



Morally admirable or moralistically deplorable? A theoretical framework for understanding character judgments of vegan advocates

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ABSTRACT

Over the last decade, vegan advocates have become a growing minority. By arguing against animal-product consumption and imposing the virtue-loaded call to “go vegan,” advocates have posed a direct challenge to the mainstream dietary ideology (termed “carnism”) in hopes of positive social change. As a consequence, while vegan advocates may be admired for their morality and commitment, they may also be derogated with moralistic traits such as arrogance and overcommitment. We call this mixed-valence perception the “vegan paradox” and propose a theoretical framework for understanding it. Next, we develop a future research agenda to test and apply our framework, and inquire vegan advocacy for ethical, health, and environmental aims. Using the perspective of the idealistic vegan advocate as a reference point, we discuss the roles of the advocate’s motives for change (i.e., the effectiveness of moral persuasion), the advocate’s call for change (i.e., radical versus incremental change), the target’s moral and carnist identification, and source attributes of the advocate. Lastly, we qualify our framework by highlighting further conceptual and methodological considerations.

1. Introduction

In today’s Western food culture, most consumers eat meat and other animal-derived products (e.g., dairy, eggs) regularly at a level that threatens human health and environmental sustainability (Willett et al., 2019). These dietary behaviors are supported by *carnism*, the prevailing belief system that legitimizes the consumption of non-human animals and their byproducts as food (Joy, 2009; Monteiro, Pfeiler, Patterson, & Milburn, 2017). A small minority of people (i.e., vegans), meanwhile, abstain from consuming animal-derived products, often because of health and environmental reasons but typically for moral reasons related to the rights and welfare of animals (Rosenfeld, 2019; Rothgerber, 2017; Trethewey & Jackson, 2019). Moral motivations may inspire some individuals to advocate actively for veganism, thereby opposing carnist culture (Chuck, Fernandes, & Hyers, 2016; Joy, 2009; Leenaert, 2017; Wrenn, 2017). Yet just as moral beliefs promote vegan advocacy, so too might moral beliefs undermine these advocacy efforts via threat-based processes that promote derogation of vegans (MacInnis & Hodson, 2017).

People who adhere to animal-based consumption (namely, meat-eaters) may hold ambiguous attitudes toward vegans. On the one

hand, they may view vegans positively for their morality, their commitment, and their reputation as health-conscious, eco-friendly animal lovers (De Groot, Hudders, & Bleys, 2021; Judge & Wilson, 2019; Markowski & Roxburgh, 2019; Ruby & Heine, 2011). On the other hand, research suggests that vegans’ often morally motivated dietary commitments might also evoke feelings of threat among meat-eaters, causing them to defensively stereotype vegans with moralistic traits indicating arrogance and overcommitment (De Groot et al., 2021; Markowski & Roxburgh, 2019; Minson & Monin, 2012). This “vegan paradox” is reminiscent of the “meat paradox” signifying that people both care about animals but also love to eat animals as meat (Loughnan, Bastian, & Haslam, 2014). People can resolve the meat paradox through moral disengagement, dissociating animal products (in particular meat) from their animal origin and legitimizing their consumption as socially normal and nutritionally necessary (Loughnan et al., 2014; Piazza et al., 2015). Although previous research suggests that vegans may serve as symbolic reminders of the meat paradox (Rothgerber, 2014a, 2020), how meat-eaters form impressions of vegans as arrogantly over-committed do-gooders remains to be explored. In addition, within the vegan movement, strategies for effective vegan advocacy are fiercely debated (Greenebaum, 2015; Leenaert, 2017), yet until now the topic of

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vegan advocacy received scant attention in empirical literature (Nezlek & Forestell, 2020; Phua, Jin, & Kim, 2019, 2020).

In this article, we present a theoretical framework for better understanding vegan advocacy by connecting the vegan paradox (i.e., supporting vegans as morally committed, but derogating them as arrogantly overcommitted) with the meat paradox; then, we develop a future research agenda to inquire vegan advocacy applying our framework, which would simultaneously permit validation and further development of the framework. Responding to a recent call to bridge gaps between academics and advocates to inform research (Dhont & Hodson, 2020), we address debates within the vegan movement on how to promote veganism most effectively by examining whether and how vegan advocates can counter moralistic stereotyping to increase meat-eaters' willingness to affiliate with them and adopt a more plant-based diet. In the following section, we outline our theoretical framework (see Fig. 1 for a graphical summary), which integrates recent findings on vegan stereotyping (e.g., De Groeve et al., 2021) with theoretical work on the meat paradox (e.g., Rothgerber, 2020), research on universal dimensions of stereotype content (Abele et al., 2016; Landy, Piazza, & Goodwin, 2016), and moral psychology. Moral psychology refers to the study of morality in its (social) psychological dimensions and its intersections with philosophy (Ellemers, van der Toorn, Paunov, & van Leeuwen, 2019), here featuring prominent topics including moral judgment (Schein & Gray, 2018), moral reasoning and moral disengagement (e.g., Graça, Manuela, & Oliveira, 2016), moral identity (Aquino & Reed, 2002), perceptions of moral character (e.g., Piazza, Goodwin, Rozin, & Royzman, 2014), and animal ethics (e.g., Francione, 2012).

2. Theoretical framework

2.1. Vegan advocates challenge carnist culture by signaling animal-based consumption as harmful and avoidable

Over the last decade, a vocal minority advocating for veganism has drastically grown, posing a direct challenge to the mainstream culture's carnist ideology (The Vegan Society, 2014). *Veganism* can be described as a carnist counter-ideology (Joy, 2009) and a social identity shared by members of a social movement opposing animal-based consumption

often for its effects on animal suffering and the perpetuation of speciesism (i.e., discrimination of animals based on species membership; Caviola, Everett, & Faber, 2019). Vegan ideology is closely linked with animal rights advocacy and philosophy (Francione, 2012; Pendergrast, 2014; Wrenn, 2012; The Vegan Society, 2014) pleading for the abolishment of using animals for human consumption. The primacy of the animal protection motive is further demonstrated by (a) studies showing that vegans (vs. vegetarians) have more favorable animal-related and anti-speciesist attitudes (Rosenfeld, 2018, 2019; Rothgerber, 2017), and by (b) the Vegan Society's (2014, p. 4) animal-focused definition of veganism as "a lifestyle and way of living which seeks to exclude—as far as is possible and practicable—all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose; and by extension, promotes the development and use of animal-free alternatives for the benefit of humans, animals and the environment."

By raising awareness about harms related to animal-based consumption, vegans may be viewed as innovators (Leenaert, 2020) or positive deviants (Judge and Wilson, 2019) evoking admiration and inspiration (Bolderdijk, Brouwer, & Cornelissen, 2018; Cramwinckel, Van den Bos, & Van Dijk, 2015; Judge & Wilson, 2019) for their often morally motivated dietary commitment (see De Groeve et al., 2021). However, because animal-based consumption is a cherished social habit legitimized by carnist ideology (Graça, 2016; Joy, 2009), meat-eaters are also motivated to maintain and defend it against loss aversion (Graça, 2016) and the threat posed by vegan advocacy (e.g., Bastian, 2019; Joy, 2009; Minson & Monin, 2012; Rothgerber, 2014a) as they are reminded of the meat paradox (Rothgerber, 2014a, 2020).

2.2. Vegan advocates as reminders of the meat paradox: construing animal-based consumption as harmless or unavoidable

By communicating about harms associated with animal-based consumption, vegan advocates may increase the salience of the meat paradox in meat-eaters' minds (Loughnan, Haslam, & Bastian, 2010). The term "meat paradox" typically refers to the apparent conflict between caring about animals but engaging in an omnivorous diet that requires animals to be harmed (Bastian & Loughnan, 2017; Loughnan, Bratanova, & Puvia, 2012; Loughnan et al., 2010, 2014), though it can also be described more generally to include other harms related to

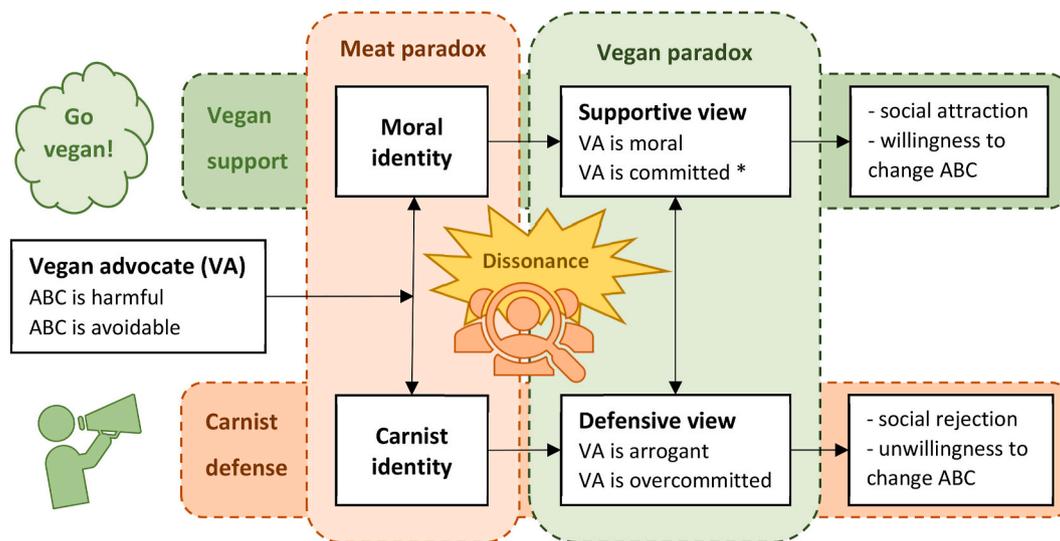


Fig. 1. Theoretical framework explaining the vegan paradox. Vegan advocate (VA) signals that animal-based consumption (ABC) is harmful and avoidable, making the meat paradox salient to non-vegan targets. This meat paradox primes psychological conflict between targets' moral identity (e.g., "I want to avoid ABC-related harm.") and targets' carnist identity (e.g., "I want to maintain ABC."). To resolve dissonance, targets may either (a) support the vegan advocate by viewing them as moral and committed, increasing the targets' willingness to affiliate with them and adopt a diet (more) congruent with vegan ideals, or (b) defensively stereotype them as arrogant and overcommitted, reducing the advocate's social attractiveness and reinforcing ABC and carnist defense beliefs. These diverging vegan stereotypes constitute the vegan paradox. *Commitment may function as a catalyst of both positive and negative impressions (Piazza et al., 2014).

animal-based consumption that vegan advocates may raise awareness about (Greenebaum, 2015) and that people may consider morally or cognitively troublesome – such as environmental and (public) health aspects – while also maintaining animal-based consumption (Buttler & Walther, 2018; Rothgerber, 2020). Nevertheless, in our article we mainly rely on the abundant evidence based on the meat paradox as originally formulated (Bastian & Loughnan, 2017; Rothgerber, 2020). Considering a self-based revision of cognitive dissonance theory (Aronson, 1968; Cooper, 2007; Steele, 1988), vegan advocates may cause two conflicting identities to become salient simultaneously in omnivore targets: their *moral identity* (e.g., “I want to be a good person and thus avoid causing harm.”) and their *carnist identity* (e.g., “I am not a vegan and thus want to maintain animal-based consumption.”).

We construe the term “carnist identity” as an aspect of one’s dietician identity (Rosenfeld & Burrow, 2018), referring more specifically to one’s self-relevant thoughts, feelings, and behaviors with regard to animal-based consumption. Rothgerber’s (2020) review suggests that a salient carnist identity would be a rare occurrence for omnivores, as they comprise the large majority and are socialized to include animal-based consumption as a part of their identity that is by default deemed legitimate (Bastian & Loughnan, 2017; Graça, 2016; Joy, 2009). As a consequence, meat-eaters rarely consider animal-based consumption as an important part of their identity (Rosenfeld & Burrow, 2018), or construe it as a choice stemming from widely held beliefs (Bastian & Loughnan, 2017; Joy, 2009), but rather as a matter of habit or taste (Mullee et al., 2017; Ruby, 2012). Vegan advocates confront omnivores with their identity as consumer of animals, highlighting that such consumption is a choice with harmful consequences, and with relevant implications for their moral identity (Bastian & Loughnan, 2017; Feinberg, Kovacheff, Teper, & Inbar, 2019; Graça et al., 2016). Integrating different conceptualizations of the term “moral identity” (Aquino, 2002), we construe moral identity as one’s self-construal as a morally committed person, capturing one’s self-relevant thoughts, feelings, and behaviors with regard to promoting or protecting the welfare of others. Given that most people care deeply about their moral identity (Aquino, 2002), the “vegan” message that animal-product avoidance is a way to avoid harm conflicts with the consumption of animals, arousing in omnivores a sense of dissonance when their moral and carnist identities are salient simultaneously (Rothgerber, 2020).

