

Master's Thesis - Master Sustainable Business and Innovation

## Vegan Stigma: A Categories-Theoretical Approach

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Word count: 20,760

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# Abstract

A shift to a vegan lifestyle presents opportunities to dramatically reduce negative impacts on animal welfare, the environment, and human health. However, anticipated stigma presents a large barrier to the adoption of veganism. In researching vegan stigma, scholars typically focus their analysis on the overarching vegan category. This perspective becomes problematic when we consider that vegan sub-categories, tied to motives (i.e. animal rights, environmental, or health), may experience stigma differently. This thesis addresses this gap by approaching vegan stigma through a sub-category lens. More specifically, I explore which sub-categories may face more or less stigma. I also apply the concept of stigma dilution (Vergne, 2012) to explore how sub-category combinations (i.e. combined framings) may influence the stigmatisation of vegan identities. I take a netnographic approach and look to Twitter to explore these stigmatising interactions involving veganism. Both quantitative and qualitative data were collected, with the primary method of analysis being an interpretive thematic analysis. Stigma was measured along four main themes, in ascending order of 'stigma intensity': argumentativeness without toxic language -> argumentativeness with toxic language -> verbal aggressiveness without toxic language -> verbal aggressiveness with toxic language. The results show support for both Propositions 1 and 2. Proposition 1 proposes that the health sub-category will receive the least stigma, while Proposition 2 proposes that including more sub-categories in a framing, especially the health sub-category, will 'dilute' stigma. These findings offer advice to vegan practitioners on how to effectively navigate their stigma. For instance, vegans can choose to emphasise the health sub-category when communicating about their lifestyle, because health appeals to both pro- and anti-vegan actors. Moreover, these recommendations can be generalised to other nascent categories or innovations that may want to manage contention. By paying attention to the (potential) categorical associations of innovations, actors can frame new practices in ways that appeal to shared norms and values. Furthermore, the qualitative analysis revealed other interesting findings that help to view vegan stigma from a different perspective, such as being tied to broader political orientations or as a movement against meat consumption.

# 1. Introduction

Livestock farming has significant impacts on the environment due to overgrazing, water contamination from waste runoff, biodiversity loss due to landscape conversion, and greenhouse gas emissions (Kustar & Patino-Echeverri, 2021). Over 35% of all habitable land on earth is reserved for livestock farming purposes, compared to 11% being crops for human consumption (Ritchie & Roser, 2013). Moreover, this sector accounts for roughly 16.5% of all greenhouse gas emissions globally (Twine, 2021). GHG emissions continue to rise each year, with emissions from top dairy and meat makers increasing by 3% from 2022, and only four of the top 20 companies in the sector have net-zero goals (de Sousa, 2023). Plant-based diets show the opportunity to dramatically reduce these impacts by replacing livestock farming practices. For example, a vegan diet can lower land use by 50–86%, water use by 22–70%, and greenhouse gas emissions by 21–70% (Kustar & Patino-Echeverri, 2021).

According to the Vegan Society (2014), veganism is “a philosophy 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 animals, humans, and the environment. In dietary terms, it denotes dispensing with all products derived wholly or partly from animals.” Vegans may also avoid using any product or service that has involved an animal at some stage, such as through animal testing, as well as avoid partaking in entertainment that involves animals, such as zoos or aquariums (The Vegan Society, n.d.). Interest in vegan lifestyles has gained popularity over the past decades due to a number of factors. For example, growing awareness and concern about conditions in animal farms, environmental degradation, and climate change may play a significant role. People may also find it easier to cut animal-based products from their diets seeing that there is a growing market and availability of plant-based alternatives (Kim, 2022).

While the term vegan can bring various positive images to mind, such as innovative plant-based meat and dairy substitutes, cruelty-free cosmetics, and a lifestyle committed to the protection of animal rights and the environment, it is also subject to more negative connotations. For example, one might think of vegans as being judgmental, extreme, weak, hostile, militant, and elitists who openly disrupt valued meat-eating and food-sharing norms (e.g. Cole & Morgan, 2011; Khara, 2018; Markowski & Roxburgh, 2019). These negative perceptions can lead to a fear of eliciting stigma when talking about veganism, resulting in vegans staying silent about their values and further establishing the lifestyle as nothing more than a niche phenomenon

(Bolderdijk & Cornelissen, 2022). This presents a major barrier to the transition towards more plant-based diets and their associated sustainability benefits.

There is an increasing body of evidence that has linked plant-based lifestyles with reduced environmental impact (e.g. Chai et al., 2019; Kustar & Patino-Echeverri, 2021; Rabès et al., 2020; Scarborough et al., 2023), and positive health consequences as compared to omnivorous diets (if considered carefully)(e.g. Craig, 2009; Eichelmann et al., 2016). Vegans are now able to call upon motives other than animal well-being to justify their lifestyle choices (Janssen et al., 2016; Vestergren & Uysal, 2022). As a result, scholars typically refer to three sub-categories of vegan, each differentiated by their main motivation to avoid animal product consumption: animal rights vegan, environmental vegan, and health vegan. Furthermore, according to Statista, these three are the main reasons for participating in Veganuary of 2022 (Wunsch, 2023). These sub-categories are of interest to the present research.

Despite this, in researching vegan stigma, scholars typically group all vegan identities into one 'vegan' category. This can be problematic when we consider the perspective that each sub-category (linked to motive) may have different sources of stigma and uniquely experience stigma, for example, with varying levels of intensity. If this view is not established, we risk spreading anticipated stigma and its consequences to those who may not even possess it (to the same extent) (Link & Phelan, 2001). This thesis therefore aims to explore vegan stigma by paying attention to the differences between the sub-categories of veganism mentioned above. Such differences are implied in the study of Greenebaum (2012a), where vegans navigate stigma by appealing to the health sub-category and leaving out animal rights and environmental motives, and MacInnis & Hodson (2017), who find that omnivores evaluate vegans motivated by animal rights and environmental reasons more negatively than those motivated by health reasons. Both studies do not sufficiently explain why this is the case, and there has been no research on vegan stigma that exclusively looks at sub-category differences as part of their theoretical framework. Doing so allows for stigma-navigating strategies to be more sensitive to various motives.

Furthermore, taking a sub-category perspective opens a door to exploring another strategy which vegans can opt for to navigate stigma, one which would not leave motives unaddressed. For this, I turn to stigma dilution as conceptualised by Vergne (2012). Stigma dilution seeks to reduce the stigma of a category by forming multiple categorical associations (particularly with more neutral categories), thereby diverting stakeholder attention away from the stigmatised category. The result is an overall lower public disapproval of the entity. Considering that many vegan advocates may prefer to promote a more holistic meaning of the lifestyle, this approach is particularly insightful. Therefore, in addition to the isolated framings (or individual motives) mentioned above

(i.e. animal rights, environmental, health), by considering stigma dilution I will also look at the influence of combining sub-categories on vegan stigma.

Following this theoretical understanding, the present research is interested in the effect of framing veganism in one or multiple sub-categories (animal rights, environmental, health) on the stigmatisation of vegan identities.

The following research question is proposed:

*How do different framings of veganism affect the stigmatisation of vegan identities?*

While potentially diluting stigma, holistically framing veganism may settle concerns about how to conceptualise and define membership in the emerging vegan category. Membership may be determined by alignment with (i.e. understanding and contribution of) the goals of the overarching vegan category. Because of this, animal rights vegans are viewed as prototypical vegans and typically refuse to include vegans motivated by other means under the same umbrella category (Greenebaum, 2012b; MacInnis & Hodson, 2021). However, the present research argues that a broad, inclusive conceptualization would advance the interests of all groups by removing a significant barrier to the promotion and adoption of more plant-based lifestyles, being the anticipated stigma that is attached to the 'vegan' label. It is important to acknowledge that being too inclusive may create more confusion and thus be counterproductive, so I limit my conceptualization to only the three main vegan sub-categories, which are already dominant in vegan discourse.

Vegan stigma has been researched mainly through interviews (e.g. Markowski & Roxburgh, 2019), surveys (e.g. MacInnis & Hodson, 2017), and news articles (e.g. Cole & Morgan, 2011), leaving a large yet influential space underexplored: social media (Shamoi et al., 2022). The role of social media in shaping public discourse and spreading information is undeniable. It has become a powerful tool that is incorporated into the daily lives of billions.

Twitter (now 'X') is one of the most widely used social media platforms, with over 238 million daily users (Ahlgren, 2023). People share their opinions and often engage in discussion with one another. This presents an opportunity to observe first-hand interactions between vegans and non-vegans. As such, Twitter will be used as the primary database of this research, and a netnographic research approach is taken.

The scientific contribution of this thesis can be seen in three ways. First, it provides a nuanced perspective on vegan stigma by elaborating on sub-category differences, something that is overlooked in the literature (MacInnis & Hodson, 2021). Second, I apply Vergne's (2012) concept of stigma dilution in a new context (i.e. social

movements), showcasing the applicability of the theory to other stigmatised categories. Lastly, seeing that most of the current literature details real-world experiences, by taking a netnographic approach, I provide a richer understanding of how vegan stigma manifests in online settings.

## 2. Theory

### 2.1. Context: Stigma

The term stigma originated in ancient Greece, where criminals and outcasts were tattooed labels and burned with branding irons to showcase their immorality or lack of fitness with society. In the modern era, it has been defined as the discrimination or disapproval of an individual or group based on some characteristics that distinguish them from other members of society (Goffman, 1963).

Stigma can serve various higher-level purposes. Phelan, Link & Dovidio (2008) refer to these generally as keeping people down, keeping people in, and keeping people away. *Keeping people down* recognizes status hierarchies and the role of stigma and ideology in legitimising the exploitation/domination of less powerful individuals or groups. Kurzban & Leary (2001) make a similar argument when they refer to “coalitional exploitation” of subordinate groups by dominant groups. *Keeping people in* attempts to enforce conformity in societies by penalising individuals who fail to comply with given norms, at the same time demonstrating to other in-group members that there are consequences of non-conformity. *Keeping people away* draws on insights from evolutionary psychology. It posits that the advantage of avoiding diseases may have led to the evolution of systems that detect correlates of parasite infestation, and guide individuals to physically distance themselves from individuals who deviate from the local species-typical phenotype in terms of bodies or behaviour (Kurzban & Leary, 2001).

In the literature on vegan stigma, scholars primarily take one of two views. First, that stigma is attributable to the disruption of social conventions and norms that challenge the values and morals of the normative meat-eating practice. The rationale here is that by rejecting the normative practices, hegemonic practitioners may perceive vegans as a threat to their cultural and social identity, which is deeply intertwined with their food practices, resulting in negative stereotyping, judgement, and discrimination against vegans. Interestingly, this perspective sees vegans as holding a moral stigma, but not because they engage in activities perceived as immoral or sinful, but because of the opposite. A response by the dominant group is, therefore, as Link & Phelan (2001) note, to avoid stigmatisation by actively stigmatising others. The other common view is that stigma arises due to the perceived attitudes and approaches of some vegans to the topic, as well as the difficulty in sustaining vegan lifestyles. It may be that because of

how some advocates approach the topic (being seen as 'hostile' and 'militant'), they are seen as deviant in their behaviour and therefore want to be avoided because not many people like being (aggressively) lectured on practices one finds joy in, regardless of the moral arguments presented. Some vegans are very stringent in their conceptualization of the lifestyle, which only adds additional pressure on non-vegans and gives the impression that to be vegan, one needs to follow suit.

