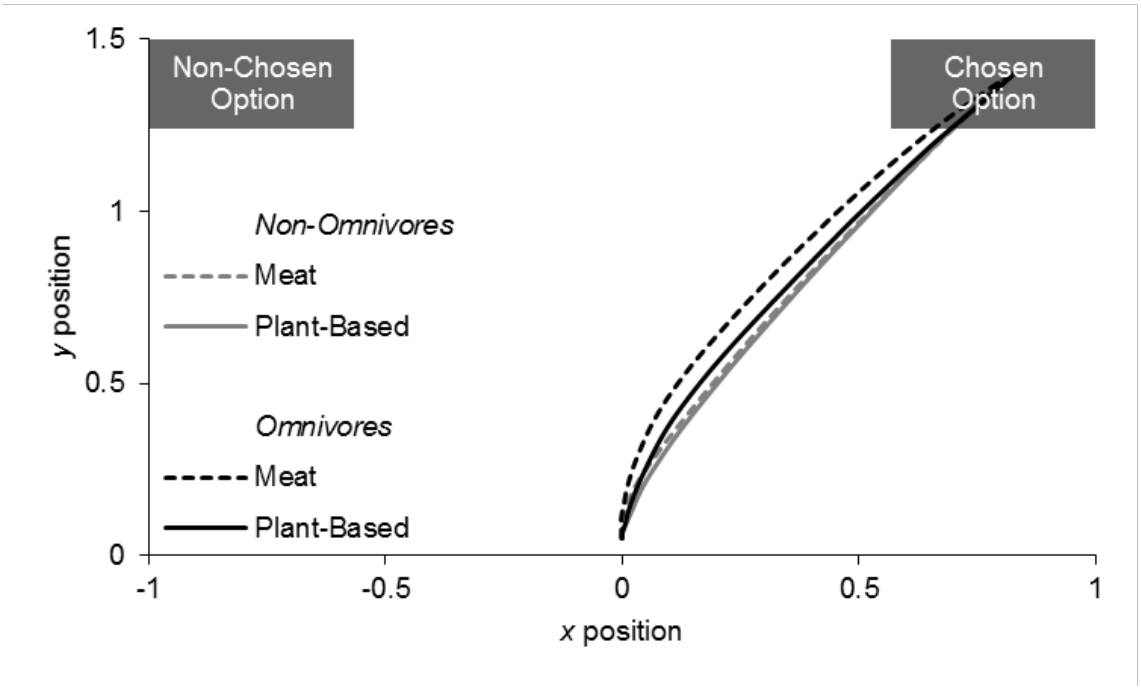

Figure 19: Visualization of averaged mouse trajectories depicted separately for plant-based vs. meat dishes and for omnivores vs. non-omnivores. To allow comparisons, responses to the left were flipped horizontally.

11.4 Practical Implications for Environment Protection Interventions and Policies

Of course, these findings first and foremost have strong implications for environment protection interventions and policies regarding meat consumption due to the big environmental impact of meat (Tilman & Clark, 2014). In fact, it has to be noted that one main cause for anthropogenic climate change stems from the food choices that individuals make every day, resulting in an enormous demand for meat (Smil, 2013). Problematically, meat production is very resource-intensive. Livestock and the crops for their feed take up one third of the earth's ice-free land which accounts for 70 per cent of all land used for agriculture. However, animal agriculture accounts only for 17 per cent of humanities calorie intake worldwide (Steinfeld et al., 2006). Unnoticed by many, animal agriculture thus contributes more to climate change than every other factor—including the global transportation system (Steinfeld et al., 2006). Downsizing animal agriculture, thus, might be one of the most effective ways to reduce climate change.

Based on the reviewed findings (Buttlar & Walther, 2018), it can be argued that some strategies seem to be more important regarding people's ability to cope with the meat paradox than others. Policies and interventions regarding meat consumption could, therefore, focus more closely on implicit moral disengagement strategies, like the denial of harm. In fact, it seems like conflicted omnivores cope with their ambivalence especially by denying animals mind and emotions, but not by rationalizing meat consumption. Thus,

focusing on this rather implicit strategy—compared to rationalizing meat consumption rather explicitly—may proof to be effective in interventions and help to reduce meat consumption. That is, information may be spread in intervention campaigns about animals' mental and emotional capacities, which make them highly sensible beings (Joy, 2010). This way, it may become more difficult for people to accept the harm on animals being inflicted by animal agriculture (Joy, 2010), making it more difficult for them to resolve the meat paradox.

Going beyond meat consumption, measuring behavioral ambivalence may also stimulate research in other areas of environmental psychology by systematically investigating (goal) conflicts in pro-environmental behavior. In fact, pro-environmental behaviors are not only inherently ambivalent as outlined in the introduction, but people frequently use moral disengagement strategies to maintain unsustainable behaviors (Bandura, 2007). Parallel to the moral disengagement strategies that are known in research on the meat paradox (Bastian & Loughnan, 2017), the typical strategies to resolve inconsistency in unsustainable behavior involve minimizing or misconstruing the impact of the detrimental practices, and the displacement or diffusion of responsibility (Atkinson & Kim, 2015). Thus, future research should consider investigating ambivalence and goal conflicts more systematically in pro-environmental behavior by using considerate ambivalence measures and by studying moral disengagement. Insights from these studies may be put into practice in interventions and policies to avoid that people uphold their unsustainable practices although they know about their actions detrimental consequences.

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