Cognitive dissonance theory (Festinger, 1957), suggests that to resolve dissonance resulting from the meat paradox, meat-eaters may adopt one of two strategies: either (1) bringing one’s dietary behavior more into alignment with one’s moral identity and ideals (i.e., moral piggybacking; Feinberg, Kovacheff, Teper, Inbar, & Publication, 2019), and rejecting animal-based consumption at least partially (i.e., reduce animal-based consumption, become vegetarian or vegan), or (2) maintaining animal-based consumption by relying on psychological strategies that foster moral disengagement from harms related to it and buffer against threats to moral and carnist identity (Camilleri, Gill, & Jago, 2020; Graça et al., 2016; Loughnan et al., 2010; Piazza et al., 2015; Rothgerber, 2020). In the latter strategy, individuals may (a) minimize perceived harm related to animal-based consumption (e.g., denial, avoidance, dissociation of harm, neutralize harm through moral licensing; Bastian & Loughnan, 2017; Dowsett, Semmler, Bray, Ankeny, & Chur-Hansen, 2018; Rothgerber, 2020) and view food animals as unworthy of moral consideration (i.e., denigrating animals, speciesism; Caviola et al., 2019; Monteiro et al., 2017), and/or (b) justify animal-based consumption as a requirement that is practically unavoidable by endorsing the “4Ns”: the belief that eating animals is *Necessary* for one’s health (a nutritional requirement), too *Nice* or delicious to give up (a hedonic requirement), a *Natural* thing to do (a biological requirement), and a *Normal* practice that is socially endorsed (a social requirement) (Piazza et al., 2015). The 4Ns capture the vast majority of justifications for eating meat (Piazza et al., 2015) and other animal uses (e.g., clothing, medical testing, zoos; Piazza, Cooper, & Slater-Johnson, 2020), though avoidable harms may also be rationalized

by appealing to religion and faith (i.e., animals are divinely created or “meant” to be eaten), human supremacy over animals and the environment, traditional masculinity and freedom of choice (Piazza et al., 2015; Rothgerber, 2013) and reinforced by system-justifying sociopolitical dispositions valuing traditions (i.e., right-wing authoritarianism), dominance hierarchies (i.e., social dominance orientation), and current economic systems (i.e., economic system justification) (Dhont & Hodson, 2014; Judge & Wilson, 2019; Monteiro et al., 2017).

In line with Rothgerber (2014a, 2020), we argue that vegan advocates may be particularly threatening to omnivores because their moral commitment directly challenges the notion that animal-based consumption is harmless and unavoidable, making it more difficult to alleviate dissonance because familiar dissonance-reducing strategies are undermined. Because vegan advocates’ moral commitment is difficult to ignore, we argue that omnivore’s dissonance-reducing strategies involve motivated impression formation of the vegan advocate, giving rise to the vegan paradox. Just like there is an ambiguity in caring for animals (and other harms related to animal-based consumption) and wanting to maintain animal-based consumption (i.e., the meat paradox), there is an ambiguity in the impression of vegans advocating on behalf of animals (or other harms related to animal-based consumption) to avoid animal-based consumption, diverging in supportive views of them as morally committed and defensive views of them as arrogantly over-committed. Below, we analyze these diverging views more elaborately and clarify their relations to behavior change versus moral disengagement strategies.

2.3. Supportive view of vegan advocates as moral and committed

Because vegan advocates typically express strong moral motivations to avoid harms related to animal-based consumption, omnivores may admire them for their moral commitment. Based on previous research on moral character traits (Piazza et al., 2014) and facets of fundamental content dimensions (Abele et al., 2016), moral commitment traits can be separated into two dimensions: *morality* (Brambilla, Carraro, Castelli, & Sacchi, 2019; Goodwin, 2015; Goodwin, Piazza, & Rozin, 2014; Landy et al., 2016) and *commitment* (Piazza et al., 2014).

Morality has been shown to play a primary role in person perception and impression formation (Brambilla et al., 2019; Goodwin, 2015; Goodwin et al., 2014), and captures content about someone’s helpful or harmful intentions (Landy et al., 2016), involving traits such as being fair, ethical and kind (Goodwin et al., 2014; Landy et al., 2016; Ruby & Heine, 2011). These traits can also be considered core-goodness traits because they are seen as intrinsically good (Piazza et al., 2014). As perceptions of moral wrongs are strongly tied to perceptions of harm (Schein & Gray, 2018), and as vegans typically adhere to and advocate for their diet to avoid harms that omnivores also care about to some extent (Trethewey & Jackson, 2019), vegan advocates may be perceived as morally good. Likewise, omnivores freely associate positive moral traits (e.g., caring, considerate) with vegans and view vegans as more moral than their own dietary ingroup (De Groeve et al., 2021), consistent with studies showing the perceived moral superiority of vegetarians (Minson & Monin, 2012; Ruby & Heine, 2011). Given that morality traits are perceived as intrinsically good (Piazza et al., 2014) and have a positive effect on overall impressions (Landy et al., 2016) and social attractiveness (De Groeve et al., 2021), omnivores may be prompted to affiliate with vegan advocates and adopt their behavior.

Commitment represents a second dimension of moral character (Piazza et al., 2014) capturing traits such as determination, dedication and discipline, signaling someone’s commitment to goals or values (Piazza et al., 2014). These traits also indicate assertiveness, a facet of agency capturing a motivational aspect to attain goals, to be self-confident, and to have leadership skills (Abele et al., 2016). Commitment traits are associated with moral character because they may enhance the goodness of an agent, yet they can also amplify the perceived badness of an agent (e.g., dedicated ecofascist) (Piazza et al.,

2014). Because moral (vs. nonmoral) judgments are often held with deeper conviction and are less pliable to change or compromise (see Schein & Gray, 2018), it is not surprising that vegans and vegetarians with moral motivations express a higher commitment to their diet than do health-motivated vegans and vegetarians (Radnitz, Beezhold, & DiMatteo, 2015; Rosenfeld, 2018; Ruby, 2012). For example, morally motivated vegetarians/vegans tend to adopt their diet more abruptly (vs. gradually; Ruby, 2012), adhere to their diet more strictly (Rosenfeld, 2018), and are more likely to maintain their diet (Pendergrast, 2014; Radnitz et al., 2015; Ruby, 2012). Likewise, omnivores freely associate commitment traits (e.g., dedicated, passionate) with a mere description of vegans, including stereotypes such as “(animal rights) activists” (De Groeve et al., 2021; Wrenn, 2017).

Although merely identifying oneself as vegan can be construed as an act of advocacy (i.e., expressing public support to the cause of veganism, shifting norms), identifying oneself explicitly as a vegan advocate expresses even more commitment (e.g., Thomas et al., 2019), as advocates can be construed as adopting an assertive moral leadership position (Bolderdijk et al., 2018; Greenebaum, 2012; Riverola, Salle, Ramon, Joan, & Salle, 2017) to inspire and guide non-vegans to avoid harm associated with animal-based consumption. Because the commitment of vegans challenges the notion that animal-based consumption is unavoidable, it might support behavioral change strategies to reduce dissonance (Rothgerber, 2020). Likewise, research on minority influence suggests that by showing commitment, vegans may communicate that the omnivorous majority should see their minority position as a valid alternative and that omnivores should change to their position (Martin, Hewstone, Martin, & Gardikiotis, 2008; Moscovici, 1985). Nevertheless, several studies theorize and demonstrate that vegetarians’ and vegans’ expression of moral commitment may also threaten omnivores (Bastian, 2019; Minson & Monin, 2012; Riverola et al., 2017), causing them to defensively distort perceptions of moral commitment into moralistic stereotypes. We argue that moralistic stereotyping serves as an identity-based dissonance-reducing moral disengagement strategy and carnist defense (Joy, 2009), in line with Jost and Banaji’s (1994) account that negative stereotypes serve to justify individual and group behavior (i.e., as non-vegans), and the prevailing ideological system (i.e., carnism).

2.4. Defensive view of vegan advocates as arrogant and overcommitted

Corroborating experimental and focus group studies demonstrating moralistic stereotyping of vegetarians (Minson & Monin, 2012) and vegans (Guerin, 2014; Markowski & Roxburgh, 2019), De Groeve et al. (2021) found that moralistic traits (e.g., self-righteous, preachy, judgmental) comprised about 60% of the negative psychosocial traits omnivores associated with both vegetarians and vegans, and that vegans (vs. non-vegans) were viewed as significantly more moralistic, which could explain their lower social attractiveness. Because moral commitment can be separated into a morality and a commitment dimension, we theorize that moralistic impressions can be separated into two analogous dimensions reflecting defensively stereotyped counterparts of morality and commitment, respectively: *arrogance* and *overcommitment*.

Arrogance can be thought of as a personality or character trait (Goodwin et al., 2014; Tiberius & Walker, 1998), yet it has a clear interpersonal component: Arrogant people believe they are superior to others and display disdain toward others (Tiberius & Walker, 1998). Arrogance can be linked with hubristic pride, feelings of grandiosity and low agreeableness (Tracy & Robins, 2007) and can be captured with terms like conceited, smug, snobbish, and self-righteous. Because harm perceptions are robustly tied to moral condemnation (Schein & Gray, 2018) and because vegans generally find animal-based consumption harmful and immoral, they might look down to non-vegans to some extent, and judge them negatively for violating norms surrounding harm and morality (Rosenfeld, 2019; Schein & Gray, 2018). At the same time, research shows that vegans often feel they must balance their dietary

identity with societal norms, and therefore engage in “face-saving” impression management techniques such as refraining from limiting omnivore’s choices and appearing confrontational and rude (Greenebaum, 2012; Rosenfeld & Tomiyama, 2019), which arguably becomes increasingly difficult when they engage in advocacy.

Because most people care strongly about their moral identity, vegan advocacy about harms related to animal-based consumption may pose a significant moral identity threat to omnivores, causing them to feel inferior and dismissed (e.g., Minson & Monin, 2012; Monin, Sawyer, & Marquez, 2008). Defensively stereotyping vegan advocates as holier-than-thou may justify such feelings (e.g., Adams, 2003; Minson & Monin, 2012). Studies have found that omnivores who are prompted to think about vegetarians’ view of their morality are more likely to engage in derogative stereotyping (e.g., viewing vegetarians as pretentious, conceited, self-righteous) (Minson & Monin, 2012), and deny human-animal mental and emotional similarity (Rothgerber, 2014a), suggesting motivated reasoning: By construing animals as having less mind or animal-based consumption as relatively harmless, vegan advocacy may seem inappropriately dismissive for lacking moral ground. Conversely, stereotyping vegan advocates as arrogant may mitigate the legitimacy of imposed moral threat and buffer omnivores’ moral identity (Minson & Monin, 2012; Monin, 2007; Monin et al., 2008).

Overcommitment is theorized to represent the second dimension of moralistic impressions, capturing traits that express an overabundance of investment into a cause, such as obsessed, fanatical, and stubborn, and thus indicate that someone is *too* committed, motivated or dedicated to attain goals or enact values. Overcommitment traits resemble symptoms related to obsessive compulsive personality disorder (e.g., rigid perfectionism, perseveration, overconscientiousness and moral inflexibility, mental and interpersonal control, miserliness) (American Psychiatric Association, 2013), which is predicted by harm avoidance and not-just-right experiences as underlying motivators (Lee & Wu, 2019). Although these motivators remind of vegans’ dietary motivations of harm avoidance and feelings of injustice (Rosenfeld, 2018), and although perceptions of harm and moral judgment are related with behavioral commitment (Schein & Gray, 2018), there is no evidence that these motivations necessarily take a psychopathological form, and the fairly robust finding that vegetarians score higher than do omnivores on personality trait “openness to experience” (Rosenfeld, 2018) is somewhat antithetical to being overcommitted.

Vegan advocacy, however, suggests that animal-based consumption is a free choice, which may cause dissonance among omnivores and trigger defensive processing as a result. For example, Rothgerber (2014a) found that omnivores exposed to (a) a freely choosing (vs. constrained) vegetarian denied animal pain more and believed more strongly in the necessity of meat, and (b) a consistent (vs. inconsistent) vegetarian justified meat consumption more strongly, suggesting that the perceived possibility to avoid animal-based consumption triggers dissonance and motivated reasoning to maintain it. Defensively stereotyping vegan advocates as overcommitted justifies the idea that veganism is supererogatory (i.e., something that is good in principle, but not required in practice; Reid, 2018) or difficult – if not impossible – to maintain (Cole & Morgan, 2011). This could explain why vegans are stereotyped as difficult and fussy eaters (De Groeve et al., 2021), as ascetics (Adams, 2003; Cole & Morgan, 2011) living frugal and clean lives (De Groeve et al., 2021), or as puritans (Adams, 2003) who are strict, obsessed and close-minded (De Groeve et al., 2021). Thus, we theorize that commitment might not only enhance perceptions of goodness or badness of an agent (Piazza et al., 2014), but also be the subject of negative stereotyping (De Groeve et al., 2021).

Although we suggest that arrogance and overcommitment can be separated theoretically – i.e., an arrogant person can be uncommitted to attain goals and an overcommitted person can be humble – vegan advocates may also generate moralistic stereotypes that capture both arrogance and overcommitment simultaneously (e.g., preachy,

judgmental, domineering) (De Groeve et al., 2021; Minson & Monin, 2012). Moralistic stereotyping may suppress moral impressions and defuse moral threat in a number of ways. First, by attributing feelings of moral threat to hostile interpersonal attitudes of the vegan advocate, attention is shifted away from the threatened self and the (moral) argument (Doyle, 2005). Second, blaming advocates of moralistic attitudes not only puts them at the center of attention rather than the message, but also downplays their moral motives (Monin, 2007). Third, moralistic derogations may serve to silence and stigmatize advocates and protect the self from future persuasion attempts (Greenebaum, 2012; Markowski & Roxburgh, 2019). Essentially, moralistic stereotyping allows omnivores to morally disengage and socially distance themselves from advocates and reinforce animal-based consumption.

3. Applying our framework to inquire vegan advocacy and future research

Guided by the theoretical framework outlined above, we shift toward clarifying how vegan paradox theorizing can be tested and applied to inquire vegan advocacy, providing directions for future research accordingly. In applying our framework, researchers may tap into debates within the vegan movement on how to promote veganism effectively (Francione, 2012; Greenebaum, 2015; Leenaert, 2020; Wrenn, 2012), where an idealist and a pragmatic approach can be distinguished along a spectrum of persuasive strategies (Freeman, 2008; Leenaert, 2017). The *idealistic* approach can be defined as “placing principles and values above practical considerations and seeking to express one’s true ideals” (Kivetz & Tyler, 2007, p. 201), which – in the context of vegan advocacy – is characterized by consistently promoting veganism without compromise based on animal rights with the goal to abolish the speciesist exploitation of animals for consumption (Francione, 2012; Greenebaum, 2015; Leenaert, 2020; Wrenn, 2012). The *pragmatic* approach, in contrast, is “action-oriented and primarily guided by practical concerns” (Kivetz & Tyler, 2007, p. 201). This approach allows incremental steps toward veganism such as flexitarianism (i.e., reducing one’s meat intake partially; Rosenfeld, 2018), reductarianism (i.e., reducing any form of animal-based consumption to any degree; <https://www.reducarian.org/>) and welfare reforms, as well as using arguments other than animal rights and welfare to promote veganism including less morally salient ones (e.g., health, taste) (Leenaert, 2017, 2020).