Sharing meals, for instance, may be disrupted by vegans. The practice of sharing meals serves a variety of social functions and represents one of the few opportunities where everyone in a household can come together to intimately discuss important topics and share experiences. If disrupted, one can miss out on such opportunities and undermine the importance of commensality. Furthermore, Twine (2014) points out some boundary maintenance and co-habitation strategies employed by vegans living in non-vegan households. They note how vegans would cook at different times, organise food separately, refuse to eat together unless others would eat vegan as well, or even seek new relationships (in a romantic sense, this preference for non-meat eaters is known as 'vegansexuality'). By doing so, vegans can be portrayed as contesting the joys and simplicity of the normative practices ('killjoy'), and as 'fussy', 'sensitive', and 'difficult'. Along this vein, Bresnahan, Zhuang, & Zhu (2016) explain how vegan stigma can be moderated by attitudes towards communal food-sharing practices. They proposed that those who valued commensality would display higher levels of stigma towards vegans because not sharing the same food can be seen as a rejection of the offer of fellowship.

Non-vegans may interpret this refusal to partake in these hegemonic practices as an "implicit indictment of anyone taking a different path" (Minson & Monin, 2011, p. 200). Furthermore, Twine (2014) argues that the very presence of a vegan at a table with meat is enough to bring into proximity the successfully sequestered presence of the violence inherent to an animal's journey. In doing so, the vegan invites a troubled self-conception for the omnivore. According to this view, a vegan therefore does not have to say anything to invoke negative feelings among non-vegans, as they embody the often unreflected meanings of the normative practice.

The reaction of non-vegans may be to judge back or take other measures to protect their self-identity, reestablish conformity, and thus legitimise animal exploitation (Greenebaum, 2012a; Rao, Monin, & Durand, 2003). For example, vegans may be pressured into eating animal products. Markowski & Roxburgh (2019) note how a vegan was bribed 200\$ to eat a steak by a family member. Participants also mentioned how their families would mock them and jokingly ask if they wanted meat. Others point out that their families would completely deny their proposition to go vegan, indicating they are not open to eating in ways amenable to vegans. Cole & Morgan (2011) highlight how news articles frequently employ humour to derogate vegans, for example by saying



vegans produce extra flatulence and thus the environmental motivations are paradoxical. Non-vegans also employ social distancing tactics and exclude vegans from their social circles, which prevent the adoption of vegan practices in fear they will be treated the same (Markowski & Roxburgh, 2019).

Stigma is also shaped by the perceived attitudes and approaches of vegans to the topic, as reflected in the study of Markowski & Roxburgh (2019), as well as some pragmatic challenges. Vegans were often assigned labels such as judgmental, annoying, overzealous, rude, and militant when contesting normative meat/dairy eating practices. On the other hand, Greenebaum (2012a) shows that vegans do not want to be associated with a 'stereotypical activist', as being confrontational and employing in-your-face tactics, recognizing that these approaches are not effective and potentially harm the vegan identity. Moreover, vegan diets are perceived to be difficult or impossible to sustain as traces of animal-derived products are widespread (Cole & Morgan, 2011; Williams et al., 2023). The restrictiveness of a vegan lifestyle clears any association with pleasurable eating experiences, and points stigmatisers to a new way to stereotype vegans, as only eating grass and leaves (Markowski & Roxburgh, 2019) and as ridiculous and extreme (Cole & Morgan, 2011; Twine, 2014).

## 2.2. Sub-category Differences

Seeing that stigma is a category-level property transferable to all group members (Vergne, 2012), perceptions of one sub-category might drastically influence how the vegan identity is viewed and vice versa. It can be assumed from the literature that animal rights, environmental, and health motivations are the most salient motives of veganism, that is, arguments concerning these three are most prominent in the public discourse. Vegan stigma may vary depending on the different motivations proponents communicate (as indicated by MacInnis & Hodson, 2017). Despite the lack of explanation on this perspective, some inferences can be made from the existing literature. These additionally call for further research.

Being motivated by ideological or ethical reasons contains a dimension of social identity and group membership that reasons related to individual health do not (Vestergren & Uysal, 2022). As people tend to be more competitive in group contexts than when acting alone (e.g. Insko et al., 1987), it may be observed that vegan practitioners motivated by animal or environmental benefits are perceived to be more challenging in their approach to the topic (as is also illustrated in the study of Greenebaum, 2012a and MacInnis & Hodson, 2017), and would therefore warrant more stigma. Such vegans are likely to identify with broader societal movements that aim for widespread institutional changes. In contrast, health vegans are assumed to be motivated to a greater extent by immediate self-interest and are thus typically not concerned with what others consume

(Janssen et al., 2016). The former two groups are therefore, in the minds of vegans and non-vegans alike, preconsciously associated with status quo-disrupting movements that forcibly attempt to suppress traditional norms and values and impose new ones upon society. Non-vegans may therefore anticipate more criticism and interrogation from the animal rights and environmental vegan sub-categories, which would warrant more dislike toward these groups.

Furthermore, at face value, animal rights and environmental vegans may appear more moral or virtuous than health vegans (depicted in the studies of MacInnis & Hodson, 2021, who refer to a 'moral hierarchy' embedded in vegan motives, and Rothgerber, 2014, who groups animal and environmental vegans as 'moral' vegans). The former sub-categories are motivated by a concern for the well-being of animals and the environment and believe that humans should avoid harming or damaging them because we have a duty to do so. Such belief systems align with mainstream moral and environmental values such as compassion, empathy, fairness, stewardship, and sustainability. The idea of treating everyone fairly and as ends in themselves is extended to encompass other (non-human) animals and the environment, emphasised through vegan narratives. Utilitarianist views explicitly begin to include such non-human entities. It is this 'moral circle expansion' that some vegans feel the need to establish, and as a result, implicitly indict the part of society that believes or behaves otherwise, holding them accountable for the exploitation and destruction of animal lives and the environment, and implying they lack desirable values. To a health vegan, their priority is to improve their own health rather than attempt to impose a new ideology that is characterised by seemingly superior morals.

Animal rights vegans and environmental vegans therefore place themselves in a position for upward moral comparisons by non-vegans. Such comparisons can be threatening to one's self-concept and can lead to defensive strategies to preserve self-image through denying virtue (or suspicion of morals), derogation (attacking other traits), and distancing (Monin, 2007). These mechanisms are characteristic of vegan stigma. Additionally, the 'intensity' of these strategies depends on anticipated moral reproach by seemingly morally superior others. Minson & Monin (2011), for example, find that the negative valence of words that omnivores associated with vegetarians is correlated to how much the omnivores expected vegetarians to see themselves as morally superior to non-vegetarians, and therefore morally reproach omnivores. This suggests that groups who portray themselves as having better morals are more likely to be met with negative reactions. This image of higher morality does not even have to be explicitly stated but is embodied in vegan identities (Twine, 2014), particularly animal rights and environmental vegans (MacInnis & Hodson, 2021).

Proposition 1: Judgement by non-vegans towards animal rights and environmental vegan sub-categories will be greater than towards the health vegan sub-category as they are seen as a social group demonising a key aspect of the self-concept of another social group. We may therefore observe that the former vegan sub-categories will experience more stigmatisation on Twitter than the latter.

## 2.3. Vegan Stigma Management

Scholars point to some of the ways vegan practitioners navigate their stigma. For instance, Greenebaum (2012a) notes how vegans use 'face-saving' techniques, such as avoiding confrontation, waiting for an appropriate time to disclose information, focusing on health benefits, and leading by example. Twine (2014) also notes how displaying cooking competence and skill can help to show the appeal of veganism. Here, familiarity with the practice of eating is re-established through the expression of vegan innovation, experimentality, creativity, or substitution. Bolderdijk & Cornelissen (2022) find that vegans self-silence about their preferences, but readily express them, and go against the majority, in the presence of allies who endorse meat-free diets. In her thesis, Howard (2021) elaborates on four general strategies of vegan stigma management: acceptance, avoidance, reduction, and denial. Overall, management strategies mostly rely on the benefit of vegan stigma being concealable (Jones, 1984), and when it is disclosed, practitioners employ a mix of strategies that attempt to minimise social repercussions or reframe veganism in a positive light. Another strategy, I propose, is to holistically frame veganism, elaborated below.

## 2.4. A New Perspective

Some scholars have noted a decrease in vegan stigma in the media in recent years (e.g. Lundah, 2018; Shamoï et al., 2022). One possible explanation for this is the increased awareness of the multifaceted benefits of plant-based diets. For example, there is a growing number of popular documentaries revealing the violence of animals in the industry, environmental impacts, as well as health implications (for example, *Dominion*, 2018, *Eating Our Way to Extinction*, 2021, *Game Changers*, 2018). This shows audiences that veganism is not just about animal rights but also beneficial for the environment and personal health. While, recently, we do see an increasing number of disruptive protests in the media that exacerbate the notion of vegans (or related groups) being hostile and militant, in an observer's mind, it may be that the growing number of alternate framings help to 'cover-up' or dilute the harm these instances would otherwise create. Building on this view, I adopt the concept of stigma dilution proposed by Vergne (2012) to offer a new stigma-navigating strategy for vegan practitioners.

Vergne (2012, p. 1032) defines stigma dilution as “the process whereby category straddlers associated with a stigmatised category dilute stakeholder attention, moving it away from that stigmatised category by forming multiple categorical associations”. The argument rests on the fact that stakeholder attention is limited and, in the case of a single categorical association, one directs all their attention to that category and can evaluate it attentively against some predefined schema. If multiple categorical associations are presented, complex signals (or cues) are sent that split or dilute stakeholder attention from any particular schema. Previous research on straddling and audience evaluation finds that this typically results in devaluation and lower appeal of something to audience members (e.g. Hsu, 2006 in the case of spanning film genres; Rao, Monin, & Durand, 2005 in the case of classical and nouvelle cuisine dishes). However, Vergne (2012) adds that straddling multiple categories can also be to the advantage of more negatively evaluated, or stigmatised entities when it straddles with more neutrally or positively evaluated categories. For instance, an arms manufacturer, already a negatively evaluated organisation, with a larger share of its industry operations in civilian activities will be less negatively evaluated than one with a larger share in military activities, *ceteris paribus* (Vergne, 2012).

Because it is assumed that vegan stigma is greater towards animal rights and environmental vegan identities, it follows that the health sub-category is more neutrally evaluated than the former two. Although we may still expect some stigma, from, for example, claims of nutrient deficiencies and association with the superordinate vegan identity, the stigma here is expected to be less (see proposition 1). In line with Vergne’s (2012) perspective, we may therefore observe less stigmatisation when combining vegan motive(s) with the health sub-category. Additionally, it is proposed that combining the animal rights and environmental vegan sub-categories will also result in less stigmatisation experienced than when advocating for anyone in isolation. This is because stakeholders are less willing to offer extreme judgments when presented with an increasing number of criteria to evaluate the entity (Vergne, 2012).

Proposition 2: stigmatisation towards vegans is diluted by combining multiple sub-categories, especially when a framing includes the health sub-category

## 2.5. Twitter Relevance

Social media allows the rapid spread of information to an unprecedented extent. The role of these platforms in shaping public perceptions is undeniable. Billions of people are exposed to vast amounts of information daily. Social media therefore presents a double-edged sword for shaping the meanings of veganism. On the one hand, it provides the opportunity to advocate for veganism and reach audiences one would otherwise not be able to. On the other hand, negative portrayals of vegans may be

repeatedly shared and thus shape a negative image of the lifestyle. Despite these implications, literature on vegan stigma has severely underexplored this domain.