Considered through our framework, it becomes apparent that these debates revolve around the effectiveness of promoting a moral commitment to veganism. By expressing their “true” ideals, idealistic vegan advocates signal a high moral commitment, typically by imposing a double demand on omnivores (Leenaert, 2020): “go vegan” (i.e., commit to radically change your behavior) “for the animals” (i.e., based on moral attitudes or motives). In doing so, advocates appeal to targets’ moral identity and ethical persuasion with the consequent risk of coming across as moralistic and exclusive (Leenaert, 2020; Wrenn & Johnson, 2013). Pragmatic vegan advocates, on the other hand, signal a low (er) moral commitment but a higher social flexibility by using various strategies that are more adaptable and inclusive to non-vegan identities. For this reason, we suspect that they are less likely to evoke moralistic impressions and gain more traction but with the consequent risk of diluting minority principles and discounting the rights of animals (Freeman, 2008; Wrenn, 2012). Because research on minority influence shows that minorities are most effective in changing majority attitudes if their position is novel and if they adopt a consistent yet flexible style of social influence and persuasion (e.g., Martin et al., 2008; Mugny & Pérez, 1991), it is not surprising that the effectiveness of promoting moral commitment is at the center of these ongoing debates. Research regarding vegan advocacy, however, is extremely scarce (Nezlek & Forestell, 2020).

To address this issue, we outline a future research agenda based on our theorizing, which simultaneously provides empirical contexts to

enable confirmation, adaptation, and refinement of our theorizing. Using the perspective of the idealist vegan advocate as a reference point, we discuss the role of (a) the advocates’ motives for change (i.e., the effectiveness of moral persuasion), (b) the advocates’ call for change (radical vs. incremental change), (c) the targets’ moral and carnist identification and (d) the source attributes of the vegan advocate. Lastly, to enable a more comprehensive and balanced assessment of vegan advocacy, we provide further conceptual and methodological considerations that are not captured by our framework.

3.1. Motives for change: the effectiveness of moral persuasion

One recurring debate within the vegan movement concerns whether or not to use moral arguments (Greenebaum, 2015; Leenaert, 2017, 2020). From an idealistic viewpoint, vegan advocates want to convince targets that it is morally wrong to exploit animals for consumption (Leenaert, 2017, 2020). They want targets to experience a “vegan mindshift” (Grassian, 2019) where animal-based foods become reminders of animal suffering and death and become categorized as inedible. Although viewing animal-based consumption as immoral can be a powerful motivator for behavior change (Feinberg et al., 2019; Grassian, 2019), our theoretical framework suggests that moral arguments may act as a double-edged sword. On one hand, signaling harm and morality may appeal to the moral identity of omnivores, garner social attraction and strengthen omnivore targets’ willingness to adopt a diet (more) congruent with vegan ideals to reduce dissonance. On the other hand, vegans’ advocated moral motives may be defensively stereotyped as arrogant and overcommitted (i.e., moralistic) to alleviate threats to their moral and carnist identity, which may suppress moral impressions and influence.

Researchers might address this issue by comparing the use of animal protection arguments with environmental and/or health arguments for veganism. In line with Rothgerber (2020), we speculate that the latter arguments have a lower moral salience among most targets because the victims of environmental or health harm are psychologically more distant and require more knowledge to recognize (Rothgerber, 2020), whereas the connection between animal victims and consuming animal products is more obvious and intuitive. This perspective aligns with the theory of dyadic morality, which posits that people can perceive something as immoral only if they believe that a vulnerable victim is harmed (Schein & Gray, 2018); victims of health or environmental damage may be more ambiguous. Because of this lower moral salience, we would expect that vegan advocates using health or environmental arguments would generate less moral impressions – in line with the finding that health and environmental arguments would be weaker motivators for change (Bianchi, Dorsel, Garnett, Aveyard, & Jebb, 2018; Grassian, 2019) – but also less moralistic stereotyping. Differences in moralistic stereotyping could explain why vegans motivated by health and environmental (vs. animal rights) reasons may be evaluated more positively by omnivores (MacInnis & Hodson, 2017), why these reasons attract the most attention in public discourse and media (Pendergrast, 2014), and why vegans may focus on health benefits and avoid animal rights to minimize confrontation with omnivores (Greenebaum, 2012). Researchers may also compare and/or combine different frames of arguments for veganism: Animal protection arguments may focus on promoting welfare or rights (Wrenn, 2012); environmental arguments that could be raised are manifold (Willett et al., 2019); and health arguments may focus on disease prevention or weight maintenance (Bianchi et al., 2018; Rosenfeld, 2018). In addition, researchers may also investigate other non-moral motivations to promote veganism such as taste preference, saving money, familial and friend influences, trendiness and a desire for group belonging (Hoffman, Stallings, Bessinger, & Brooks, 2013; Leenaert, 2020; Plante, Rosenfeld, Plante, & Reysen, 2019; Rosenfeld & Burrow, 2017).

One caveat to consider is that vegan advocates might also elicit moralistic impressions simply for railing against the omnivore diet and

carnist identity, irrespective of the arguments used. For instance, [Howe and Monin \(2017\)](#) demonstrated that overweight individuals anticipate that doctors who portray themselves as fitness-focused will judge them negatively, which could trigger defensive stereotyping as a coping mechanism ([Minson & Monin, 2012](#); [Monin et al., 2008](#)). In other words, people might also feel looked down upon in the absence of moral arguments ([Monin, 2007](#)), with simply the *imagined* presence of moral reproach spurring defensiveness. Furthermore, given that health and environmental arguments provide justification to support steps *toward* veganism rather than for adopting a fully vegan diet or lifestyle ([Hooley & Nobis, 2016](#)), vegan advocates using these arguments may risk overselling veganism ([Cooney, 2014](#)) and may thus seem over-committed even without evoking defensive attitudes. In particular, vegan diets risk being less robust to obtain adequate nutrition in low- and middle-income countries, as well as vulnerable populations in high-income countries (e.g., infants, pregnant mothers, individuals with a certain medical conditions) ([Leroy, Hite, & Gregorini, 2020](#)), so we acknowledge it is possible that vegan advocates might push veganism too far in some contexts, though vegans may also highlight the importance of the modifier “as far as is possible and practicable” in their preferred definition of veganism and abhor health and ability shaming within the vegan movement ([North, Kothe, Klas, & Ling, 2021](#)) while promoting food justice ([Greenebaum, 2017](#)).

Another fruitful area for future research is to examine how vegan advocates using moral arguments could circumvent moralistic stereotyping. Reducing self-involvement seems crucial ([Bolderdijk et al., 2018](#); [Cramwinckel et al., 2015](#); [Monin et al., 2008](#); [Zane, Irwin, & Reczek, 2016](#)). Targets may have favorable views of moral others as long as they themselves are uninvolved spectators ([Bolderdijk et al., 2018](#); [Cramwinckel et al., 2015](#); [Monin et al., 2008](#)); however, the moment they feel their moral self-concept is on the line, they may derogate the moral advocate, deny their genuine morality and express dislike toward them ([Monin, 2007](#)). Physical cleansing ([Cramwinckel, van Dijk, Scheepers, & van den Bos, 2013](#)) and engaging in positive self-affirmations ([Monin et al., 2008](#)) are two empirically supported tools that allow targets to immunize themselves against feelings of moral threat in order to respond to moral others in a more open and self-reflective way ([Cramwinckel et al., 2013](#); [Monin et al., 2008](#); [Sherman & Cohen, 2006](#)). Other strategies that might decrease defensiveness include the use of social nudges (e.g., highlighting norms or positive trends) and positive emotions (rather than past-oriented guilt), focusing on immoral behavior of others (i.e., so that people would reflect nondefensively on consequences of their own behavior) and on the non-necessity of (frequent) animal-based consumption (rather than unethical implications) by promoting alternatives ([Bastian, 2019](#)). New food technologies such as cell-cultured and plant-based meat and other animal products could be promoted ([Reese, 2020](#)). Similarly, [Reese \(2020\)](#) argues that animal activists should shift some resources from an individual change approach to prioritize an institutional approach. Future research could examine whether messages such as “end factory farming” have more appeal as it places the blame on institutions rather than individuals, reducing self-involvement. Case in point, US adults typically believe that nobody should tell them whether to eat animals or be vegetarian (97%), but many would support a ban on factory farming (49%), slaughterhouses (47%) or animal farming in general (33%) ([Reese, 2017](#); in [Reese, 2020](#)).

Challenging common justifications for eating animal products may further help to decrease moralistic stereotyping and promote veganism, as these defensive ideological beliefs are more reliable predictors of dietary pattern/identification than moral or personal motivations for vegetarianism ([Rosenfeld, Rothgerber, & Tomiyama, 2019](#); [Tretthewey & Jackson, 2019](#)). First, the justification that animal-based consumption is relatively *harmless* may be countered by promoting social contact and identification with farmed animals, using techniques such as virtual reality, storytelling, visuals, and graphic content of factory farming (i.e., moral shock), leveraging the identifiable victim effect and highlighting

the moral equivalence of companion animals and farmed animals ([Dhont, Hodson, Leite, & Salmen, 2020](#); [Mathur et al., 2021](#)) or by emphasizing human-animal evolutionary kinship and increasing knowledge about animal sentience ([Amiot & Bastian, 2015](#); [Cornish, Raubenheimer, & McGreevy, 2016](#)). Second, vegans may challenge the justification that animal-based consumption is *unavoidable* by explicitly rejecting the 4Ns as being morally irrelevant (i.e., is what is considered *Nice, Natural, and Normal* also morally justified?) or often unfounded (i.e., animal products are not *Necessary* for nutritional health for most people, provided that they have access to vegan food and able to supplement vitamin B12 via fortified foods or a vitamin tablet; [Barnard & Leroy, 2020](#); [Craig & Mangels, 2009](#)) and/or argue instead that consuming animal products is not *Nice* but disgusting (e.g., eating the flesh and secretions of animal victims), not *Normal* but extreme (e.g., associated with severe animal abuse; [Cornish et al., 2016](#); [Hooley & Nobis, 2016](#)), not “*Natural*” (e.g., high-tech artificial control of the environment and animals to produce processed meat), and that vegan diets can also be *Nice* (tasty; [Paxman, 2016](#)), “*Natural*” (e.g., whole food; [Barnard & Leroy, 2020](#)), *Normal* (i.e., growing vegan movement), or commendable to treat certain chronic diseases such as cardiovascular disease, type 2 diabetes and obesity ([Craig & Mangels, 2009](#); [Trapp & Barnard, 2010](#)), besides being *Necessary* to avoid harming animals and speciesism ([Wrenn, 2012](#)).

Lastly, research suggests that the nature of advocates’ calls for change might moderate targets’ perceptions of threat ([Bastian, 2019](#); [Grassian, 2019](#); [Rothgerber, 2020](#)), thus moderating moralistic stereotyping – a strategy we examine below.

3.2. Call for change: radical versus incremental change

A second recurring debate within the vegan movement concerns the methods used to promote veganism: whether a radical or an incremental call for change is most effective ([Greenebaum, 2015](#); [Leenaert, 2017, 2020](#)). Whereas a radical call for change can be characterized as a clear, unequivocal message to “go vegan,” many different variables could be factored in (more) incremental calls for change: Examples include portions (eating smaller portions of meat), frequency (e.g., meatless days, weekday vegetarianism), periods (e.g., Veganuary), strictness (e.g., having exceptions on social occasions), type of animal product (e.g., no chicken, red meat, hybrid products), and animal welfare standards (e.g., eat “organic,” “humane,” “free-range”) ([de Bakker & Dagevos, 2012](#); [Leenaert, 2017](#); [Rosenfeld, 2018](#)). If the aim of vegan advocacy is to abolish animal exploitation and speciesism, calling for incremental changes seems abhorrent and impermissible from a decontextualized animal rights perspective ([Francione, 2012](#); [Leenaert, 2020](#); [Wrenn, 2012](#)). Idealistically, rights are construed as non-negotiable absolutes; incrementalism is construed as condoning rights violations and speciesism; and veganism is construed as a moral imperative ([Francione, 2012](#); [Leenaert, 2017](#)). In practice, however, animal-based consumption is deeply embedded in Western culture, and people generally lack the ability (e.g., cooking skills and willpower), opportunity (e.g., social support, availability of vegan options, socioeconomic barriers) or motivation (e.g., habits, being resistant) to adopt a plant-based diet ([Grassian, 2019](#); [Graça, Godinho, & Truninger, 2019](#); [Lacroix & Gifford, 2019](#)). Consequently, pragmatic considerations support the inclusion of more target-oriented, incremental approaches to change ([de Bakker & Dagevos, 2012](#); [Grassian, 2019](#); [Leenaert, 2020](#)), and we add a psychosocial dimension to this debate.

Applying our theoretical framework, an advocates’ call for change can be construed as an expression of their commitment to veganism, and this perceived commitment may amplify both moral and moralistic impressions. For example, although [De Groeve et al. \(2021\)](#) found that omnivores perceived flexitarians, vegetarians and vegans as equally moral at face value, they also found a do-gooder derogation effect in that a higher dietary deviance (or commitment) was associated with stronger moralistic impressions which partially suppressed moral impressions.