With over 238 million active daily users sending out 500 million tweets per day (Ahlgren, 2023), Twitter is one of these platforms that presents a rich opportunity to explore public discourse on veganism.

## 3. Method

### 3.1. Research Design Overview

This research employs a mixed-method abductive design, combining quantitative analysis with netnography (qualitative) to study the influence of framing on vegan stigma. Abductive research, as defined by Timmermans and Tavory (2012, p. 167), is “a creative inferential process aimed at producing new hypotheses and theories based on surprising research evidence.” This approach differs from purely inductive and deductive research, allowing for iteration between data collection and theory development.

By complementing qualitative insights with quantitative data, there is a “greater depth and breadth of information which is not possible utilising singular approaches in isolation” (Almalki, 2016, p. 288).

#### 3.1.1. Netnography

Netnography is an adaptation of ethnography into the online world. It seeks to understand people’s interactions and lived experiences in contemporary digital communication contexts. The researcher is actively involved in interpreting the meaning of the collected data. As such, findings can be subjective to the researcher's unique experiences and perspectives. In conjunction with thematic analysis, it is a powerful tool to reveal recurring patterns and themes that help to explore how meanings are communicated by online communities.

Further, netnography is conducted in a context that is not fabricated by the researcher and is, therefore, more naturalistic and less obtrusive than other research methods employed in vegan stigma literature, such as interviews, focus groups, and surveys (Heinonen & Medberg, 2018; Kozinets, 2002). Additionally, interactions in online settings allow users to express their opinions with less restraint than in face-to-face interactions (Suler, 2004). This can be useful to observe intense or harsh cases of stigmatisation that may otherwise be inhibited by potential consequences in real-life settings.

Being characterised by qualitative approaches, netnography offers a unique standpoint in the literature on vegan stigma online. Recent studies using Twitter as their data source primarily rely on large-scale quantitative approaches employing web-scraping tools and automated models to interpret the text of thousands of tweets (e.g. Cooper et al., 2022; Shamoil et al., 2022). These are useful in determining overall trends and sentiment (e.g. positive, negative, neutral), and performing basic thematic analysis. However, such models depend on text and there is difficulty in incorporating other valuable content such as pictures, videos, GIFs, emojis, and article links. Additionally, humour, sarcasm, or cultural references may not be accurately interpreted. This can lead to incomplete or even misleading understandings of how vegan stigma is being communicated online. By incorporating these omitted elements, netnography enables a more contextual and full understanding of the topic.

## 3.2. Data Collection

The X platform was used as the primary data source for this thesis. An account was created specifically for this study. The advanced search feature of X was used to filter for relevant tweets. This feature allows users to search for tweets within specified criteria (elaborated in the sampling strategy). Tweet data was stored in an Excel sheet. This includes tweet URLs, engagement levels, and dates posted.

In total, 175 tweets were collected from the seven framings, making 25 tweets per framing.

### 3.2.1. Sampling Strategy

Data was collected using a stratified random sampling strategy. This involves dividing the population (i.e. all tweets about veganism) into predetermined strata, or subgroups (i.e. the different framings), and taking a random sample from each strata. Forming strata is useful when there is a great deal of variety within a population, and ensures that each strata is represented sufficiently (Taherdoost, 2016). Strata can then be easily compared during analysis. For this thesis, there are seven strata, each representing a unique way veganism is framed along the three sub-categories. Framings are characterised by the different keyword combinations in Table 1.

Random sampling ensures greater freedom from bias than non-random approaches, allowing for generalizability beyond the initial sample and reproducibility of results (Etikan & Bala, 2017).

The sampling frame for this research was the 100 most recently posted tweets from the search query. A random number generator (randomlists.com) was used to obtain 25 numbers within a range of 1-100. These were then recorded in the Excel sheet in

ascending order. Tweets corresponding to each number as they appeared in the Twitter search results were then chosen. For instance, if the first number is 3, the third tweet from the top of the search results was analysed. The link to this tweet and other data points were then recorded. This process was repeated seven times (once per framing), making for a total of 175 unique tweets. Additionally, tweet replies were also useful for analysis, thus  $n=175+(\text{number of replies})$

When filtering for relevant tweets, search results can either show 'top' tweets, i.e. those trending or containing relatively higher engagement, or 'latest' tweets, i.e. most recently posted. The top tweets are assumed to be more controversial or from actors with large followings, which may influence the stigma observed. On the other hand, the latest tweets are seen as more representative of the average user's thoughts and behaviour and are therefore more appropriate in capturing everyday stigmatising interactions.

### Keyword selection

Twitter's advanced search can filter by words, language, accounts, engagement, dates, and more. See the link below for reference:

<https://twitter.com/search-advanced>

The filters that were modified are "all of these words" and "none of these words". The rest of the filters were kept at default. All non-English interactions were translated using Google Translate. Limiting the amount of filters used provides a more representative sample of the Twitter environment.

Table 1 describes the keywords included and excluded in each search query. Each row represents a specific framing of veganism. These are grouped into single, double, or triple framings, appealing to one, two, or three vegan sub-categories, respectively. In cases of single and double framings, the 'none of these words' filter was used to exclude sub-categories irrelevant to the search. Closely related words, such as 'planet' or 'nutrition', were also excluded.

Table 1. Keywords included (all of these words) and excluded (none of these words) in search queries.

Framing type	All of these words	None of these words
Single	Animal, vegan	Environment, planet, climate, health, nutrition
	Environment, vegan	Animal, health, nutrition
	Health, vegan	Animal, environment, planet, climate
Double	Animal, environment, vegan	Health, nutrition
	Environment, health, vegan	Animal
	Animal, health, vegan	Environment, planet, climate
Triple	Animal, environment, health, vegan	

The excluded keywords were not exhaustive to maintain nuance in language use. Because of this, some tweets would contain other words appealing to irrelevant sub-categories. Moreover, the keyword search filters cannot account for added media and content in article links. It was, therefore, important to pay close attention to each tweet and ensure they accurately reflected relevant framings. If this was not the case, and the tweet was seen framing veganism differently, the next relevant tweet was selected instead.

### 3.3. Operationalisation and Data Analysis

#### 3.3.1. Operationalisation

To operationalize vegan stigma within this study, three concepts will be included: tweet stance, locus of attack, and toxicity. First, tweets can either express pro-vegan, anti-vegan, neutral, or mixed stances regarding sub-categories. A summary of stance characteristics and examples are shown in Table 2. Pro-vegan tweets portray veganism in a positive light. For example, they could showcase the advantages of or endorse vegan lifestyles, or share positive experiences and opinions. Anti-vegan tweets,



conversely, portray veganism in a negative light and attempt to diminish its appeal in some way. They may, for instance, highlight drawbacks, downplay vegan benefits, share negative experiences and opinions, or promote stereotypes. Users leaning toward one side are called pro-vegan or anti-vegan users. Neutral tweets are unbiased and do not appear to take pro- or anti-vegan stances regarding vegan topics. This is most clear when users ask their audience about veganism or express uncertainty about vegan impacts. Lastly, mixed tweets express both pro- and anti-vegan stances. This is particularly relevant when looking at combined framings: a tweet may support one sub-category while opposing the other. Both anti-vegan users and users taking a mixed stance are seen as vegan stigmatisers. For simplicity, the term ‘anti-vegan user’ is used to refer to all vegan stigmatisers.

Table 2. Summary of stance characteristics and example quotes (using the environmental sub-category). In orange are the stances that can contain vegan stigma.

Stance	Characteristics	Example Quote
Pro-vegan	Positive portrayal of veganism	“Trying to reduce my environmental footprint. I’m considering a vegan diet”
Anti-vegan	Negative portrayal of veganism	“Vegans are destroying the environment”
Neutral	Unbiased. Typically information-seeking or user uncertainty	“Is being vegan better for the environment? I’ve heard different answers”
Mixed	(In a combined framing) supporting one sub-category while opposing another	“I want to be vegan for the environment, but my health wouldn’t allow it”

In addition to tweet stance, the locus of attack of an anti-vegan user is considered. These themes are adapted from the understandings of Infante & Rancer (1996) on argumentativeness and verbal aggressiveness in communication. Argumentative communication attacks the position an individual takes on a given issue while verbal aggressiveness attacks the self-concept of the other rather than, or in addition to, their positions on topics (ad hominem fallacy). In the context of vegan stigma, these communication styles highlight two general ways stigmatisers shut down vegan advocacy and reinforce traditional norms, or *keep people in* (Phelan, Link & Dovidio, 2008). Argumentativeness is only a more sophisticated way to do so.

In further differentiating the two communication styles, we can consider the purpose or apparent intent of the tweet. Argumentative communication intends to resolve conflicts or persuade the other. As such, it is often accompanied by a more rational tone. On the other hand, verbally aggressive communication intends to psychologically harm the

other. This can be done in several ways, for instance, through character or competence attacks, threats, teasing, maledictions, ridicule, and non-verbal emblems. It is typically accompanied by more irrational or emotional tones. Table 3 summarises the different features of the two communication styles.

*Table 3. Argumentativeness and verbal aggressiveness conceptualization, adapted from Infante & Rancer (1996).*

Feature	Argumentativeness	Verbal aggressiveness
Locus of attack	Positions on issues	Other person (self-esteem)
Purpose	Resolve conflict, persuasion	Psychological harm
Tone of message	Rational	Irrational or emotional

To provide more nuance into stigma intensity, a measure of toxicity was incorporated. The term toxicity is a broad concept referring to any rude, disrespectful, or unreasonable comment that would make someone want to leave an interaction (Jigsaw LLC, 2023). To avoid overlap with verbal aggression, toxic language in this study is characterised more narrowly, by profanity (Aroyo et al., 2019) or strong negative imagery (similar to non-verbal emblems of verbal aggression, however, in this case, it may also be untargeted without clear intent to harm) (Hada et al., 2021). A comment that is accompanied by toxic language is perceived as more distressing to the target than a comment without toxic language (Young, 2004). Toxicity is highly context-dependent and subject to individual interpretation, making it a suitable measure for the present study.

Combining the two concepts, we can observe vegan stigma on a spectrum of the following four levels of stigma intensity (in ascending order): argumentativeness without toxic language -> argumentativeness with toxic language -> verbal aggressiveness without toxic language -> verbal aggressiveness with toxic language. The latter two, targeting the self-esteem of the other, are more intense forms of stigma, whereas the former two are less intense. Together, these themes are referred to as 'stigma intensity levels'.

To summarise, tweet stance captures the overall sentiment of a user toward a vegan framing, providing a baseline understanding of how veganism is being contested online. The locus of attack delves deeper into the negative sentiment that characterises vegan stigma, exploring the two main communication styles that characterise anti-vegan discourse. Finally, the toxicity dimension considers profanity and negative imagery as additional subtleties in the ways vegan identities are stigmatised. By combining the locus of attack with toxicity, we can capture a wider spectrum of negative attitudes

towards veganism expressed on Twitter, ranging from civilised disagreement to hostile attacks.

### 3.3.2. Data Analysis

This thesis is interested in the strategies and language anti-vegans use to express vegan stigma. Therefore, the main method of analysis is qualitative, and a thematic analysis was seen as the most suitable given the operationalisational approach. Thematic analysis involves “identifying, analysing, and interpreting patterns of meanings within qualitative data” (Clarke & Braun, 2017, p.297). It is useful in uncovering underlying meanings within qualitative data.

The operationalisation section details the three themes used for the analysis. The analysis was carried out on the tweets and their respective replies. The general process of analysis was as follows: First, each tweet was grouped according to its stance toward a vegan framing. This step does not consider tweet replies. Second, replies were read, and each stigmatising comment (i.e. tweet and/or reply) was categorised as either argumentative or verbally aggressive. Third, each stigmatising comment was classified as containing toxic language or not. Tweet replies are seen as ‘reactions’ to vegan framings and are therefore reflective of a user's general attitude toward vegans.

If the same user replies more than once, all replies after their initial reply were not considered. This controls for spam and one user influencing the quantitative results drastically. It is also seen as most representative of a user's ‘immediate reaction’ to a vegan framing. Furthermore, a reply to a reply was not considered, as this may send or emphasise other unrelated cues. In other words, only initial replies to the tweet itself were included in the analysis.

During analysis, non-text content from users, such as photos, videos, GIFs, links, and referenced media was analysed. This can contribute to the overall tone, intent, and broader context beyond the text itself. For instance, a tweet critical of the health sub-category of veganism accompanied by a picture of a malnourished person is more degrading than the same tweet containing only text. Further, usernames and user bios were examined briefly. These could give more insight into the underlying assumptions and social values contributing to vegan stigma. For example, a user with “BBQ every day” in their bio might suggest a strong negative bias toward veganism or a sub-category in particular.

In the results section, numerous example quotes are given alongside interpretation to clarify why each case is deemed as argumentative or verbally aggressive, and as non-toxic or toxic. This adds transparency to my thought process and research results.

While qualitative methods were of primary concern for this thesis, a complementary quantitative analysis was carried out. This consisted of, generally, engagement levels, and more specifically, of tweet stances and stigma counts per framing. Due to the large focus on communication styles, as well as having a low sample size, no statistical tests were conducted. Nevertheless, the quantitative analysis helped to provide general overviews of the extent to which veganism is contested online and allowed for interesting insights to be made.

In comparing the amount of stigmatisation received by each framing, it was important to control for varying amounts of total replies for each framing. It was expected that some framings would generate more engagement than others, and therefore have more stigmatising replies. As a result, rather than looking at the absolute amount of stigmatising comments for each framing, a relative amount was mainly used for analysis:

$$\left[ \frac{\text{number of stigmatising comments}}{\text{total number of comments}} \right] * 100 = \text{relative stigma} \\ \text{(per intensity level)}$$

Note that the term ‘comment’ is used throughout this thesis to refer to both tweets and replies collectively.

### 3.4. Ethical Considerations

Concerning tweet collection and analysis, informed consent is not necessary. Netnography recognizes the researcher taking the role of most internet users, as a lurker (Lehner-Mear, 2019). Online, users expect that they are under some level of observation.

Furthermore, users grant Twitter the ability to “use, copy, reproduce, process, adapt, modify, publish, transmit, display and distribute such Content in any and all media or distribution methods now known or later developed [and] to make your Content available to the rest of the world and to let others do the same” (Twitter, 2023, p.13). Tweets are public acts made deliberately for public consumption.

Anonymity, however, should be guaranteed even if users are not made aware of the research and explicitly asked for consent. Online identities may contain information traceable to offline identities and should therefore be understood as being ‘real to participants’ (Lehner-Mear, 2019). Especially given the contentious nature of the topic of this study, anonymity is seen as highly important.

It is possible to trace quotations back to open-access websites even when the user and host websites have been anonymized (Eynon et al., 2009). Some strategies were used to prevent this. In analysis, original passages were considered, but in discussing these,

quotations were rephrased as much as possible, and uncommon phrases or words were replaced with more common and generic ones, all while keeping the overall thrust and content of the message the same (Lehner-Mear, 2019).

## 4. Results

The following section details the results obtained for this thesis. General findings will be presented, such as descriptive statistics of the engagement of the sample, before going into tweet stances and the stigma experienced within each framing. Inferences are made along the way. It is important to note that no statistical tests were carried out during the quantitative analysis, so these inferences should be taken with a grain of salt. The next section follows a more qualitative approach, diving deep into the isolated (i.e. single) and combined (i.e. double or triple) framings and the specific language that characterises stigma. Representative example quotes and their interpretation is presented here. At the end of this section, a summary of the results is offered, including tables with common verbally aggressive and argumentative comments found during the analysis (Tables 8 and 9, respectively).

For each framing, 25 tweets were collected, making for 175 tweets analysed. The date on which collected tweets were posted ranged from October 8th, 2023 to March 16th, 2024. Table 4 below summarises some engagement criteria of the observed data.

*Table 4. Descriptive statistics of the engagement criteria used over the entire sample of tweets (n=175).*

	n (=number of tweets collected)	Number of tweets with $\geq 1$ reply/retweet/like	Average	Range
Replies	175	41	1.88	0 to 84
Retweets	175	52	5.09	0 to 263
Likes	175	104	10.69	0 to 244

Each tweet had an average of 1.88 replies, 5.09 retweets, and 10.69 likes. However, each criterion had a large range, with some generating much more engagement than others. This suggests that most tweets received little to no engagement, with a few receiving noticeably more. This can be due to the type of content included in a particular tweet, such as which framing is used.

Looking at the total number of replies for each framing as an indicator of engagement levels, we can see that the animal rights framing resulted in noticeably higher engagement than all other framings (see Table 7). Animal rights framings were therefore responsible for generating the most engagement.

Regarding the stance a tweet took on veganism, it was observed that 136 out of 175 tweets took a ‘pro-vegan’ stance, while 26 were interpreted as ‘anti-vegan’. This leaves 13 tweets that were either interpreted as neutral (7/13) or as mixed tweets (6/13). The fact that most tweets took a pro-vegan stance suggests veganism has strong online advocacy, indicating potentially growing interest in and people actively promoting the lifestyle. The number of tweets with anti-vegan and mixed stances points to existing tensions both between vegan and non-vegan groups as well as within vegan sub-categories. Finally, a small number of neutral tweets may mean people are less interested in having neutral conversations about the implications of veganism and more interested in promoting or going against the lifestyle. Table 5 below highlights these tweet stances as well as the different framings used.

*Table 5. Tweet stance toward veganism. Abbreviations used: AR (animal rights), E (environmental), H (health).*

Stance toward veganism	AR	E	H	AR/E	AR/H	E/H	AR/E/H	Total
Pro-vegan	20	15	20	19	18	19	25	136
Anti-vegan	3	8	3	5	1	6	0	26
Neutral	2	2	2	0	1	0	0	7
Mixed	0	0	0	1	5	0	0	6

A triple framing was the only framing that resulted in all pro-vegan tweets, while the rest had at least one anti-vegan, neutral, and/or mixed tweet. This indicates that it is most common to use a triple framing when promoting veganism. In this sense, vegan advocates want to portray veganism holistically, to communicate more benefits and sound more convincing. Further, the fact that every other framing contained at least one anti or mixed tweet suggests that users would rather use single or double framings when going against veganism. This might be to save time and effort when making a tweet against veganism, or again, to sound more convincing.

Most tweets taking a pro-vegan stance suggest veganism is a growing movement with strong online support. Tweets taking an anti-vegan stance, on the other hand, point to a user base that is acting as a counter-force to the movement by providing reasons to stay clear of vegan lifestyles, either by attacking vegan identities or offering logical

arguments that go against vegan beliefs and values. Either way, these are also attempts to create appeal for more traditional roles and identities. This focus on support or dissuasion means people are more interested in promoting or obstructing the vegan movement rather than having a balanced discussion.

Another interesting finding is for the framing of animal rights and health, which contains the highest amount of mixed tweets (5). Three of the five were pro-animal rights and anti-health, while the remaining two were anti-animal rights and pro-health. This suggests that these two sub-categories seem to generate the most tension within the vegan category as if they do not want to be grouped under the same label ‘vegan’. The same goes for animal rights and environmental sub-categories, although to a lesser extent. It could be that there is contention within vegan groups because some motives ‘fit’ better with the overarching vegan category, while others do not align as well (Greenebaum, 2012b; MacInnis & Hodson, 2021).

Going into stigma observations, Table 6 below highlights some metrics relative to the stance an original tweet takes on vegan topics. Columns “stigma in original tweet” and “stigma in replies” are not mutually exclusive, meaning a tweet can show stigma in the tweet itself as well as in the replies.

*Table 6. Tweets containing stigma, either in the tweet itself, or the replies to the tweet.*

Stance on Vegan topics (sample size)	Number of tweets with stigma	Stigma in the original tweet	Stigma in replies
Pro-vegan (136/175)	16	n.a.	16
Anti-vegan (26/175)	26	26	2
Neutral (7/175)	1	n.a.	1
Mixed (6/175)	6	6	1

In total, 46 tweets contained some form of stigma. This can be broken down as follows: 26 anti-vegan tweets contained stigma in the tweets themselves, two of which additionally contained stigma in the replies, 16 pro-vegan tweets contained stigma in the replies, as did one neutral tweet, and stigma within the remaining six mixed tweets was observed in the tweets themselves, one of which additionally contained stigma in the replies.

Going further, Table 7 below summarises the total counts of stigma for each framing, as well as their relevant stigma intensity levels. To control for varying engagement levels (see [section 3.3.2.](#)), a percentage score was obtained to represent the proportion of comments that contained stigma toward vegans out of all comments (referred to as ‘relative stigma’). This was done by simply dividing the number of cases of stigma (per

intensity level) by the number of comments for each framing. The total number of comments is derived by adding +25 (the number of tweets collected per framing) to the total number of replies per framing. Visualisations of this data can be seen in Figures 1 and 2. Furthermore, Table 7 aggregates single, double, and triple framings (i.e. containing one, two, or three sub-categories) along with their respective cumulative stigma observations. This is to illustrate Proposition 2, which generally concerns the effect of combining sub-categories on the stigma observed.

Table 7. Stigma observations per framing at the reply level (percent of replies containing stigma).