We speculate that a similar effect may occur for vegan advocates with different calls for change because they may challenge targets' carnist identities to different degrees. Calls for incremental adjustments that signal a lower commitment are expected to invoke less black-and-white thinking and carnist identity threat compared to more radical calls for elimination (e.g., Bastian, 2019; Rothgerber, 2020). Therefore, we expect that calls for incremental adjustments will generate less motivated resistance and moralistic stereotyping. Because more radical calls for change signal a higher commitment, they also make perceptions of overcommitment more likely. Radical calls for change also increase the social distance between vegan advocates and their targets (see Danziger, Montal, & Barkan, 2012), which may cause advocates to come across as increasingly self-centered and dismissive of the targets' viewpoint, making perceptions of arrogance more likely. Consequently, we expect that incremental (vs. radical) calls for change will generally be more effective to exert *direct* influence, because they invoke less moralistic impressions.

Future research may assess whether and how vegan advocates' call for change affects their social image and influence among omnivores. We expect that behavioral strategies that appeal to targets most and fit them best – in terms of capacity, opportunity and motivation (Graça et al., 2019) – will generate the least threat and moralistic derogation. Step-wise approaches that include clear reduction and elimination goals allow targets to develop self-efficacy and more pro-vegan attitudes and subsequently seek larger changes (Grassian, 2019; Rothgerber, 2020) – in line with Vygotsky's (1978) zone of proximal development. A potentially fruitful area for future research is to examine how motives and calls for change interact in leading targets to change their behavior. For example, animal protection arguments typically favor exclusion of animal products rather than reduction, and advocates may focus on avoiding chicken, battery eggs, and farmed fish first rather than beef and dairy because of higher "suffering footprints" (based on estimated quality of life and amount of individuals being killed per kg animal product consumed; Cooney, 2014; Fleischman, 2020). Research on people's attitudes toward consuming dairy, eggs, or other animal products would be informative as current research is predominantly focused on meat consumption (Piazza et al., 2020; Rothgerber, 2020), which may be perceived as the most intuitively harmful to animals as it directly entails their slaughter. Health and environmental arguments, in contrast, typically favor *restricted* consumption of animal products, and low to no intake of (un)processed red meat (for health) and ruminant meat (for the environment) in particular (Willett et al., 2019). How would different combinations of calls and motives for change affect advocates' impressions and influence? Besides this promising field of inquiry, we further recommend research to inquire whether certain targets (e.g., young people, students and academics, "animal lovers") or situations (e.g., educational settings, deep canvassing) are more conducive to a radical call for change as suggested previously (Leenaert, 2017; Wrenn, 2012). In the following section, we elaborate on the role of target characteristics in their responses to vegan advocates.

3.3. Targets' moral and carnist identification

Responses to vegan advocates in terms of moral(istic) stereotyping and influence may also depend on individual differences among targets. Although dietary habits and transitions among targets are highly individual given their own personal idiosyncrasies (e.g., personal motives/values, life experiences, demographic status) and circumstances (e.g., meal context, disruptive events; Grassian, 2019; Lin-Schilstra & Fischer, 2020; Rothgerber, 2020), our theoretical framework suggests that targets' moral and carnist identity play a central role in how targets respond to vegan advocacy. Crossing moral and carnist identification, four target profiles can be distinguished and discussed to inspire future research.

First, targets with a strong moral identity (i.e., motivated to do good and avoid harm; Aquino, 2002) and weak or absent carnist identity (i.e.,

motivated to maintain animal-based consumption) are expected to be the least likely to view vegan advocates as moralistic and the most willing to affiliate with them and change their diet. Previous research has shown that individuals with a higher internalized or symbolic moral identity (Feinberg et al., 2019; Graça et al., 2016) are more likely to moralize eating meat (Feinberg et al., 2019) and less likely to morally disengage from meat (Graça et al., 2016), suggesting that moral identity strength would predict higher moral and lower moralistic stereotyping of vegan advocates. A weak or absent carnist identity would be expected among "conscientious" omnivores (Rothgerber, 2020), flexitarians and vegetarians that admire or aspire veganism. One caveat is that people with a strong moral identity may also be particularly sensitive to moral threats, depending on the degree that the self is involved in the persuasion situation (Bolderdijk et al., 2018; Cramwinckel et al., 2015; Monin et al., 2008; Zane et al., 2016), which seems more probable among those with a stronger carnist identity, discussed next.

Second, targets with a strong moral and carnist identity are expected to feel more self-threat, dissociate animal-based consumption from their moral ideals, and view vegan advocates as more moralistic and less moral. Although there is no existing research that has explicitly examined the "carnist" identity, Graça et al. (2016) have found that identifying more strongly as an "omnivore" or "meat-eater" (and less strongly as vegetarian or vegan) is associated with a higher meat consumption frequency, which negatively affects individuals' willingness to substitute meat indirectly via feelings of attachment toward meat and moral disengagement from meat (see also Feinberg et al., 2019). Future research could examine whether moral disengagement via cognitive dissonance reduction strategies (e.g., endorsing carnism; Monteiro et al., 2017) allow to protect one's moral and carnist identity simultaneously and whether this affects character judgments of vegan advocates, as we theorize.

Third, we theorize that targets with a weaker moral identity but a strong carnist identity would experience no or little dissonance when confronted with harm to others but find vegan advocates threatening nonetheless because of a strong self-interest in maintaining an omnivorous diet (Bastian & Loughnan, 2017; Feinberg et al., 2019; Monteiro et al., 2017). These targets should be more likely to attribute less moral and more moralistic traits to vegan advocates not as a defense mechanism to reduce moral identity threat, but to protect their carnist identity from symbolic threat (e.g., MacInnis & Hodson, 2017). A high focus on self-interest has been linked with a higher meat consumption (Sariyska, Markett, Lachmann, & Montag, 2019) and a higher endorsement of self-enhancing dominance ideologies such as social dominance orientation (SDO), human supremacy beliefs, and speciesism may predict moralistic stereotyping because they are linked with moral disengagement from meat (Graça et al., 2016; Monteiro et al., 2017) and seeing vegetarianism as a cultural threat (for SDO; Dhont et al., 2014). Demographically, we expect that men (vs. women) and people who are less (vs. more) educated and conservative (vs. liberal) (Rothgerber, 2020; Sariyska et al., 2019; Vandermoere, Geerts, De Backer, Erreygers, & Van Doorslaer, 2019) are most likely to have strong carnist identities (i.e., eat, love, and morally disengage from meat more; Graça et al., 2016) and to resist vegan advocates. Conversely, the opposite demographics are linked with plant-based eating (Hopwood, Bleidorn, Schwaba, & Chen, 2020; Rosenfeld, 2018; Rothgerber, 2020), so we expect a higher openness toward vegan advocates and willingness for behavioral change toward veganism among women and those who are more educated and liberal.

Fourth, targets with weak moral and carnist identities are expected to experience no prominent identity threats and to view vegan advocates rather with indifference. These targets are expected to follow the path of the least resistance. Influencing these targets would mainly be a matter of removing practical and social barriers, though this aim is of importance for any target. Convenience and a lack of social support are common barriers to reduce meat-eating and adopt plant-based diets (Feinberg et al., 2019; Graça et al., 2016; Lacroix & Gifford, 2019).

Given that dietary transitions are highly individual and context-dependent, advocacy would ideally be tailored to address individuals' existing dietary habits and their specific motivations (Grassian, 2019; Hopwood et al., 2020).

3.4. Source attributes of the vegan advocate

Besides the motives and calls for change an advocate puts forward among targets, perceptions of moral commitment and moralistic impressions may also depend on source attributes of the vegan advocate. Because idealistic vegan advocates express their "true selves," they are likely to present themselves overtly as a vegan, which is likely to attract attention as it directly signals *group membership* (Martin et al., 2008; Wrenn & Johnson, 2013). In doing so, vegan advocates may deter recruitment by accentuating intergroup differences and otherizing the non-vegan majority (Maass & Clark, 1984; Wrenn, 2016). Merely identifying oneself as a vegan may offend omnivores and could be perceived as imposing (Markowski & Roxburgh, 2019; Rothgerber, 2014a), which allows omnivores to discount vegans easily as information sources (e.g., Maass & Clark, 1984; Mugny & Papastamou, 1980). Idealistic or "typical" (vs. "atypical") activists may be less effective in recruiting people to adopt their behavior, in particular because they are stereotyped as being "militant" (i.e., moralistic) (Bashir, Lockwood, Chasteen, Nadolny, & Noyes, 2013), and pro-vegan advocacy groups may be perceived as less credible because they are associated with a self-serving agenda (Parkinson, Twine, & Griffin, 2019; Maass & Clark, 1984). Source credibility literature (Ismagilova, Slade, Rana, & Dwivedi, 2020) suggests that finding common ground (i.e., homophily) is crucial to unfreeze the larger public and recruit potential allies for change (Bastian, 2019; de Bakker & Dagevos, 2012; Riverola et al., 2017; Wrenn, 2012), as well as increasing trustworthiness (an important moral character trait; Goodwin et al., 2014), and expertise.

Concerning *homophily*, there is substantial evidence that minority members receive less defensiveness and exert more direct influence if they are seen as similar to the self or part of the target's ingroup (David & Turner, 2001), in line with both conversion theory (Moscovici, 1980) and self-categorization theory (David & Turner, 2001; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Future research could therefore assess whether openly (vs. covertly) expressing vegan group membership affects moralistic stereotyping and/or whether matching identities of advocates and targets on various domains may reduce defensiveness and moralistic stereotyping. Sources who are part of a target's social network are likely to be highly similar (McPherson, Smith-lovin, & Cook, 2001). One potential caveat is that moral others may be more threatening when they are similar, but dismissed as irrelevant when they are dissimilar (Monin, 2007). The black sheep effect also suggests that ingroup (vs. outgroup) members holding a minority position may pose a stronger threat to the self for blurring intergroup distinctions and norms (Hogg, 2016; Pinto, Marques, Levine, & Abrams, 2010). To give a specific example, MacInnis and Hodson (2017) found that vegetarian/vegan men are evaluated more negatively by omnivore men (vs. women), whereas for vegetarian/vegan women there was no sex difference; presumably, vegan men violate traditional gender norms, and omnivore men (vs. women) tend to endorse sexist beliefs more strongly. Previous research has shown that an exposure to counter-stereotypical exemplars may reduce prejudice (Bashir et al., 2013; Fitzgerald, Martin, Berner, & Hurst, 2019), which could be examined further within the context of vegan advocacy. Predictions of social identity theory (Hogg, 2016) maintain that vegan advocates who contradict outgroup stereotypes and are highly prototypical of the target group should be more influential.

Concerning *trustworthiness*, Parkinson et al. (2019) found that health institutions may be perceived as more credible pro-vegan sources because they are more trusted to care about the well-being of omnivores. Future research may assess whether trusted institutions or reference groups could increase the trustworthiness of pro-vegan messages.

Trusted reference groups can be ingroups (i.e., family, friends, a work group or club) or aspirational groups (e.g., role models, celebrities) (Gupta & Ogden, 2009). Celebrity endorsement offers a promising tool to overcome the black sheep effect and challenge ingroup norms (Bastian, 2019; Phua et al., 2019, 2020), as its positive effects on the image of brands are well-supported within the context of marketing (Gupta & Ogden, 2009; Phua et al., 2019). When celebrities promote veganism, omnivores may want to align with their behavior because they aspire to be like them (Gupta & Ogden, 2009). Although Phua, Jin, and Kim (2020) found no effect of vegan celebrity endorsement on social influence outcomes (e.g., intentions to engage in electronic Word-of-Mouth and veganism), they note that their noncelebrity condition resembled a celebrity (i.e., a popular peer influencer). Given the important role attributed to the uprise of (online) celebrity vegan influencers in promoting veganism (Phua, 2020), we recommend future research to extend this line of research.

Concerning *expertise*, Parkinson et al. (2019) found that academic sources of pro-vegan messages may be more credible because they are seen as more objective. Highlighting the value of bridging gaps between academics and advocates (Buttler, Rothe, Kleinert, Hahn, & Walther, 2020; Dhont & Hodson, 2020), argue that engaging in a dialog with omnivores is necessary to discuss information and consider people's perspectives, ideally in a face-to-face setting with an expert. In their study, animal rights activists were trained with an argumentation catalog (available at <https://osf.io/vw9sr/>) to formulate counterarguments against various moral disengagement strategies and found that addressing these in a dialog with omnivores – after exposing them to distressing scenes from animal agriculture (an intervention called "cube of truth") – was effective in decreasing their willingness to eat meat. Future research could rely on this resource to examine whether addressing moral disengagement strategies also reduces moralistic stereotyping of vegans.

Lastly, we recognize the possibility that vegan advocates may be stereotyped as moralistic by targets because vegan advocates might indeed act moralistically. Being confronted with omnivore targets, vegans may envision them as consuming remnants or residues of animals that have been the victim of intensive neglect, abuse and mistreatment (Chuck et al., 2016; Kunst & Hohle, 2016). According to the theory of dyadic morality (Schein & Gray, 2018), this may evoke negative affect, perceptions of norm violation, and evoke moralistic judgment to the extent that the targets are perceived as intentional agents causing obvious damage to obviously vulnerable patients. In addition, if following veganism (or not) is framed in black-and-white moralized terms (e.g., veganism is the moral baseline; Francione, 2012) and vegans identify themselves and targets as ingroup versus outgroup members, respectively, this may evoke polarization, an increased commitment to ingroup norms and moralistic judgment toward the outgroup targets (Bastian, 2019; Bastian & Loughnan, 2017). This may particularly be the case for vegan advocates, as stronger ingroup identification may predict both collective action (van Zomeren, Postmes, & Spears, 2008) and negative judgment toward outgroups (Hogg, 2016). Some vegan advocates have raised moralistic attitudes and behavior as a major issue within the vegan movement that is considered not only harmful but also counter-productive (Leenaert, 2017, 2020). Though experimental studies to investigate the influence of moralistic vegan advocacy on targets would be ethically problematic, researchers may attempt to conduct observational research in naturalistic settings to investigate target responses.