Framing ->	AR	E	H	AR/E	AR/H	E/H	AR/E/H	Total
Total comments (= # total replies + 25)	235	26	26	40	108	35	34	504
Verbal Aggression with toxic language	22 (9.36%)	2 (7.69%)	0	3 (7.50%)	7 (6.48%)	0	1 (2.94%)	35 (6.94%)
Verbal Aggression without toxic language	55 (23.40%)	4 (15.38%)	1 (3.85%)	8 (20.00%)	16 (14.81%)	1 (2.86%)	2 (5.88%)	87 (17.26%)
Total Verbal Aggression	77 (32.77%)	6 (23.08%)	1 (3.85%)	11 (27.50%)	23 (21.30%)	1 (2.86%)	3 (8.82%)	122 (24.21%)
Argumentativeness with toxic language	3 (1.28%)	0	0	0	1 (0.93%)	2 (5.71%)	0	6 (1.19%)
Argumentativeness without toxic language	36 (15.32%)	3 (11.54%)	2 (7.69%)	3 (7.50%)	6 (5.56%)	4 (11.43%)	1 (2.94%)	55 (10.91%)
Total Argumentativeness	39 (16.60%)	3 (11.54%)	2 (7.69%)	3 (7.50%)	7 (6.48%)	6 (17.14%)	1 (2.94%)	61 (12.10%)
Total number of comments containing stigma	116 (49.36%)	9 (34.62%)	3 (11.54%)	14 (35.00%)	30 (27.78%)	7 (20.00%)	4 (11.76%)	183 (36.31%)
<b>Framing (single, double, or triple) -&gt;</b>	<b>Single</b>			<b>Double</b>			<b>Triple</b>	<b>/</b>
Total comments (= # total replies + 25)	287			183			34	/
Verbal Aggression with toxic language	24 (8.36%)			10 (5.46%)			1 (2.94%)	/
Verbal Aggression without toxic language	60 (20.91%)			25 (13.66%)			2 (5.88%)	/
Total Verbal Aggression	84 (29.27%)			35 (19.13%)			3 (8.82%)	/
Argumentativeness with toxic language	3 (1.05%)			3 (1.64%)			0	/
Argumentativeness without toxic language	41 (14.29%)			13 (7.10%)			1 (2.94%)	/



Total Argumentativeness	44 (15.33%)	16 (8.74%)	1 (2.94%)	/
Total number of comments containing stigma	128 (44.60%)	51 (27.87%)	4 (11.76%)	/

As mentioned before, framings containing animal rights had noticeably more replies than other framings. Even when combined with a health or environmental framing, the two with the least number of replies, the effect of animal rights topics provoking engagement was observed, raising the number of replies to the second and third highest, respectively. However, when combined with both health and environmental sub-categories (i.e. triple framing), the effect of animal rights on engagement is noticeably weaker. This suggests that, when talking about veganism, animal rights topics will bring about more discussion, agreement, or disagreement, and that this effect weakens by including more sub-categories. On the other hand, the health and environmental sub-categories received the least replies (one reply each), pointing to the potential unwillingness to interact with these sub-categories.

Regarding the single, isolated framings, the results show support for Proposition 1 that the health sub-category is expected to receive the least stigma out of the three sub-categories. The percentage of comments containing any form of stigma for the individual sub-categories was 49.36% for animal rights, 34.62% for environmental, and 11.54% for health. This suggests that vegans may be less likely to experience attacks, both arguments or verbal aggression when talking about health aspects.

Looking at combined framings, when the health sub-category was included in framings of veganism, stigmatisation of vegans was lower than in those framings not including the health sub-category. In ascending order, the framings with the least relative amount of stigma were health (11.54%), animal rights/environmental/health (11.76%) environmental/health (20.00%), and animal rights/health (27.78%), followed by all other framings. This suggests that when any sub-category or sub-categories of veganism are framed alongside health, stigma decreases relative to the more stigmatised categories in isolation, in part supporting Proposition 2.

In addition, by aggregating framings into single, double, or triple framings, we can also see alignment with Proposition 2, which suggests that, generally, including more sub-categories in a framing will result in less stigma. This is based on less willingness of audiences to offer extreme judgement towards an entity when presented with an increasing number of criteria (i.e. when straddling more sub-categories). By going from single to double to triple framings in general, the relative amount of stigma decreased from 44.60% to 27.87% to 11.76%, respectively.

## Stigma count

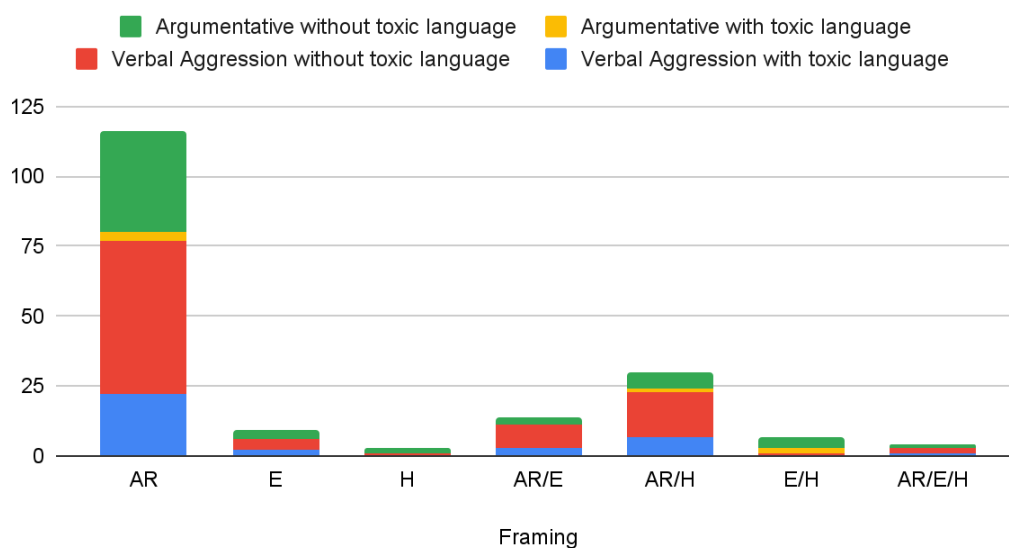


Figure 1. Stigma count per framing (absolute stigma)

## % of messages containing stigma

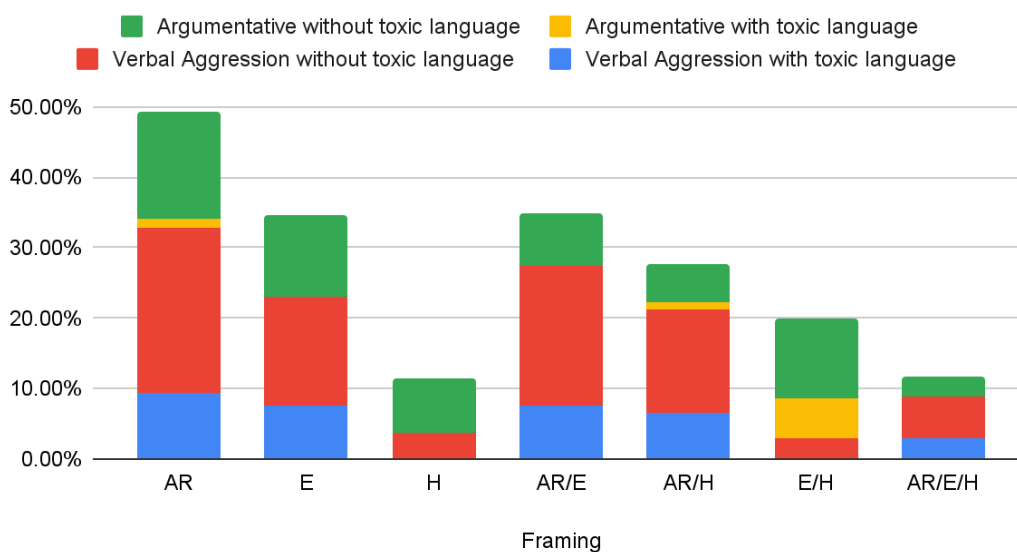


Figure 2. Percentage of comments containing stigma per framing (relative stigma)

### 4.1. Isolated Framings

The following sections are dedicated to framings containing one sub-category. Each framing contains sub-sections for the appropriate stigma intensity levels (i.e. themes), and all those themes that were not found are not included. A table of representative

quotes is included under each code, followed by interpretations of each stigmatising quote. This structure also applies to the ‘combined framings’ section that follows.

#### 4.1.1. Animal Rights

##### Verbal aggression with toxic language

Tweet	Stigma reply example
<p>1. “STOP KILLING ANIMALS FOR FASHION. #Vegan”</p> <p>[link to PETA article on the fashion industry] [picture of a crocodile being skinned]</p>	<p>“Why? Delicious”</p> <p>[picture of a dead animal held upside down]</p>
<p>2. “People on the carnivore diet justify consuming animals because they are less intelligent. According to them, vegans can eat people on the carnivore diet”</p>	<p>“The opposite analogy is more appropriate because vegoons are as stupid as a box of tools. Although, I would not eat a vegoon - too many toxins and no meat.”</p>
<p>3. “Fish feel pain. We torture them in trillions every year. Do not hurt animals anymore. Live vegan. Go to my bio to help.”</p>	<p>“You are gay as fuck. All living things kill others to eat. It’s called a goddamn food chain, shut up dumbass.”</p>
<p>4. Vegans really are annoying as fuck.. WE GET IT you don’t eat animals MY GOD</p>	

Tweet number 1 urges audiences to stop killing animals for fashion and includes a graphic picture involving animal cruelty as well as an article with more information on how animals are abused in the fashion industry. This tweet is met with a picture of a dead animal, which looks to be a pig, held upside down, along with a ridiculing caption. By asking “why?”, the anti-vegan dismisses the motives and reasoning portrayed in the post, as if these are not convincing enough for them to fully consider it. Saying that the lifeless pig in the picture is ‘delicious’ is a way to mock and provoke the vegan using strong imagery. The anti-vegan seems to be concerned with the dietary aspect of veganism, despite no mention of this in the tweet itself. They imply that taste alone will win over animal welfare. This reply intends to ridicule and mock vegans.

Tweet number 2 attacks the intelligence of carnivore diet practitioners, who are those taking on a diet consisting solely of animal products. As a result, this post is met with

several replies similarly attacking the intelligence of vegans. In the example reply, the anti-vegan calls vegans as stupid as a box of tools, a direct and rude attack on the intelligence of vegans. The derogatory term 'vegoon' is used to emphasise this lack of intelligence, as it is seen as an attempt at a humorous play on words combining vegan and goon, meaning a foolish person. Additionally, the anti-vegan shares the stereotype that vegans are unhealthy and undesirable by saying they are full of toxins. The intent here is to ridicule and mock vegans.

Tweet number 3 advocates for the livelihoods of fish by claiming that these animals feel pain, and we therefore torture them. Interestingly, this pro-vegan tweet was the only one including fish in their animal rights framing rather than more commonly factory-farmed species such as cows, pigs, and chickens. Nevertheless, an anti-vegan sees this as an opportunity to throw homophobic slurs at the vegan in addition to attacking their intelligence, both of which aim to hurt the OP ('Original Poster' of the tweet) personally. Further, the anti-vegan uses the excuse of "all living things kill others to eat" to justify animal exploitation, which completely ignores the moral difference between predation in nature and the way humans raise and consume factory farm animals. The intent here is to ridicule vegans.

Tweet number 4 showcases an anti-vegan tweet calling vegans annoying for communicating about their lifestyles and emphasising this frustration by using vulgar and blasphemous language. The anti-vegan perpetuates stereotypes of vegans being militant or judgmental. By saying "We get it", the anti-vegan disregards arguments for veganism and trivialises the matter. The intent here is to ridicule vegans.

Verbal aggression without toxic language

Tweet	Stigma reply example
5. “On our show, we received a message from a vegan saying that meat-eaters who pretend to care about their pets and animal cruelty are hypocrites. Are they right?”	“Vegans are hypocrites. Plants have feelings too”
6. “Piglets at farms go through horrible treatment such as their teeth-clipping, etc. All this is paid for by non-vegan. Stop supporting this cruelty. Go Vegan #LiveVegan”	“‘All this is paid for by non-vegans.’ But you alleged ‘animal lovers’ support farmers to purposely and violently massacre quadrillions of living beings just to have a soyburger and kale smoothie.”
7. “I’m amazed that no vegan has cancelled the song ‘Something in the Way’ [by Nirvana] for the lyric: “It’s okay to eat fish ‘cause they don’t have any feelings”. Some complain about every single thing nowadays.”	

Tweet number 5 asks the audience about their opinion about a vegan saying that meat-eaters are hypocrites if they claim to care about pets or other animals. It is met with replies calling vegans hypocrites as well for preaching about animal welfare while consuming plants, which the anti-vegan claim similarly have feelings. With the knowledge that plants do not possess a central nervous system like animals do, saying that plants have feelings in this way is seen as mocking and provoking vegans rather than offering logical arguments. As will be seen, this claim is common when going against the animal rights sub-category of veganism. It is a way anti-vegans equate animals to plants, implying that killing a plant is no different than killing an animal. Calling vegans hypocrites gives the impression that vegans go against their principles of reducing harm and therefore implies veganism is illogical and counterproductive. The reply has the intent to ridicule and mock vegans.

Tweet number 6 highlights some of the cruelties baby pigs go through in factory farms and then goes on to place the burden of these cruelties onto non-vegans. An anti-vegan, unsettled with this blame, calls vegans ‘alleged’ animal lovers, suggesting they pretend to care for animals, and exaggerates the amount of wildlife killed in the process of farming for crops. They imply that vegans are hypocrites for only blaming non-vegans for animal deaths. Additionally, the anti-vegan draws on stereotypes of a lack of vegan food options. Together, this suggests that veganism goes against its values, sacrificing

food/nutrition options for an even greater number of animal deaths. The intent here is to ridicule and mock vegans.

The OP of tweet number 7 expresses dissatisfaction with how sensitive society has become. They are surprised that a song which downplays vegan beliefs has not been wiped off the internet, claiming that some people, particularly vegans, complain about everything. In doing so, they appeal to the stereotype that vegans are overly sensitive and militant. As a result, it is implied that vegan beliefs are unjustifiable and erroneous, as they are merely a product of a society that has become too sensitive to seemingly insignificant issues, such as the lyrics to a song. The intent here is to ridicule vegans.

Argumentative with toxic language

Tweet	Stigma reply example
8. "On our show, we received a message from a vegan saying that meat-eaters who pretend to care about their pets and animal cruelty are hypocrites. Are they right?"	"I would eat a burger while petting a cow"
9. "On our show, we received a message from a vegan saying that meat-eaters who pretend to care about their pets and animal cruelty are hypocrites. Are they right?"	"Most of my pension is spent on the care of my pets. Veganism is not good for the environment. A lot of the veggie rubbish is imported. They shouldn't consume imported crap, only local products."

Example 8, a reply to tweet number 5, argues that meat-eaters are not hypocrites, because they can enjoy consuming animal products while still showing kindness towards animals through physical affection. The anti-vegan's use of language can bring about disturbing imagery to a vegan that goes against vegan values, however, they do not directly attack vegan identities. The main intent of this reply is to invalidate the vegan animal rights belief that non-vegans are hypocritical.

Example 9 is another argument against tweet 5. The anti-vegan depicts how much they care for their pets, allocating most of their pension toward their animals. They make it clear that meat-eaters can care for their non-human companions. Further, the anti-vegan attacks the environmental sub-category, arguing that vegan food is environmentally damaging because most of it needs to be imported. Using loaded words such as 'rubbish' and 'crap', however, evoke a disrespectful attitude toward vegan foods. The main intent here is the same as in Example 8, to invalidate vegan animal rights beliefs.

Argumentative without toxic language

Tweet	Stigma reply example
10. "People on the carnivore diet justify consuming animals because they are less intelligent. According to them, vegans can eat people on the carnivore diet"	"Meat is nutritious and has excellent taste and texture. It contributes to a healthy and complete diet."
11. "Fish feel pain. We torture them in trillions every year. Do not hurt animals anymore. Live vegan. Go to my bio to help."	"Plants feel pain as well..." [link to BBC article titled "Plants Have Feelings Too"]
12. "There are two options: one, have a plant-based diet and unfortunately harm/kill some small animals and insects. Two, mass-breed animals and consume them and their secretion. In the process, they are also fed plants, so you also cause the first option. Vegans choose option one."	"Option two for a nutritionally complete diet"

Example 10, which is an argument against tweet number 2, brings up the health sub-category of veganism. The anti-vegan presents meat as having excellent taste and texture, as well as contributing to a healthy and complete diet. The latter point is also brought up by an anti-vegan in example number 12. These arguments are logical and generally accepted in society. Moreover, it is unlikely that such comments will cause immediate distress to a vegan user. Nevertheless, these tweets intend to invalidate vegan health beliefs.

Example 11, a reply to tweet number 3, draws on the argument that plants feel pain. However, there is a link added in the reply, which leads to a BBC article on how plants can use different senses to adapt to their surroundings. The article also adds how when wounded or under attack, plants release compounds that act to lessen their injuries. Overall, the anti-vegan attempts to take a rational approach to support the claim that plants feel in a similar way to animals. The main intent is to invalidate the vegan animal rights belief that consuming plants results in less harm to beings.

#### 4.1.2. Environment

##### Verbal aggression with toxic language

Tweet	Stigma reply example
13. "There are people in Palestine who have to eat grass to survive."	"We call them vegans for fucks sakes. At least they stay committed to saving the environment."
14. "Some say cows are bad for the environment because all they do is eat plants and shit ... Just like Vegans [4 laughing emojis]" [link to TikTok video with laughing audio in the background]	

Tweet number 13 attempts to spread awareness about the inhumane livelihoods of the people of Palestine, saying how they must eat grass to survive. One anti-vegan retweets this and sees it as an opportunity to make a disrespectful joke about the situation, using vulgar language. They call the people eating grass vegans. Their remark appeals to the stereotype of vegans lacking food options, but more specifically as only eating grass. The main intent here is to mock vegans.

Tweet number 14 similarly makes a disrespectful joke about vegans, using vulgar language to compare them to cows, saying all they do is 'eat plants and shit'. Additionally, there is a link to a TikTok meme with laughing audio and a photo of a cow under a caption repeating the same joke. The anti-vegan sees veganism as having a lack of food options by likening vegan food to cow food, or 'plants', as well as claiming veganism is bad for the environment. The main intent here is to mock vegans.

##### Verbal aggression without toxic language

Tweet
15. "Imagine being vegan. Never listen to a vegan. Mentally weak, eating leaves every day. #vegan #climatechange #environment #plant..."
16. "Doing my part for the environment by having a vegan breakfast" [picture of cigar in ashtray]
17. "They say cows are bad for the environment because they only eat plants and fart. Similar to what vegans do."



Tweet number 15 shows complete disapproval of vegan identities as well as dismissing the mere thought of being vegan. The starting sentence “Imagine being vegan” is given a sarcastic undertone, and suggests that veganism is a strange or undesirable concept to the OP that is not worth serious consideration. The anti-vegan tells their audience to never listen to vegans and spreads the idea that they are mentally weak and only eat leaves. The hashtags add more sarcasm and mockery to the anti-vegan tweet, as vegan-related hashtags were more often observed to express positive views of vegan topics. The main intent here is to ridicule and mock vegans.

Tweet numbers 16 and 17 both perpetuate the stereotype of vegans lacking food options. In tweet 16, the anti-vegan considers a cigar as a ‘vegan breakfast’. Besides this, the tweet may imply that by being vegan and having less environmental impact, one must sacrifice actual meals with food (and consume health-damaging products instead). It may also give the impression that vegan-friendly meals are too difficult to come up with, and nicotine is an easy alternative that suppresses hunger. Overall, the tweet uses humour to trivialise vegan efforts and give it a negative image. The intent here is to mock and ridicule vegans. Tweet 17 shares the same joke as in tweet 14, likening vegan food to cow food, but with less vulgar language. The main intent is to mock vegans.

Argumentativeness without toxic language

Tweet
18. “Young people like me are going vegan. That’s bad for the environment” [link to Fox News article discussing impacts of vegan product farming]
19. “I buy 2nd hand leather rather than vegan leather, as the latter is much less sustainable and worse for the environment.”
20. “Vegans argue that the lifestyle is good for the environment but this is often false, ESPECIALLY the implications of textiles.

Tweet number 18 claims veganism is bad for the environment and therefore denies the belief of veganism as an environmentally friendly alternative to consumption. The tweet includes a link to an article that discusses the impacts of farming for various vegan products such as soy. The article uses words such as “might”, “often”, and “likely”, and links articles when discussing more specific figures. The article additionally encourages vegans to think critically about where their food comes from. Overall, there is a scientific and logical tone portrayed throughout the article. The tweet intends to invalidate vegan environmental beliefs.

Tweet numbers 19 and 20 claim that veganism can be worse for the environment. They both argue that textiles are significantly worse than their animal-derived alternatives. Tweet 19 expresses how 2nd hand leather is superior to vegan leather, made of plastics, from an environmental perspective. This belief rests in sustainability values of reusing and extending a product's useful life as opposed to manufacturing new products, particularly using environmentally pervasive chemicals. Tweet 20 emphasises the environmental implications of vegan textiles in general. These claims are likely due to most vegan textiles being made from plastics which are known to be environmentally damaging. Both tweets thus have the main intent of invalidating vegan environmental beliefs.

#### 4.1.3. Health

##### Verbal aggression without toxic language

<b>Tweet</b>
21. "Extremists (carnists, vegans, keto, etc.) are among the WORST types of health accounts to follow."

Tweet number 21 groups vegans as extremists, within the same categories as carnivores and ketogenic diet practitioners. This suggests that these groups are too strict with their diet and have little room for flexibility. Additionally, by claiming they are among the 'worst' types of health accounts to follow, the OP indirectly tells their audience to stay away from these users. This can prevent vegan advocates from gaining support and spreading more vegan awareness. The main intent of this tweet is to ridicule vegans.

##### Argumentativeness without toxic language

<b>Tweet</b>
22. "If you're vegan and insult meat eaters, you are never allowed to consume meat again even if it's for your health. I consume vegan food so you cannot say I am not allowed to. You can't judge things then indulge if it suits you."
23. "To maintain metabolic well-being on a vegan diet, you would need supplements. Humans did not evolve taking supplements. Go carnivore instead. #vegan #carnivore"

Tweet number 22 creates the dichotomy that veganism must either be a rigid, life-long dedication to abstain from meat, or that practitioners must not judge meat-eaters. In other words, vegans cannot be hypocritical. In this light, the anti-vegan is rather lenient as they show no aggression toward those vegans who refrain from judgement. Additionally, the anti-vegan uses the argument of eating vegan food to justify eating meat, further suggesting they have no problem with being associated with veganism in general. The anti-vegan, however, invalidates in part the vegan belief of spreading awareness and exposing traditional meat-eating practices, as judgement is seen to do so.

Tweet number 23 draws on the potential health drawbacks of a vegan diet, claiming that vegans would need to use supplements for good metabolic health. They also point out how unnatural it is to use supplements by appealing to the argument that, historically, humans have never used such means and have always consumed meat. Further, telling the audience to go carnivore instead implies that a carnivore diet is superior in terms of health, completely ignoring the health benefits of fruits and vegetables in a diet. With this, the anti-vegan aims to persuade audience members towards a carnivore diet and away from a vegan diet. The main intent of this tweet is to invalidate vegan health beliefs.