4. Further conceptual and methodological considerations

In this final section, we elaborate on issues that are not captured by our theoretical framework, but allow a more comprehensive and balanced understanding of vegan advocacy, including (a) indirect, private, and delayed influence, (b) alternative stereotypical impressions of vegan advocates, (c) inter- and intragroup perceptions and dynamics,

and (d) methodological considerations.

4.1. Considering indirect, private and delayed influence

Both academic research (Bastian, 2019; de Bakker & Dagevos, 2012) and vegan advocates (Leenaert, 2017, 2020) suggest that a high dose of pragmatism is required within the vegan movement to realize change. Likewise, we theorize that vegan advocates evoke less moralistic stereotyping and exert direct influence if they are more pragmatic – that is, if they seek to identify and adapt to targets' interests, use incremental calls for change, and are careful with using moral arguments. However, if feelings of moral threat can be avoided, moral arguments should be particularly effective to motivate behavioral change. In this subsection, we add another layer of complexity by reflecting on the potential role of indirect, private and delayed influence (idealist) vegan advocates may exert by drawing on research on resistance appraisal (Tormala, 2008) and minority influence (Levine & Tindale, 2014; Martin et al., 2008; Mugny & Pérez, 1991).

First, although promoting moral commitment may induce direct resistance through moralistic stereotyping, research on resistance appraisal (Tormala, 2008) suggests that it is possible that initial resistance masks private influence at a later point in time. Targets might reflect on their persuasion resistance and appraise it negatively if they believe that they used illegitimate resistance strategies (Tormala, 2008). Derogating the advocate (e.g., through moralistic stereotyping) without providing effective counterarguments to the advocate's message might be perceived as illegitimate, and consequently induce negative resistance appraisal among targets, which could decrease certainty about the message content (Tormala, 2008) and one's carnist identity. On the other hand, if targets felt justified in viewing the vegan advocate as moralistic, this would increase certainty about the message content and strengthen carnist identity, making moralistic stereotypes more accessible for future persuasion attempts (Rothgerber, 2020; Tormala, 2008). Likewise, according to the sleeper effect, a message that is initially rejected due to a discounting cue (e.g., outgroup minority source) can become more persuasive over time but only if the message is persuasive enough to be internalized by the target and after the message has been dissociated from the discounting cue that initially suppressed acceptance (Cook, Gruder, Hennigan, & Flay, 1979; in Tormala, 2008). In our context, this reasoning suggests that a message promoting moral commitment to veganism could lead to delayed moralization and reduced animal-product consumption after being initially rejected through moralistic derogation of the vegan advocate. Future research could thus examine whether persuasive moral arguments could generate sleeper effects and whether moralistic stereotyping could mask a delayed private influence via negative persuasion appraisals.

Second, although idealist vegan advocates may not exert any direct influence based on their outgroup status (Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994), a meta-analytic review on minority influence (Wood et al., 1994) concluded – in line with Moscovici's (1980) conversion theory – that minorities exert most influence on measures that are private and indirectly related to the advocated message (i.e., conversion), whereas direct private and publicly expressed agreement (i.e., compliance) among targets is less evident, especially because of an aversion to align themselves with a deviant source. According to Wood et al.'s (1994) review, indirect private influence is especially likely when the minority is distinctively defined through group membership rather than other means (i.e., showing the distribution of judgments in the population or positions adopted by members of a small group), when the minority sources are few in number rather than many, when the minority position is perceived to be advocated consistently, and when there is remote contact (e.g., audiotaped or written message) rather than immediate contact between the minority source and the targets. A speculative explanation is that these factors strengthen sleeper effects: A socially defined, small and consistent minority (vs. less defined, larger, inconsistent minority) may provide a stronger initial discounting cue as

the deviant minority identity is clearer (vs. blurred), while remote contact could make it easier for targets to dissociate the message from the source (Wood et al., 1994) or to feel less persuasion resistance (Moscovici & Nève, 1971). However, a clear minority identity and greater indirect influence may be associated with greater recall of the minority identity (Moscovici, 1980), which calls for further investigation (Wood et al., 1994). Consistency in presenting and defending one's position may also attract attention and convey intransigence, thereby forcing targets to recognize their position as a valid alternative without simply being derogated or rejected (Moscovici, 1985). Although it is not clear to what extent these findings can be translated to the topic of vegan advocacy, it adds credit to vegan academics who maintain that moral consistency requires an abolitionist (i.e., idealistic) vegan approach because it would be the only way to seriously challenge speciesism (Francione, 2012; Wrenn, 2012) and underlines the role of radical (i.e., idealistic) factions to revive and clarify the goals of social movements (Wrenn & Johnson, 2013). One recent meta-analysis also found that more forceful “go vegan” (vs. vegetarian and [more] flexitarian) messages may be more effective among flexitarians (Mathur et al., 2021).

Despite this evidence favoring idealistic vegan advocacy, we emphasize that their influence would still be indirect (i.e., not directly related to the content of the minority appeal) and that those who became vegan rarely did so radically but rather gradually after a series of encounters including a variety of different sources of information (Chuck et al., 2016; Grassian, 2019). A series of studies by Mugny (1975; in Mugny & Pérez, 1991) also demonstrate that, while minority consistency is important, minorities that use a flexible style of negotiation (i.e., prepared to adapt and accept some compromises) compared to a rigid style are more likely to influence the majority, especially on a direct level and when differences in opinion are large (Maass & Clark, 1984). Overall, available evidence suggests that vegan advocacy is not a straightforward process and that neither an idealistic nor a pragmatic approach should be disqualified *a priori* but can be seen as complementary, negotiable approaches to realize change. Social change seems most likely to happen indirectly in a stepwise manner, both by exerting indirect influence using consistent idealist (i.e., abolitionist) vegan advocacy and by using various pragmatic approaches that may directly appeal to targets but only support veganism indirectly. Idealistic considerations attend to the *why* of behavior change at an abstract high-construal level, while pragmatic considerations are needed to address the *how* of behavioral change at a concrete low-construal level (Danziger et al., 2012).

4.2. Considering alternative stereotypical impressions of vegan advocates

Given our central aim to increase theoretical understanding of character judgments of vegan advocates by connecting the vegan paradox with the meat paradox, another potential criticism is that vegan advocates might elicit other stereotypical impressions among non-vegan targets that are not captured by our framework. Although moralistic impressions appear to dominate spontaneous negative stereotyping of veg*ns (De Groeve et al., 2021; Greenebaum, 2012; Guerin, 2014; Markowski & Roxburgh, 2019), previous empirical work has demonstrated two additional stereotypes specifically associated with morally-motivated minorities (Bashir et al., 2013; De Groeve et al., 2021). Since morally-motivated activists necessarily break conventional norms and social bonds with the majority, they might also be perceived as *eccentric* (i.e., unconventional and slightly strange) and *unsociable* (i.e., having a lower perceived ability to connect with others and recruit allies to support them; Brambilla et al., 2019; Landy et al., 2016), which mirrors positive stereotypes of omnivores' own group as being *normal* and *sociable* (De Groeve et al., 2021).

Concerning eccentric impressions, De Groeve et al. (2021) indeed found large differences between omnivores and vegans based on a direct measure, though vegans were generally seen as neither normal or abnormal. Likewise, eccentric impressions only comprised 6% of the

negative terms freely associated with vegans, even when responses indicating trendiness or being hippy were taken into account. In addition, being alternative, trendy, and hippy may also be viewed positively (Minson & Monin, 2012). Nevertheless, eccentric and moralistic impressions may fuse together in the “extreme” vegan stereotype (Guerin, 2014; Povey, Wellens, & Conner, 2001); if vegans actively promote veganism, negative eccentric impressions could become more prominent (see Bashir et al., 2013), which may predict a lower perceived sociability and social attractiveness (De Groeve et al., 2021). Future research could examine this further and test whether eccentric stereotyping is more common among right-wing authoritarians who are more likely to view vegans as threatening cultural norms to eat meat (Dhont & Hodson, 2014; Judge & Wilson, 2019).

Compared to eccentric impressions, De Groeve et al. (2021) found that vegans are more spontaneously stereotyped as lacking sociability (25% of negative responses), but the perceived differences between omnivores and vegans based on their direct measure was smaller when compared to moralistic and eccentric impressions. These latter stereotypes could explain the lower sociability of vegans, but perceived sociability had little empirical value to explain vegans’ social (un)attractiveness and moralistic impressions were by far the most important predictor (De Groeve et al., 2021). Nevertheless, exploratory analysis pointed toward an intriguing mechanism consistent with our theorizing, namely that perceived morality predicts a higher sociability of vegetarians and vegans (vs. omnivores) when controlling for the larger, negative effect of moralistic impressions. In other words, moral perceptions may help to recruit allies (i.e., sociability’s theorized function), while the opposite is true for moralistic impressions, providing a mechanism for group polarization. Future research may test this potential role of sociability further within the context of vegan advocacy, though we did not include it in our theoretical model because its role seems redundant and sufficiently captured by social attractiveness (i.e., a willingness to affiliate rather than a perceived ability to affiliate). Specific unsociable impressions that may require further attention are being annoying, picky, and difficult – as these traits are stereotypically associated with vegans and closely related with moralistic impressions – along with being uninformed (Jordan et al., 2021). The latter trait is a competence trait, indicating a target’s perceived personal ability (rather than commitment) to attain goals (Abele et al., 2016; Landy et al., 2016). Although derogating vegans or activists on competence traits (e.g., being ignorant or naïve; Minson & Monin, 2012; Monin, 2007) seems to be relatively rare (Bashir et al., 2013; De Groeve et al., 2021; MacInnis & Hodson, 2017), perceived competence is an important variable to consider when researchers manipulate the perceived expertise of vegan advocates.

Furthermore, non-vegan targets may also differ in how they respond to the meat paradox. Construing animal-based consumption as relatively harmless may not only minimize moral impressions and inform arrogant stereotyping, but also support the stereotype that vegans are sentimental (Adams, 2003; Cole & Morgan, 2011) or that they are effeminate for caring about animals (Cole & Morgan, 2011), mirroring masculinity norms to be tough and emotionally restricted (Rothgerber, 2013). Construing animal-based consumption as avoidable by endorsing the 4Ns may be reinforced by stereotyping veg*ns reciprocally as boring for abstaining from hedonic pleasures (cf. *Nice*) (Adams, 2003; Cole & Morgan, 2011), being eccentric deviants (cf. *Normal*, see above), and having diets that are “unnatural” for humans (cf. *Natural*) (Silva-Souza, Atkinson, & Montague, 2020). The latter implies hypocrisy or that omnivorous diets are nutritionally *Necessary*. Indeed, animal products are often portrayed as both healthy and unhealthy, and this is also the case for vegans and their diets (Barnard & Leroy, 2020; Corrin & Papadopoulos, 2017; Leroy et al., 2020). In short, future research could examine whether (challenging) moral disengagement mechanisms (i.e., justifying avoidable harm) affect non-vegan targets’ impressions of arrogance, overcommitment, and additional stereotypes more specifically associated with common justifications, as well as their

interrelationships.

4.3. Considering inter- and intragroup perceptions and dynamics

A last potential criticism to our framework we anticipate is that it is one-sided and is mostly focused on how (advocating) vegans might be perceived by omnivores, while we did not touch on the intergroup perceptions non-vegans might generate among vegans or how vegans perceive their own group. Research in this domain is sorely lacking to date, yet based on sociological interactionist accounts, it can be expected that intergroup perceptions are dynamically interrelated. If omnivores view vegans as morally committed, health-conscious and eco-friendly animal lovers (De Groeve et al., 2021), then the opposite could be expected from vegans’ perceptions of omnivores. That is, vegans may see omnivores as relatively less morally committed and more cruel to animals, eco-unfriendly and unhealthy (Guerin, 2014; Povey et al., 2001). In addition, vegans might argue that moralistic traits are not intrinsically or exclusively “vegan” traits; omnivores may be perceived as overcommitted for their attachment to consuming animal products and as arrogant for privileging human hedonic interests over basic interests of animals to not suffer and die (Greenebaum, 2017). In general, vegans with stronger moral motivations are likely to report more negative judgments toward non-vegans (MacInnis & Hodson, 2021; Rosenfeld, 2019; Rothgerber, 2014b).

Focusing on vegan-vegetarian relations specifically, tensions may arise between both groups (MacInnis & Hodson, 2021; see Rosenfeld, 2018, for psychological differences). Vegans may cast vegetarians as morally inconsistent or hypocritical (Povey et al., 2001; Ruby, 2012) for abstaining from animal flesh (like vegans), yet still consuming other animal products such as dairy and/or eggs (like omnivores) (MacInnis & Hodson, 2021; Ruby, 2012), which often entails harmful treatment of farmed cows and chickens (Hooley & Nobis, 2016). Consistent with the black sheep effect (Pinto et al., 2010), MacInnis and Hodson (2021) found that vegans showed more intergroup bias than vegetarians, preferring vegans over vegetarians, especially when they are morally motivated (by animal ethics). In contrast, like omnivores, vegetarians might view veganism as an overcommitment (i.e., overly restrictive and difficult) and endorse vegetarianism pragmatically to reduce animal suffering (Markowski & Roxburgh, 2019; Ruby, 2012) as they too are often morally motivated (MacInnis & Hodson, 2021; Rosenfeld, 2018, 2019), yet they report elevated anxiety and vigilance in their interactions with (idealistic) vegans motivated by animal ethics (MacInnis & Hodson, 2021). MacInnis and Hodson (2021) speculate that vegetarians, like omnivores, may anticipate that vegans will morally reject them (Minson & Monin, 2012), which can be linked with moralistic stereotyping of vegans among vegetarians (Markowski & Roxburgh, 2019). At the same time, vegetarians share a lot of similar negative experiences as vegans for their diet (Greenebaum, 2012; MacInnis & Hodson, 2017; Markowski & Roxburgh, 2019), consistent with findings that omnivores view vegetarians and vegans similarly, but vegans as more extreme and negative (De Groeve et al., 2021; Rosenfeld, 2018).