## 4.2. Combined Framings

### 4.2.1. Animal Rights and Environment

#### Verbal aggression with toxic language

Tweet	Stigma reply example
<p>24. "I am vegan for animal reasons, however, another major motive to be vegan is for Earth! #GoVegan to combat climate change. The best petitions you can sign are ones saying: I AM VEGAN! #vegan #environment."</p>	<p>"Shut up, then tell people to stop flying in private jets and eating meat. Does he get a pass because he's a celebrity?" [picture of Leonardo DiCaprio]</p>
<p>25. "People go vegan to sound edgy and cool. It's dumb as fuck that you think you are doing something good for the environment. It doesn't matter how much you try to save animals, many of us will consume twice the amount of meat."</p>	
<p>26. "Climate change facts: veganism is three times worse for the environment than animal farming. It also kills all the birds, bugs, rabbits, and other small animals. It's all a lie promoted by environmentalists. Do your research." [GIF of sheep with the caption "SHEEPLER, don't know why we follow, we just do!"]</p>	

Tweet number 24 shares the user's motives for choosing a vegan lifestyle, before urging others to go vegan for environmental reasons. This tweet is met with a reply telling the OP to shut up, dismissing them completely. The anti-vegan is frustrated at the OP for advocating veganism to the general public rather than protesting celebrities and other powerful societal actors who may have even larger impacts on the environment. This way, the anti-vegan argues that the vegan's priorities remain in the wrong place, shifting the blame for environmental and animal harm from non-vegans to powerful actors. The intent here is to ridicule vegans through dismissive language and by downplaying the OP's advocacy efforts.

Tweet number 25 attacks vegan intelligence, using profane language, for believing that their lifestyle benefits the environment, implying that it does not. This trivialises vegan environmental motives. Additionally, the starting claim that people are vegan to appear 'edgy' and 'cool', implies vegans put on facades to impress others and denies the true motives of vegans. This further showcases the OP's disdain for vegan identities as well as their incompatibility and unwillingness to empathise with vegan values. The OP also suggests that vegan efforts are futile as there exists a group of people who will

consume more meat than usual. This signals a demographic that will go out of their way to stop the growth of veganism, emphasising the tensions that exist between vegans and anti-vegans. The main intent here is to ridicule vegans.

Tweet number 26 not only denies the environmental benefits of veganism but also undermines the efforts of veganism to reduce animal suffering as much as possible, claiming that veganism is therefore all a lie pushed by environmentalists. The added GIF underneath depicts cartoon sheep following each other, symbolising those who agree with vegan beliefs. The insult ‘sheep’ is typically used to describe someone who behaves or thinks some way just because someone else does, implying they cannot think for themselves. The meme posted attempts to get others to laugh at the vegan's expense. The main intent of this tweet is to invalidate vegan beliefs, as well as ridicule and mock vegans.

Verbal aggression without toxic language

Tweet	Stigma reply example
<p>27. “My New Year's resolution is to turn vegan for environmental reasons. We only have 1 earth and if we don't act now, nothing will change. We cannot keep slaughtering animals for meat while there are many greater alternatives.”</p>	<p>“Stop killing plants!!!!”</p>
<p>28. “Veganism is not a cult. Sure, there are some ‘extremist’ and annoying vegans, but most do it out of concern for environmental or animal reasons.”</p> <p>[retweeted video of vegan protestor engaging in eccentric behaviour]</p>	<p>“Veganism for ethical reasons is oversensitivity and somewhat childish.”</p>
<p>29. “Vegans should get down from their high horse. Leather shoes are not good for environmental or animal welfare, but vegan shoes are potentially worse as they are derived from plastics and fossil fuels.</p>	

Tweet number 27 shares the New Year's resolution of the user, which is to turn vegan. The user lists their motive as environmental reasons, however, is also clearly motivated by animal rights, as seen in the last sentence “We cannot keep slaughtering animals...”. This post is met with a reply telling the vegan to stop killing plants. The anti-vegan appeals to the argument that plants have feelings. However, it is given an aggressive or hostile undertone through repeated exclamation marks and appears to dismiss the OP's motives and advocacy entirely. The intent here is to mock and ridicule the vegan.

Tweet number 28 contains a retweeted video of a vegan protestor engaging in eccentric behaviour. The user, recognizing this odd display of vegan values, attempts to address the anticipated stigma by declaring that while there are some obnoxious vegans, most do it out of genuine concern for environmental or animal reasons. An anti-vegan replies by saying the ethical reasons, i.e. environmental or animal rights reasons, for veganism are due to oversensitivity and are somewhat childish. The comment therefore suggests that vegans motivated by these concerns do not hold valid enough reasons to be taken seriously, thus downplaying animal rights and environmental motives. The intent here is to ridicule vegans.

Tweet number 29 views vegans as elitists by saying they should “get down from their high horse”, where the ‘high horse’ acts as a metaphor for a position of superiority. This is based on the perception that vegan lifestyles are more virtuous as they have lower environmental impacts and harm fewer animals. The anti-vegan believes this is not the case when it comes to vegan leather alternatives, which justifies the stigmatising comment. They therefore tell vegans to be less condescending and more humble, implying that vegan beliefs are not always true or superior. In doing so, the intent here is to ridicule vegans.

Argumentativeness without toxic language

Tweet	Stigma reply example
<p>30. “Veganism is not a cult. Sure, there are some ‘extremist’ and annoying vegans, but most do it out of concern for environmental or animal reasons.”</p> <p>[retweeted video of vegan protestor engaging in eccentric behaviour]</p>	<p>“It’s ironic because going vegan does not always help animals or the environment, instead, it may make matters worse.”</p>
<p>31. “Scientists find the ten most environmentally damaging dishes, including multiple VEGAN dishes. #Environment It’s possible for both plant-based and non-plant-based meals to have high ‘biodiversity footprints’, meaning they destroy animal habitats”</p> <p>[link to an article revealing the 10 most environmentally damaging dishes]</p>	
<p>32. “Vegans make the mistake of basing arguments against meat on environmental concerns rather than how the animals are raised. Improving farm conditions will take away the problems with meat. I heard grass-fed beef is more tasty.</p>	

Example 30, also a reply to tweet number 28, argues that veganism does not benefit animal lives or the environment, saying that the lifestyle can worsen things. By using words such as “does not always help”, and “may make”, the anti-vegan does not

outright deny the benefits of veganism, rather, they suggest only the possibility of undesirable consequences occurring. As such, they give the impression that they are open to hearing opposing views and constructive communication. The intent here is to invalidate vegan beliefs.

Tweet number 31 uses similar arguments and language as the previous example. The anti-vegan also links to a Daily Mail article that discusses rigorous research on dishes with high environmental and animal impacts through the metric biodiversity footprint. Some meat dishes are included in the most impactful dishes list as well as some vegan ones. The intent here is to invalidate vegan beliefs.

Tweet number 32 is an example of a mixed tweet as it takes a pro-animal rights and anti-environmental stance on veganism. The OP expresses their views on what arguments vegans should and should not focus on to better solve issues in exploitative animal farming. They believe that vegan efforts should not go towards minimising environmental impacts, but rather, that vegans should dedicate all of this effort to how animals are raised in farms. By improving farming conditions, the anti-vegan believes that environmental benefits will be a positive side-effect. This is seen as constructive as the OP aims to help the vegans in their efforts by recommending ways to tackle environmental and animal rights issues. Nevertheless, by undermining environmental motives, the anti-vegan intends to invalidate vegan beliefs.

## 4.2.2. Animal Rights and Health

### Verbal aggression with toxic language

Tweet	Stigma reply example
33. "Start the New Year right with our three-week Vegan challenge! Now is the best time to switch your diet to benefit animals & your health."	[out of context video clip of a man saying "We do not care" in a humorous tone]
34. "Today is the best day to go vegan. It is day 1 of Veganuary. Making the switch to a vegan diet provides advantages to your health. Try vegan this month!"  [drawing of a woman hugging a cow]	"Dear vegans, I killed this cow because it was eating your food. You're welcome."  [picture of a steak]
35. "Still using the milk of a different animal in your coffee? Do not steal milk from babies, and babies from mothers. Switch to a vegan diet this month and positively impact your health!"	"Really? You sir are a dumbass"  [picture of a man crossing his arms in disappointment]

Tweet number 33 advises the audience to partake in a three-week vegan challenge by framing it as beneficial to animals and one's health. An anti-vegan expresses how they do not care about being vegan and its benefits. They did, however, care enough to search for a meme video and share it, which suggests it is an explicit attempt to ridicule and dismiss the vegan. The fact that the anti-vegan resorts to memes to get their point across is an attempt to get others to laugh at the vegan's expense, further showing the user's disdain. Thus, the intent here is to ridicule and mock vegans.

Tweet number 34 recommends that the audience temporarily adopt a vegan diet for health reasons. The animal rights framing here is seen in the added media which is a picture of a woman hugging a cow, signifying vegan values of kindness and compassion towards animals. This tweet is met with a reply from an anti-vegan who makes the joke that they killed a cow out of thoughtfulness towards the vegan because it was eating the vegan's food. Adding a picture of steak, which is food to the meat-eater, mocks the vegan further by suggesting that the anti-vegan in fact, killed the cow for his pleasure. The intent here is therefore to ridicule and mock the vegan.

Tweet number 35 questions the practice of using milk in coffee, attributing animal exploitation to those non-vegans who consume milk. The OP then urges the audience to go vegan for a month. Disapproving this advocacy, an anti-vegan attacks the OP's



intelligence using vulgar language, implying that their claims are invalid and dismissing the vegan. The added picture of a man crossing his arms is seen as an attempt to showcase humour at the vegan's expense. The intent here is therefore to ridicule and mock vegans.

Verbal aggression without toxic language

Tweet	Stigma reply example
36. "Who is worse... vegans who do not care about their health and only care about animal lives, or carnists who believe veggies will lead to their death?"	"They are both extremists. They all lack balance"
37. "Since people are setting goals this year, why not try Veganuary and be vegan! I will give you advice if you are bothered about anything. It will also help your health and animal lives!"	"I wouldn't want to be as unhappy as you sick pronoun people"
38. "I tried going vegan for almost a year because I love animals and often walk by farming fields. But my health deteriorated. I am not willing to be sick for it. And I bet the majority of vegans sit at a desk all day or work at home from computers."	

Tweet number 36 is another example of a mixed tweet. It takes an anti-animal rights and pro-health stance on veganism. The OP does not attack vegan identities per se, rather, they are against a particular group of vegans, those who neglect their health to support animal causes. This suggests that the OP has no issue with vegans who also consider their health. Nevertheless, the tweet invites a response from an anti-vegan who sees both diets as being too rigid and lacking balance, labelling both vegans and carnists as extremists. This reply intends to ridicule vegans.

Tweet number 37 recommends the audience try being vegan for a month, claiming that it will benefit one's health and save animal lives. This tweet is met with a response from an anti-vegan indicating to the OP that they would never consider it because being vegan means it will make them miserable and sick. Additionally, calling vegans sick dismisses vegan arguments by implying they are not thinking with a clear mind. The anti-vegan also associates all vegans with the same group of people who enforce different pronouns onto unwilling others, therefore painting vegans as militant and hostile. The intent here is to ridicule vegans.