Lastly, researchers could examine vegans’ perceptions of idealistic versus pragmatic vegan advocacy. Although vegans motivated by ethical reasons may be preferred idealistically (MacInnis & Hodson, 2021), focus group studies (Greenebaum, 2012; Guerin, 2014; Paxman, 2016) suggest that vegans often distance themselves from idealistic approaches and generally prefer pragmatic approaches when publicly engaging with omnivores. Many vegans may initially use confrontational tactics and appeal to animal ethics, but aggressively defending moral boundaries may leave them feeling isolated (Greenebaum, 2012). Consequently, vegans may distance themselves from extreme/moralistic vegans (Greenebaum, 2012; Guerin, 2014), often wait to be approached by others, try to set an example, aim to present veganism in a positive light (i.e., it is healthy, easy, and brings joy) and advocate for gradual steps (Greenebaum, 2012; Paxman, 2016). These behavioral strategies are consistent with Noelle-Neumann’s spiral of silence theory (Griffin,

2008), which states that when people think they are in a minority and experience increased public pressure to conceal their views, they will adopt a more reserved (pragmatic) attitude due to a fear of isolation (i. e., the spiral of silence). Likewise, vegans view their own group and vegetarians more negatively when the omnivorous majority is made salient and only prefer ethical vegetarians over health vegetarians when majority salience is low (Rothgerber, 2014b), which might be due to a differential salience of the “moralistic vegan” stigma.

Yet, we concur with previous authors (Bolderdijk & Jans, 2021; Mathur et al., 2021) that many vegans (as well as academics and others) may erroneously believe that moral persuasion only leads to social exclusion and backfire effects. Noelle-Neumann also describes a vocal minority of individuals who deviate from spiral of silence theory and refuse to be silenced and despaired: hardcore nonconformists – people who do not fear isolation and have nothing to lose by speaking out – and the avant-garde – intellectuals, artists, and reformers who form the vanguard of new ideas (Griffin, 2008). These vocal minorities take the first steps to break the silence (Griffin, 2008) and may influence public opinion at a latent level (Moscovici, 1980). Once minorities notice their opinion is spreading, they may become more outspoken (i.e., idealistic) (Griffin, 2008) and consistent advocacy may become more effective (Leenaert, 2017; Maass & Clark, 1984). The current article may be construed as a manifestation of shifting norms in favor of veganism in some Western countries (Leroy et al., 2020) and proposes new research ideas that allow to examine moralistic stereotyping and optimize efforts for change.

4.4. Methodological considerations

To examine the effectiveness of idealistic versus pragmatic advocacy in exerting direct and/or indirect influence on targets, fully crossed experimental designs are necessary that systematically manipulate and compare qualities of the vegan advocate (e.g., group membership), different motives (e.g., moral, health), calls for change (e.g., radical, incremental), and target groups (e.g., omnivores, vegetarians). Stereotypical impressions (e.g., morality, commitment, arrogance, overcommitment) can be operationalized with continuous multi-item scales. Researchers have developed scales for morality (Goodwin et al., 2014; Landy et al., 2016; Ruby & Heine, 2011) and commitment (Piazza et al., 2014), but not for arrogance and overcommitment, though the Hubristic Pride scale captures items related to arrogance (Tracy and Robins, 2007) and some items of the dogmatic factor of the personal judgment differential of Broome (1983) resemble overcommitment. Researchers could also develop and validate new scales to measure stereotyping using existing scale development manuals (DeVellis, 2016). Relevant scales to measure dimensions of carnist identity include the Carnism Inventory (Monteiro et al., 2017), the Diетarian Identity Questionnaire (Rosenfeld & Burrow, 2018), self-identification as a meat-eater/omnivore vs. vegetarian (Rosenfeld et al., 2019), meat attachment (Graça et al., 2016), and/or scales measuring justifications to eat meat (Rothgerber, 2013) such as the 4Ns (Piazza et al., 2015). Scales also exist to measure moral identity (e.g., Feinberg et al., 2019; Graça et al., 2016), social attraction (Bashir et al., 2013; De Groeve et al., 2021) and willingness to adopt plant-based diets (Graça et al., 2016; Rosenfeld & Tomiyama, 2020). Researchers can use scales that measure influence directly (i.e., corresponding to the advocated message) or indirectly (i.e., not directly related to the content of the advocated message), though real-life choice experiments would more reliably measure the impact of vegan advocacy on behavior (e.g., Faunalytics, 2020). To measure delayed influence, longitudinal designs would be necessary. We recommend future research to engage with existing minority influence literature to gain insight in the indirect, private and delayed influence idealistic vegan advocates may exert (see Levine & Tindale, 2014; Maass & Clark, 1984; Martin et al., 2008; Mugny & Pérez, 1991; Wood et al., 1994 for reviews). Open-ended responses in questionnaires could also provide valuable information (De Groeve et al.,

2021; Minson & Monin, 2012) as well as qualitative research methods favored by interactionist approaches such field experiments, unstructured interviews and participant observation (Stryker, 2001). Lastly, to tackle the replication crisis in (psychological) science, we recommend researchers to preregister their studies to clearly separate confirmatory from exploratory analyses and avoid questionable research practices (e. g., HARKing, *p*-hacking).

5. Conclusion

Attitudes toward vegan advocates can embody a paradox: Although vegan advocates may be admired for their morality and commitment, they may also be derogated with moralistic traits such as arrogance and overcommitment. Through an integrative framework, we have theorized that omnivores form these mixed-valence impressions of vegans to defuse threats to their carnist and moral identities and to resolve feelings of cognitive dissonance tied to eating animal products. We emphasize that our framework is intended not to be conclusive but to provide testable hypotheses for future research to scrutinize. We aim for our article to guide theoretically driven research with capacity to generate direct insights for vegan advocacy, ultimately to promote a more humane, sustainable, and healthy future.

Author contributions

The first author developed the theoretical framework and wrote the manuscript. The second author contributed to writing and editing of the manuscript. Both authors read and approved the final version of the manuscript.

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Ethical Statement

The article is part of the PhD project of the first author for which we obtained ethical approval from the Ethical Committee of the Faculty of Political and Social Sciences at Ghent University (Belgium) on November 28, 2017. The current article did not involve any participants.

Declaration of competing interest

None.

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References

- Abele, A. E., Hauke, N., Peters, K., Louvet, E., Szymkow, A., & Duan, Y. (2016). Facets of the fundamental content dimensions: Agency with competence and assertiveness-communion with warmth and morality. *Frontiers in Psychology*, 7, 1–17. <https://doi.org/10.3389/fpsyg.2016.01810>
- Adams, C. J. (2003). *Living among meat eaters: The vegetarian's survival handbook*. New York: Three Rivers Press.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (Fifth edition)*. Arlington, VA: American Psychiatric Publishing.
- Amiot, C. E., & Bastian, B. (2015). Toward a psychology of human–animal relations. *Psychological Bulletin*, 141(1), 6–47. <https://doi.org/10.1037/a0038147>

- Aquino, K., & Reed, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6), 1423–1440. <https://doi.org/10.1037/0022-3514.83.6.1423>
- Aronson, E. (1968). Dissonance theory: Progress and problems. In R. P. Abelson, E. Aronson, W. J. McGuire, T. M. Newcomb, M. J. Rosenberg, & P. H. Tannenbaum (Eds.), *Theories of cognitive consistency: A sourcebook* (pp. 5–27). Rand McNally.
- de Bakker, E., & Dagevos, H. (2012). Reducing meat consumption in today's consumer society: Questioning the citizen-consumer gap. *Journal of Agricultural and Environmental Ethics*, 25(6), 877–894. <https://doi.org/10.1007/s10806-011-9345-z>
- Barnard, N. D., & Leroy, F. (2020). Children and adults should avoid consuming animal products to reduce the risk for chronic disease: Debate consensus. *American Journal of Clinical Nutrition*, 112(4), 937–940. <https://doi.org/10.1093/ajcn/nqaa237>
- Bashir, N. Y., Lockwood, P., Chasteen, A. L., Nadolny, D., & Noyes, I. (2013). The ironic impact of activists: Negative stereotypes reduce social change influence. *European Journal of Social Psychology*, 43(7), 614–626. <https://doi.org/10.1002/ejsp.1983>
- Bastian, B. (2019). Changing ethically troublesome behavior: The causes, consequences, and solutions to motivated resistance. *Social Issues and Policy Review*, 13(1), 63–92. <https://doi.org/10.1111/sipr.12048>
- Bastian, B., & Loughnan, S. (2017). Resolving the meat-paradox: A motivational account of morally troublesome behavior and its maintenance. *Personality and Social Psychology Review*, 21(3), 278–299. <https://doi.org/10.1177/1088868316647562>
- Bianchi, F., Dorsel, C., Garnett, E., Aveyard, P., & Jebb, S. A. (2018). Interventions targeting conscious determinants of human behaviour to reduce the demand for meat: A systematic review with qualitative comparative analysis. *International Journal of Behavioral Nutrition and Physical Activity*, 15(1), 1–25. <https://doi.org/10.1186/s12966-018-0729-6>
- Bolderdijk, J. W., Brouwer, C., & Cornelissen, G. (2018). When do morally motivated innovators elicit inspiration instead of irritation? *Frontiers in Psychology*, 8(January), 1–9. <https://doi.org/10.3389/fpsyg.2017.02362>
- Bolderdijk, J. W., & Jans, L. (2021). Minority influence in climate change mitigation. *Current Opinion in Psychology*, 42, 25–30. <https://doi.org/10.1016/j.copsyc.2021.02.005>
- Brambilla, M., Carraro, L., Castelli, L., & Sacchi, S. (2019). Changing impressions: Moral character dominates impression updating. *Journal of Experimental Social Psychology*, 82(May), 64–73. <https://doi.org/10.1016/j.jesp.2019.01.003>
- Broome, B. J. (1983). The attraction paradigm revisited: Responses to dissimilar others. *Human Communication Research*, 10(1), 137–151. <https://doi.org/10.1111/j.1468-2958.1983.tb00008.x>
- Buttlar, B., Rothe, A., Kleinert, S., Hahn, L., & Walther, E. (2020). Food for thought: Investigating communication strategies to counteract moral disengagement regarding meat consumption. *Environmental Communication*, 15(1), 55–68. <https://doi.org/10.1080/17524032.2020.1791207>
- Buttlar, B., & Walther, E. (2018). Measuring the meat paradox: How ambivalence towards meat influences moral disengagement. *Appetite*, 128, 152–158. <https://doi.org/10.1016/j.appet.2018.06.011>
- Camilleri, L., Gill, P. R., & Jago, A. (2020). The role of moral disengagement and animal empathy in the meat paradox. *Personality and Individual Differences*, 164(February), 110103. <https://doi.org/10.1016/j.paid.2020.110103>
- Caviola, L., Everett, J. A. C., & Faber, N. S. (2019). The moral standing of animals: Towards a psychology of speciesism. *Journal of Personality and Social Psychology*, 116(6), 1011–1029. <https://doi.org/10.1037/pspp0000182>
- Chuck, C., Fernandes, S. A., & Hyers, L. L. (2016). Awakening to the politics of food: Politicized diet as social identity. *Appetite*, 107, 425–436. <https://doi.org/10.1016/j.appet.2016.08.106>
- Cole, M., & Morgan, K. (2011). Vegaphobia: Derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers. *British Journal of Sociology*, 62(1), 134–153. <https://doi.org/10.1111/j.1468-4446.2010.01348.x>
- Cooney, N. (2014). *Veganomics: The surprising science on what motivates vegetarians from the breakfast table to the bedroom*. Brooklyn, NY: Lantern Books.
- Cooper, J. (2007). Cognitive dissonance: Fifty years of a classic theory. *Cognitive Dissonance: Fifty Years of a Classic Theory*, 1–197. <https://doi.org/10.4135/9781446214282>
- Cornish, A., Raubenheimer, D., & McGreevy, P. (2016). What we know about the public's level of concern for farm animal welfare in food production in developed countries. *Animals*, 6(11), 1–15. <https://doi.org/10.3390/ani6110074>
- Corrin, T., & Papadopoulos, A. (2017). Understanding the attitudes and perceptions of vegetarian and plant-based diets to shape future health promotion programs. *Appetite*, 109, 40–47. <https://doi.org/10.1016/j.appet.2016.11.018>
- Craig, W. J., & Mangels, A. R. (2009). Position of the American dietetic association: Vegetarian diets. *Journal of the American Dietetic Association*, 109(7), 1266–1282. <https://doi.org/10.1016/j.jada.2009.05.027>
- Cramwinckel, F. M., Van den Bos, K., & Van Dijk, E. (2015). Reactions to morally motivated deviance. *Current Opinion in Psychology*, 6, 150–156. <https://doi.org/10.1016/j.copsyc.2015.08.007>
- Cramwinckel, F. M., van Dijk, E., Scheepers, D., & van den Bos, K. (2013). The threat of moral refusers for one's self-concept and the protective function of physical cleansing. *Journal of Experimental Social Psychology*, 49(6), 1049–1058. <https://doi.org/10.1016/j.jesp.2013.07.009>
- Danziger, S., Montal, R., & Barkan, R. (2012). Idealistic advice and pragmatic choice: A psychological distance account. *Journal of Personality and Social Psychology*, 102(6), 1105–1117. <https://doi.org/10.1037/a0027013>
- David, B., & Turner, J. C. (2001). Majority and minority influence: A single process. In C. K. W. de Dreu, & N. K. De Vries (Eds.), *Group consensus and minority influence: Implications for innovation* (pp. 91–121). Oxford, England: Blackwell.
- De Groeve, B., Hudders, L., & Bleys, B. (2021). Moral rebels and dietary deviants: How moral minority stereotypes predict the social attractiveness of veg*ns. *Appetite*, 164, 105284. [doi: 10.1016/j.appet.2021.105284](https://doi.org/10.1016/j.appet.2021.105284).
- DeVellis, R. F. (2016). *Scale development: Theory and applications*. Los Angeles: SAGE Publications.
- Dhont, K., & Hodson, G. (2014). Why do right-wing adherents engage in more animal exploitation and meat consumption? *Personality and Individual Differences*, 64, 12–17. <https://doi.org/10.1016/j.paid.2014.02.002>
- Dhont, K., & Hodson, G. (2020). *Why we love and exploit animals: Bridging insights from academia and advocacy*. In K. Dhont, & G. Hodson (Eds.). Routledge.
- Dhont, K., Hodson, G., Leite, A. C., & Salmen, A. (2020). The psychology of speciesism. In K. Dhont, & G. Hodson (Eds.), *Why we love and exploit animals: Bridging insights from academia and advocacy* (pp. 28–49). Routledge.
- Dowsett, E., Semmler, C., Bray, H., Ankeny, R. A., & Chur-Hansen, A. (2018). Neutralising the meat paradox: Cognitive dissonance, gender, and eating animals. *Appetite*, 123, 280–288. <https://doi.org/10.1016/j.appet.2018.01.005>
- Ellemers, N., van der Toorn, J., Paunov, Y., & van Leeuwen, T. (2019). The psychology of morality: A review and analysis of empirical studies published from 1940 through 2017. *Personality and Social Psychology Review*, 23(4), 332–366. <https://doi.org/10.1177/1088868318811759>
- Faunalytics (2020) "Reduce or "Go Veg"? Effects on meal choice. Retrieved from <https://faunalytics.org/reduce-or-go-veg/>.
- Feinberg, M., Kovacheff, C., Teper, R., & Inbar, Y. (2019). Understanding the process of moralization: How eating meat becomes a moral issue. *Journal of Personality and Social Psychology*, 117(1), 50–72. <https://doi.org/10.1037/pspa0000149>
- Festinger, L. (1957). *Vol. 2. A theory of cognitive dissonance*. Palo Alto, CA: Stanford university press.
- Fitzgerald, C., Martin, A., Berner, D., & Hurst, S. (2019). Interventions designed to reduce implicit prejudices and implicit stereotypes in real world contexts: A systematic review. *BMC Psychology*, 7(1), 1–12. <https://doi.org/10.1186/s40359-019-0299-7>
- Fleischman, D. S. (2020). Animal ethics and evolutionary psychology. In T. K. Shackelford (Ed.), *The SAGE handbook of evolutionary psychology: Applications of evolutionary psychology* (pp. 144–162). SAGE Publications Ltd.
- Francione, G. L. (2012). Animal welfare, happy meat, and veganism as the moral baseline. In D. M. Kaplan (Ed.), *The philosophy of food* (pp. 169–189). University of California Press.
- Freeman, C. P. (2008). *Struggling for ideological integrity in the social movement framing process: How U.S. animal rights organizations frame values and ethical ideology in food advocacy communication* [PhD Dissertation]. University of Oregon. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2009-99031-279&site=ehost-live&scope=site>.
- Goodwin, G. P. (2015). Moral character in person perception. *Current Directions in Psychological Science*, 24(1), 38–44. <https://doi.org/10.1177/0963721414550709>
- Goodwin, G. P., Piazza, J., & Rozin, P. (2014). Moral character predominates in person perception and evaluation. *Journal of Personality and Social Psychology*, 106(1), 148–168. <https://doi.org/10.1037/a0034726>
- Grassian, T. (2019). *A new way of eating: Creating meat reducers, vegetarians, and vegans*. [PhD Dissertation]. University of Kent. Retrieved from <https://kar.kent.ac.uk/76482/%0ADocument>.
- Graça, J. (2016). Towards an integrated approach to food behaviour: Meat consumption and substitution, from context to consumers. *Psychology, Community & Health*, 5(2), 152–169. <https://doi.org/10.5964/pch.v5i2.169>
- Graça, J., Godinho, C. A., & Truninger, M. (2019). Reducing meat consumption and following plant-based diets: Current evidence and future directions to inform integrated transitions. *Trends in Food Science & Technology*, 91, 380–390. <https://doi.org/10.1016/j.tifs.2019.07.046>
- Graça, J., Manuela, M., & Oliveira, A. (2016). Situating moral disengagement: Motivated reasoning in meat consumption and substitution. *Personality and Individual Differences*, 90, 353–364. <https://doi.org/10.1016/j.paid.2015.11.042>
- Greenebaum, J. B. (2012). Managing impressions: "Face-saving" strategies of vegetarians and vegans. *Humanity and Society*, 36(4), 309–325. <https://doi.org/10.1177/0160597612458898>
- Greenebaum, J. B. (2015). Veganism. In K. Albala (Ed.), *The SAGE encyclopedia of food issues* (pp. 1420–1425). <https://doi.org/10.4135/9781483346304>
- Greenebaum, J. B. (2017). Questioning the concept of vegan privilege. *Humanity and Society*, 41(3), 355–372. <https://doi.org/10.1177/0160597616640308>
- Griffin, E. (2008). *Spiral of Silence of Elisabeth Noelle-Neumann. A first look at communication theory* (Seventh edition, pp. 372–382). McGraw-Hill.
- Guerin, K. (2014). *Where's the beef? (With vegans): A qualitative study of vegan-omnivore conflict. [Undergraduate Honor's Thesis]. University of Colo.*
- Gupta, S., & Ogden, D. T. (2009). To buy or not to buy? A social dilemma perspective on green buying. *Journal of Consumer Marketing*, 26(6), 378–393. <https://doi.org/10.1108/07363760910988201>
- Hoffman, S. R., Stallings, S. F., Bessinger, R. C., & Brooks, G. T. (2013). Differences between health and ethical vegetarians. Strength of conviction, nutrition knowledge, dietary restriction, and duration of adherence. *Appetite*, 65, 139–144. <https://doi.org/10.1016/j.appet.2013.02.009>
- Hogg, M. A. (2016). Social identity theory. In S. McKeown, R. Haji, & N. Ferguson (Eds.), *Understanding peace and conflict through social identity theory. Contemporary global perspectives. Peace psychology book series* (pp. 3–27). Springer. https://doi.org/10.1007/978-3-319-29869-6_1
- Hoolley, D., & Nobis, N. (2016). A moral argument for veganism. In A. Chignell, T. Cuneo, & M. C. Halteman (Eds.), *Philosophy comes to dinner: Arguments about the ethics of eating* (pp. 92–108). Routledge.

- Hopwood, C. J., Bleidorn, W., Schwaba, T., & Chen, S. (2020). Health, environmental, and animal rights motives for vegetarian eating. *PLoS One*, 15(4), 20–24. <https://doi.org/10.1371/journal.pone.0230609>
- Howe, L. C., & Monin, B. (2017). Healthier than thou? "practicing what you preach" backfires by increasing anticipated devaluation. *Journal of Personality and Social Psychology*, 112(5), 718–735. <https://doi.org/10.1037/pspi0000085>
- Ismagilova, E., Slade, E., Rana, N. P., & Dwivedi, Y. K. (2020). The effect of characteristics of source credibility on consumer behaviour: A meta-analysis. *Journal of Retailing and Consumer Services*, 53(January), 101736. <https://doi.org/10.1016/j.jretconser.2019.01.005>
- Jordan, A. K., Dial, L. A., Barnhart, W. R., Studer-Perez, E. I., Kamath, S., & Musher-Eizenman, D. R. (2021). Fussy, fad, and frustrating?: Stigma toward picky eaters and popular dieters by peers. *Stigma and Health*, Advance online publication. <https://doi.org/10.1037/sah0000322>
- Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, 33(1), 1–27. <https://doi.org/10.1111/j.2044-8309.1994.tb01008.x>
- Joy, M. (2009). *Why we love dogs, eat pigs and wear cows: An introduction to carnism*. San Francisco: CA: Conari Press.
- Judge, M., & Wilson, M. S. (2019). A dual-process motivational model of attitudes towards vegetarians and vegans. *European Journal of Social Psychology*, 49(1), 169–178. <https://doi.org/10.1002/ejsp.2386>
- Kivetz, Y., & Tyler, T. R. (2007). Tomorrow I'll be me: The effect of time perspective on the activation of idealistic versus pragmatic selves. *Organizational Behavior and Human Decision Processes*, 102(2), 193–211. <https://doi.org/10.1016/j.obhdp.2006.07.002>
- Kunst, J. R., & Hohle, S. M. (2016). Meat eaters by dissociation: How we present, prepare and talk about meat increases willingness to eat meat by reducing empathy and disgust. *Appetite*, 105, 758–774. <https://doi.org/10.1016/j.appet.2016.07.009>
- Lacroix, K., & Gifford, R. (2019). Reducing meat consumption: Identifying group-specific inhibitors using latent profile analysis. *Appetite*, 138(March), 233–241. <https://doi.org/10.1016/j.appet.2019.04.002>
- Landy, J. F., Piazza, J., & Goodwin, G. P. (2016). When it's bad to be friendly and smart: The desirability of sociability and competence depends on morality. *Personality and Social Psychology Bulletin*, 42(9), 1272–1290. <https://doi.org/10.1177/0146167216655984>
- Lee, S. R., & Wu, K. D. (2019). Feelings of incompleteness explain symptoms of OCD and OCPD beyond harm avoidance. *Journal of Obsessive-Compulsive and Related Disorders*, 21, 151–157. <https://doi.org/10.1016/j.jocrd.2019.04.002>
- Leenaert, T. (2017). *How to create a vegan world: A pragmatic approach*. New York, NY: Lantern Books.
- Leenaert, T. (2020). Stakeholders: How pragmatic strategies can make the animal protection movement more effective. In K. Dhont, & G. Hodson (Eds.), *Why we love and exploit animals: Bridging insights from academia and advocacy* (pp. 245–259). <https://doi.org/10.4324/9781351181440-15>. Routledge.
- Leroy, F., Hite, A. H., & Gregorini, P. (2020). Livestock in evolving foodscapes and thoughtscape. *Frontiers in Sustainable Food Systems*, 4(July), 1–15. <https://doi.org/10.3389/fsufs.2020.00105>
- Levine, J. M., & Tindale, R. S. (2014). Social influence in groups. In M. Mikulincer, P. R. Shaver, J. F. Dovidio, & J. A. Simpson (Eds.), *Vol. 2. APA handbook of personality and social psychology (Group processes: I. Intragroup processes)* (pp. 3–34). Washington, DC: American Psychological Association. doi: 10.1037/14342-001.
- Lin-Schilstra, L., & Fischer, A. R. H. (2020). Consumer moral dilemma in the choice of animal-friendly meat products. *Sustainability (Switzerland)*, 12(12), 4844. <https://doi.org/10.3390/SU12124844>
- Loughnan, S., Bastian, B., & Haslam, N. (2014). The psychology of eating animals. *Current Directions in Psychological Science*, 23(2), 104–108. <https://doi.org/10.1177/0963721414525781>
- Loughnan, S., Bratanova, B., & Puvia, E. (2012). The meat paradox: How are we able to love animals and love eating animals? *Mind*, 1, 15–18. <https://doi.org/10.1177/01461672112424291>
- Loughnan, S., Haslam, N., & Bastian, B. (2010). The role of meat consumption in the denial of moral status and mind to meat animals. *Appetite*, 55(1), 156–159. <https://doi.org/10.1016/j.appet.2010.05.043>
- Maass, A., & Clark, R. D. (1984). Hidden impact of minorities: Fifteen years of minority influence research. *Psychological Bulletin*, 95(3), 428–450. <https://doi.org/10.1037/0033-2909.95.3.428>
- MacInnis, C. C., & Hodson, G. (2017). It ain't easy eating greens: Evidence of bias toward vegetarians and vegans from both source and target. *Group Processes & Intergroup Relations*, 20(6), 721–744. <https://doi.org/10.1177/1368430215618253>
- MacInnis, C. C., & Hodson, G. (2021). Tensions within and between vegans and vegetarians: Meat-free motivations matter. *Appetite*, 164, 105246. <https://doi.org/10.1016/j.appet.2021.105246>
- Markowski, K. L., & Roxburgh, S. (2019). "If I became a vegan, my family and friends would hate me": Anticipating vegan stigma as a barrier to plant-based diets. *Appetite*, 135, 1–9. <https://doi.org/10.1016/j.appet.2018.12.040>
- Martin, R., Hewstone, M., Martin, P. Y., & Gardikiotis, A. (2008). Chapter 16: Persuasion from majority and minority groups. In W. Crano, & P. Radmila (Eds.), *Frontiers of social psychology: Attitudes and attitude change* (First edition, pp. 189–212). New York, NY: Psychology Press. doi: 10.4324/9780203838068.
- Mathur, M. B., Peacock, J., Reichling, D. B., Nadler, J., Bain, P. A., Gardner, C. D., et al. (2021). Interventions to reduce meat consumption by appealing to animal welfare: Meta-analysis and evidence-based recommendations. *Appetite*, 164, 105277. <https://doi.org/10.1016/j.appet.2021.105277>
- McPherson, M., Smith-lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415–444. Retrieved from <http://www.jstor.org/stable/2678628>.
- Minson, J. A., & Monin, B. (2012). Do-gooder derogation: Disparaging morally motivated minorities to defuse anticipated reproach. *Social Psychological and Personality Science*, 3(2), 200–207. <https://doi.org/10.1177/1948550611415695>
- Monin, B. (2007). Holier than me? Threatening social comparison in the moral domain. *Revue Internationale de Psychologie Sociale*, 20(1), 53–68.
- Monin, B., Sawyer, P. J., & Marquez, M. J. (2008). The rejection of moral rebels: Resenting those who do the right thing. *Journal of Personality and Social Psychology*, 95(1), 76–93. <https://doi.org/10.1037/0022-3514.95.1.76>
- Monteiro, C. A., Pfeiler, T. M., Patterson, M. D., & Milburn, M. A. (2017). The Carnism Inventory: Measuring the ideology of eating animals. *Appetite*, 113, 51–62. <https://doi.org/10.1016/j.appet.2017.02.011>
- Moscovici, S. (1980). Toward a theory of conversion behavior. In , Vol. 13. *Advances in experimental social psychology* (pp. 209–239). New York: Academic Press. doi: 10.1016/S0065-2601(08)60133-1.
- Moscovici, S. (1985). Social influence and conformity. In G. Lindze, & E. Aronson (Eds.) (Third edition), Vol. 2. *Handbook of social psychology*. New York: Random House.
- Moscovici, S., & Nève, P. (1971). Studies in social influence: I. Those absent are in the right: Convergence and polarization of answers in the course of a social interaction. *European Journal of Social Psychology*, 1(2), 201–214. <https://doi.org/10.1002/ejsp.2420010204>
- Mugny, G., & Papastamou, S. (1980). When rigidity does not fail: Individualization and psychologization as resistances to the diffusion of minority innovations. *European Journal of Social Psychology*, 10(1), 43–61. <https://doi.org/10.1002/ejsp.2420100104>
- Mugny, G., & Pérez, J. A. (1991). *The social psychology of minority influence*. Cambridge: Cambridge University Press. <https://doi.org/10.2307/2075801>
- Mullea, A., Vermeire, L., Vanaelst, B., Mullie, P., Deriemaeker, P., Leenaert, T., et al. (2017). Vegetarianism and meat consumption: A comparison of attitudes and beliefs between vegetarian, semi-vegetarian, and omnivorous subjects in Belgium. *Appetite*, 114, 299–305. <https://doi.org/10.1016/j.appet.2017.03.052>
- Nezlek, J. B., & Forestell, C. A. (2020). Vegetarianism as a social identity. *Current Opinion in Food Science*, 33, 45–51. <https://doi.org/10.1016/j.cofs.2019.12.005>
- North, M., Kothe, E., Klas, A., & Ling, M. (2021). How to define "Vegan": An exploratory study of definition preferences among omnivores, vegetarians, and vegans. *Food Quality and Preference*, 93(March), 104246. <https://doi.org/10.1016/j.foodqual.2021.104246>
- Parkinson, C., Twine, R., & Griffin, N. (2019). *Pathways to veganism: Exploring effective messages in vegan transition*. Retrieved from <https://research.edgehill.ac.uk/en/publications/pathways-to-veganism-exploring-effective-messages-in-vegan-transi>.
- Paxman, C. G. (2016) [PhD Dissertation]. *Vegan voices: Communicatively negotiating a food-based identity*. University of Iowa <https://doi.org/10.17077/etd.03h12n4d>.
- Pendergast, N. (2014). *A sociological examination of the contemporary animal advocacy movement: Organisations, rationality and veganism*. [PhD Dissertation]. Curtin University.
- Phua, J., Jin, S. V., & Kim, J. J. (2019). The roles of celebrity endorsers' and consumers' vegan identity in marketing communication about veganism. *Journal of Marketing Communications*, 26(8), 1–23. <https://doi.org/10.1080/13527266.2019.1590854>
- Phua, J., Jin, S. V., & Kim, J. J. (2020). Pro-veganism on Instagram: Effects of user-generated content (UGC) types and content generator types in Instagram-based health marketing communication about veganism. *Online Information Review*, 44(3), 685–704. <https://doi.org/10.1108/OIR-06-2019-0213>
- Piazza, J. R., Cooper, L., & Slater-Johnson, S. (2020). Rationalizing the many uses of animals: Application of the 4N justifications beyond meat. *Human-Animal Interaction Bulletin*, 8(1), 1–22.
- Piazza, J., Goodwin, G. P., Rozin, P., & Royzman, E. B. (2014). When a virtue is not a virtue: Conditional virtues in moral evaluation. *Social Cognition*, 32(6), 528–558. <https://doi.org/10.1521/soco.2014.32.6.528>
- Piazza, J., Ruby, M. B., Loughnan, S., Luong, M., Kulik, J., Watkins, H. M., et al. (2015). Rationalizing meat consumption. *The 4Ns. Appetite*, 91, 114–128. <https://doi.org/10.1016/j.appet.2015.04.011>
- Pinto, I. R., Marques, J. M., Levine, J. M., & Abrams, D. (2010). Membership status and subjective group dynamics: Who triggers the black sheep effect? *Journal of Personality and Social Psychology*, 99(1), 107–119. <https://doi.org/10.1037/a0018187>
- Plante, C. N., Rosenfeld, D. L., Plante, M., & Reysen, S. (2019). The role of social identity motivation in dietary attitudes and behaviors among vegetarians. *Appetite*, 141 (October), 104307. <https://doi.org/10.1016/j.appet.2019.05.038>
- Povey, R., Wellens, B., & Conner, M. (2001). Attitudes towards following meat, vegetarian and vegan diets: An examination of the role of ambivalence. *Appetite*, 37 (1), 15–26. <https://doi.org/10.1006/appe.2001.0406>
- Radnitz, C., Beezhold, B., & DiMatteo, J. (2015). Investigation of lifestyle choices of individuals following a vegan diet for health and ethical reasons. *Appetite*, 90, 31–36. <https://doi.org/10.1016/j.appet.2015.02.026>
- Reese, J. (2020). Institutional change and the limitations of consumer activism. *Palgrave Communications*, 6(26), 1–8. <https://doi.org/10.1057/s41599-020-0405-8>
- Reid, A. C. (2018). *Veganism and the ethics and epistemology of disagreement: A Neo-Pascalian approach*. [PhD Dissertation]. Johns Hopkins University.
- Riverola, C., Salle, L., Ramon, U., Joan, S., & Salle, L. (2017). When do early adopters share or scare? A conceptual model Francesc Miralles Ozgur dedehayir. *ISPIM Innovation Summit*, 1–12. December.
- Rosenfeld, D. L. (2018). The psychology of vegetarianism: Recent advances and future directions. *Appetite*, 131(September), 125–138. <https://doi.org/10.1016/j.appet.2018.09.011>

- Rosenfeld, D. L. (2019). Ethical motivation and vegetarian dieting: The underlying role of anti-speciesist attitude. *Anthrozoös*, 32(6), 785–796. <https://doi.org/10.1080/08927936.2019.1673048>
- Rosenfeld, D. L., & Burrow, A. L. (2017). The unified model of vegetarian identity: A conceptual framework for understanding plant-based food choices. *Appetite*, 112, 78–95. <https://doi.org/10.1016/j.appet.2017.01.017>
- Rosenfeld, D. L., & Burrow, A. L. (2018). Development and validation of the vegetarian identity Questionnaire: Assessing self-perceptions of animal-product consumption. *Appetite*, 127(April), 182–194. <https://doi.org/10.1016/j.appet.2018.05.003>
- Rosenfeld, D. L., Rothgerber, H., & Tomiyama, A. J. (2019). Mostly vegetarian, but flexible about it: Investigating how meat-reducers express social identity around their diets. *Social Psychological and Personality Science*, 11(3), 406–415. <https://doi.org/10.1177/1948550619869619>
- Rosenfeld, D. L., & Tomiyama, A. J. (2019). When vegetarians eat meat: Why vegetarians violate their diets and how they feel about doing so. *Appetite*, 143, 104417. <https://doi.org/10.1016/j.appet.2019.104417>. April.
- Rosenfeld, D. L., & Tomiyama, A. J. (2020). Taste and health concerns trump anticipated stigma as barriers to vegetarianism. *Appetite*, 144, 104469. <https://doi.org/10.1016/j.appet.2019.104469>
- Rothgerber, H. (2013). Real men don't eat (vegetable) quiche: Masculinity and the justification of meat consumption. *Psychology of Men and Masculinity*, 14(4), 363–375. <https://doi.org/10.1037/a0030379>
- Rothgerber, H. (2014a). Efforts to overcome vegetarian-induced dissonance among meat eaters. *Appetite*, 79, 32–41. <https://doi.org/10.1016/j.appet.2014.04.003>
- Rothgerber, H. (2014b). Horizontal hostility among non-meat eaters. *PLoS One*, 9(5). <https://doi.org/10.1371/journal.pone.0096457>
- Rothgerber, H. (2017). Attitudes toward meat and plants in vegetarians. In F. Mariotti (Ed.), *Vegetarian and plant-based diets in health and disease prevention* (pp. 11–35). <https://doi.org/10.1016/B978-0-12-803968-7.00002-2>. Academic Press.
- Rothgerber, H. (2020). Meat-related cognitive dissonance: A conceptual framework for understanding how meat eaters reduce negative arousal from eating animals. *Appetite*, 146, 104511. <https://doi.org/10.1016/j.appet.2019.104511>. May 2019.
- Ruby, M. B. (2012). Vegetarianism. A blossoming field of study. *Appetite*, 58(1), 141–150. <https://doi.org/10.1016/j.appet.2011.09.019>
- Ruby, M. B., & Heine, S. J. (2011). Meat, morals, and masculinity. *Appetite*, 56(2), 447–450. <https://doi.org/10.1016/j.appet.2011.01.018>
- Sariyska, R., Markett, S., Lachmann, B., & Montag, C. (2019). What does our personality say about our dietary choices? Insights on the associations between dietary habits, primary emotional systems and the dark Triad of personality. *Frontiers in Psychology*, 10(November), 1–11. <https://doi.org/10.3389/fpsyg.2019.02591>
- Schein, C., & Gray, K. (2018). The theory of dyadic morality: Reinventing moral judgment by redefining harm. *Personality and Social Psychology Review*, 22(1), 32–70. <https://doi.org/10.1177/1088868317698288>
- Sherman, D. K., & Cohen, G. L. (2006). The psychology of self-defense: Self-affirmation theory. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 38, pp. 183–242). [https://doi.org/10.1016/S0015-0282\(16\)40998-2](https://doi.org/10.1016/S0015-0282(16)40998-2)
- Silva-Souza, G. L., Atkinson, A., & Montague, B. (2020). Perceptions about veganism. *The Vegan Society and The Ecologist*. <https://doi.org/10.13140/RG.2.2.24333.90084>
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 21, pp. 261–302). San Diego, CA: Academic Press.
- Stryker, S. (2001). Social psychology, sociological. In N. S. Smelser, & P. B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp. 14409–14413). <https://doi.org/10.1016/b0-08-043076-7/01963-x>. Pergamon.
- The Vegan Society (2014) Ripened by human determination - 70 years of The Vegan Society. Retrieved from [https://www.vegansociety.com/sites/default/files/uploads/Ripened by human determination.pdf](https://www.vegansociety.com/sites/default/files/uploads/Ripened%20by%20human%20determination.pdf).
- Thomas, E. F., Bury, S. M., Louis, W. R., Amiot, C. E., Molenberghs, P., Crane, M. F., et al. (2019). Vegetarian, vegan, activist, radical: Using latent profile analysis to examine different forms of support for animal welfare. *Group Processes & Intergroup Relations*, 22(6), 836–857. <https://doi.org/10.1177/1368430218824407>
- Tiberius, V., & Walker, J. D. (1998). Arrogance. *American Philosophical Quarterly*, 35(4), 379–390.
- Tormala, Z. L. (2008). Chapter 10: A new framework for resistance to persuasion: The resistance appraisals hypothesis. In W. Crano, & P. Radmila (Eds.), *Frontiers of social psychology: Attitudes and attitude change* (First edition, pp. 213–234). New York, NY: Psychology Press. doi: 10.4324/9780203838068.
- Tracy, J. L., & Robins, R. W. (2007). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology*, 92(3), 506–525. <https://doi.org/10.1037/0022-3514.92.3.506>
- Trapp, C. B., & Barnard, N. D. (2010). Usefulness of vegetarian and vegan diets for treating type 2 diabetes. *Current Diabetes Reports*, 10(2), 152–158. <https://doi.org/10.1007/s11892-010-0093-7>
- Trethewey, E., & Jackson, M. (2019). Values and cognitive mechanisms: Comparing the predictive factors of Australian meat intake. *Appetite*, 142(February), 104386. <https://doi.org/10.1016/j.appet.2019.104386>
- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford and New York: Basil Blackwell.
- van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, 134(4), 504–535. <https://doi.org/10.1037/0033-2909.134.4.504>
- Vandermoere, F., Geerts, R., De Backer, C., Erreygers, S., & Van Doorslaer, E. (2019). Meat consumption and vegaphobia: An exploration of the characteristics of meat eaters, vegaphobes, and their social environment. *Sustainability*, 11(14), 3936. <https://doi.org/10.3390/su11143936>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., et al. (2019). Food in the Anthropocene: The EAT–lancet commission on healthy diets from sustainable food systems. *The Lancet*, 393(10170), 447–492. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)
- Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., & Blackstone, T. (1994). Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, 115(3), 323–345. <https://doi.org/10.1037/0033-2909.115.3.323>
- Wrenn, C. L. (2012). Abolitionist animal rights: Critical comparisons and challenges within the animal rights movement. *Interface*, 4(2), 438–458.
- Wrenn, C. L. (2016). *Professionalization, factionalism, and social movement success: A case study on nonhuman animal rights mobilization*. [PhD Dissertation]. Colorado State University.
- Wrenn, C. L. (2017). Trump veganism: A political survey of American vegans in the era of identity politics. *Societies*, 7(4), 32. <https://doi.org/10.3390/soc7040032>
- Wrenn, C. L., & Johnson, R. (2013). A critique of single-issue campaigning and the importance of comprehensive abolitionist vegan advocacy. *Food, Culture and Society*, 16(4), 651–668. <https://doi.org/10.2752/175174413X13758634982092>
- Zane, D. M., Irwin, J. R., & Reczek, R. W. (2016). Do less ethical consumers denigrate more ethical consumers? The effect of willful ignorance on judgments of others. *Journal of Consumer Psychology*, 26(3), 337–349. <https://doi.org/10.1016/j.jcps.2015.10.002>