Tweet number 38 also expresses a mixed stance on veganism. This time, the OP has a pro-animal rights and anti-health outlook on veganism. They depict how they were once vegan out of compassion for animals, but after almost a year, their health had gotten worse. They suggest that a vegan diet is unhealthy. The anti-vegan proceeds to stereotype vegans as having cushy jobs and as staying indoors all day, implying that most vegans are unaware of what goes on on farms, or that their bodies, by being inactive, do not demand as much nutrients and energy, meaning they can better tolerate the health drawbacks. The intent here is to ridicule vegans on the health aspect of their lifestyle.

Argumentativeness with toxic language

Tweet	Stigma reply example
39. “Start the New Year right with our three-week Vegan challenge! Now is the best time to switch your diet to benefit animals & your health.”	“Vegan farming kills more animals than non-vegan farming [laughing emoji]”

Example 39 showcases a different reply to tweet number 34. Here, the anti-vegan claims that vegan farming kills more animals than non-vegan farming. This comment is seen to be based on the assumption that farming for vegan products requires the cultivation of more land for crops and the use of more pesticides, which in turn jeopardises the lives of small animals, such as insects. The anti-vegan adds toxicity by placing a laughing emoji, suggesting they find the OP’s claims amusing. The intent here is to invalidate vegan beliefs.

Argumentativeness without toxic language

Tweet	Stigma reply example
40. "Still using the milk of a different animal in your coffee? Do not steal milk from babies, and babies from mothers. Switch to a vegan diet this month and positively impact your health!"	"Genuinely, what will happen to all the animals if everybody turns vegan?"
41. "Still using the milk of a different animal in your coffee? Do not steal milk from babies, and babies from mothers. Switch to a vegan diet this month and positively impact your health!"	"Vegan diets contain too many carbohydrates, sugars, and processed foods. In terms of health, nothing is better than a balanced diet focused on protein from animals and reducing the aforementioned foods."
42. "Who is worse... vegans who do not care about their health and only care about animal lives, or carnists who believe veggies will lead to their death?"	"I would have to pick vegans just because the carnivores get micronutrients"

Examples 40 and 41 are both replies to tweet number 35. The reply in example 40 questions what will happen to the farm animals if everybody turns vegan. It is assumed that the anti-vegan believes that the animals currently being raised will need to be disposed of somehow, either killed or released into the wild. With no honed survival skills, these animals are presumed bound to go extinct. Thus, the anti-vegan argues that at least with the current practices, the animals can live. Additionally, as the anti-vegan is asking a genuine question, it suggests that they are willing to listen to vegan viewpoints on the matter. The intent here is to invalidate vegan beliefs by claiming animals are worse off in a vegan world.

The reply in example 41 argues for a diet focusing on animal proteins and reducing carbohydrates, sugars, and processed foods, which the anti-vegan claims are more prevalent in vegan diets. Although this claim is not particularly true, as vegan diets low on carbohydrates, sugars, and processed foods also exist, the anti-vegan does not attack vegan identities and takes on a formal and constructive tone. The intent here is to invalidate vegan beliefs.

Example 42 depicts a reply to tweet number 36. Here, the user, when confronted with the two options, chooses vegans as the worst ones, solely based on the assumption that carnivores get micronutrients from consuming meat. The anti-vegan, when making the choice, uses words such as "I would have to", indicating that they have thought about it critically and are, therefore, less likely driven by emotion in their response. The intent here is to invalidate vegan beliefs.

### 4.2.3. Environment and Health

#### Verbal aggression without toxic language

<b>Tweet</b>
43. "My reaction when vegans say their diet is superior for our health and environment"  [Picture of cows looking shocked]

Tweet number 43 attempts to make a joke at vegans who claim that their diet is better in terms of health and the environment. The anti-vegan adds a meme picture of cows staring into the camera with shock, emphasising how absurd the OP thinks these arguments are, and giving the impression that they are unwilling to consider alternative claims because these are difficult to believe. The tweet mocks vegans by sharing humorous content at their expense. The intent here is to ridicule and mock vegans.

#### Argumentativeness with toxic language

<b>Tweet</b>	<b>Stigma reply example</b>
44. "I laugh when I hear that vegan diets are better for our health and the environment. Most of the time you need supplements to get enough nutrients, and farming uses more resources."	"If you want to kill the earth and all animals on it, you would turn people to veganism. I do not care if someone is vegan, but if we all practice it, the earth is fucking doomed. The immense quantity of fauna we kill farming is crazy."

Example 44 showcases the stigma observed in an anti-vegan tweet and its replies. The OP shares how they laugh at vegan arguments for health and the environment, which can undermine the seriousness of conversations regarding veganism. They then put forward the arguments of supplementing diets to get nutrients and that farming uses more resources, switching to a logical and argumentative tone that suggests openness to debate. The main intent here is to invalidate vegan beliefs.

A replying anti-vegan adds to this by claiming that vegan lifestyles are detrimental to the earth and all animals on it, using profane language to get their point across. They add how they do not care if someone is vegan, suggesting they are not interested in attacking vegan identities and are more interested in arguing about the implications of veganism. The intent is therefore to invalidate vegan beliefs.

Argumentativeness without toxic language

Tweet
45. "A vegan diet is not good from a health or environmental perspective. Most humans, particularly young people, won't get a nutritionally complete diet by cutting meat/dairy - health supplements cannot replace these."
46. "Veganism does not benefit one's health compared to other diets. It isn't good for the planet as well. The production process is just as resource-intensive. Get produce from local sources. This is better nutritionally, environmentally, and economically (as it helps a local business)"
47. "Vegan perspectives on environmental and health matters do not seem logical. It would not benefit the environment much, and people are proven to look better and have better health with animal products in their diet"

Tweet number 45 highlights how vegan diets are not good from a health or environmental perspective. The anti-vegan adds that young people are most at risk of deficiencies, as this demographic has an increased need for nutrients for growth. They argue that health supplements cannot replace animal products in one's diet. The OP maintains a logical and argumentative tone suggesting openness to debate the issues. The intent here is to invalidate vegan beliefs.

Tweet number 46 also highlights how vegan diets are not superior to other diets in terms of health or the environment. They appeal to the argument that vegan products are as resource-intensive as other products, and therefore just as environmentally damaging. The anti-vegan advises people to consume local produce to benefit their health and the environment in a way that supports local businesses. This portrays a constructive and supporting tone. Nonetheless, the intent here is to invalidate vegan beliefs.

Tweet number 47 similarly argues against the health and environmental implications of veganism. Here, the anti-vegan sees these arguments as illogical, providing counter-claims such as that it would not make a great change to the environment, and that animal products are proven to contribute to a healthy diet. The anti-vegan puts themselves in the position for constructive debate. Their language does not carry a hostile or aggressive tone, further showing openness to listen to opposing views. The intent is to invalidate vegan beliefs.

#### 4.2.4. Animal Rights, Environment, and Health

##### Verbal aggression with toxic language

Tweet	Stigma reply example
<p>48. “#vegan let's extend our compassion for companion animals to all animals. Remember that they experience emotions and fear. Consider veganism - it can benefit the environment, potentially your well-being, etc”</p> <p>[graphic video of animals in slaughterhouses]</p>	<p>[picture of a man pointing to his computer, laughing]</p>

Tweet number 48 asks audiences to share the values of vegans by extending compassion to all sentient animals. The OP then advises people to consider going vegan. They include a video showcasing what goes on in slaughterhouses in the animal industry. This is met with a reply of a meme of a man pointing to his computer and laughing. The anti-vegan here is seen as dismissing the vegan's arguments and as making fun of or laughing at the content of the graphic video. At the same time, they signal to other audience members that the post should not be taken seriously. The intent is to ridicule and mock vegans.

##### Verbal aggression without toxic language

Tweet	Stigma reply example
<p>49. “#vegan let's extend our compassion for companion animals to all animals. Remember that they experience emotions and fear. Consider veganism - it can benefit the environment, potentially your well-being, etc”</p> <p>[graphic video of animals in slaughterhouses]</p>	<p>“Then be kind hypocrite. You kill greater numbers, and brutally.”</p>
<p>50. “My motivation for going vegan is the animals. However, we should also recognize the benefits to human health and the planet. It does not matter as long as the animals are saved. Thanks!”</p> <p>[retweeted: “I am not so important that another living being should have to suffer or die for me”]</p>	<p>“Whoever thinks that [referencing retweeted content] is true lacks knowledge of the natural world and life itself, and is perhaps unaware of the universe as a whole”</p>

Example 49 showcases another reply to tweet number 48. The anti-vegan calls the vegan a hypocrite by bringing up the claim that vegans kill a greater number of animals than non-vegans, adding that they do so brutally. This attacks the animal rights motives but does so using verbal aggression. By explicitly calling vegans hypocrites, the anti-vegan suggests vegan arguments are contradicting and invalid, not worth serious consideration. The intent here is to ridicule vegans.

Tweet number 50 contains a retweet of a post expressing concern for animal rights, saying how other living beings should not have to suffer or die for human gain. The OP resonates with this post, sharing their main motivation for being vegan: animal rights. They add that veganism also benefits human health and the planet. An anti-vegan, referencing the retweeted content, is seen as appealing to the argument that animals and humans are fundamentally different and the consumption of other living beings is completely natural and normal. However, by claiming that those who agree (i.e. vegans) with the retweeted content “lack knowledge”, it suggests that vegans are not worth listening to. The anti-vegan intends to ridicule vegans in this way.

Argumentativeness without toxic language

Tweet	Stigma reply example
51. “It is always the perfect time to live well. We are here to back you up in your transition to veganism, whatever motive you may have: personal well-being, animals, or environmental motives!”	“People do not have to be vegan to live well. In fact, being vegan makes it much more difficult to live well”

Tweet number 51 encourages people to transition to a vegan diet, saying it will allow them to live well, i.e. to live with benefits to animals, the environment, and personal health. Disapproving this statement, an anti-vegan implies that it is easier to have a positive impact on these three aspects and is therefore easier to ‘live well’ with a non-vegan diet. The anti-vegan uses a logical tone and formal language which may invite constructive discussion about topics like vegan food options, for instance. The intent here is to invalidate vegan beliefs.

### 4.3. Summary

Throughout the data sample, there were some recurring ways in which anti-vegans expressed verbal aggressiveness or argumentativeness. These can be seen in Tables 8 and 9 below, respectively. Verbal aggression was mainly displayed by ridiculing or mocking vegans in some way. The latter has the main intention to tease or use humour at the vegan's expense, while the former is more concerned with dismissing vegan

advocacy. Argumentative comments took a more logical tone, often drawing on scientific arguments. The main intention here was to invalidate vegan beliefs about animal rights, environment, and health.

*Table 8. Common verbally aggressive comments against vegans.*

<b>Verbal aggression</b>
Saying veganism is a lie
Attack on Intelligence
Dismissing vegan advocacy
Virtue signalling or elitists
Sensitive
Hypocrite label
Extremist label
Claiming plants feel pain
Pictures of meat
Eating grass and leaves

*Table 9. Common argumentative comments against veganism.*

<b>Argumentative</b>
Vegan leather is worse for the environment
Farming for vegan products requires more resources
Animal products are healthier and part of a balanced diet
A vegan lifestyle kills more animals
Food web/natural to consume animals



This chapter has looked at social media data on vegan stigma from both quantitative and qualitative perspectives. It provides a rich and varied picture of the ongoing online debates on veganism. In the next chapter, I am going to summarise the findings and discuss these in the light of the two guiding propositions derived in the theory chapter. I will also discuss some findings that do not relate to the propositions but lead to some interesting supplementary observations about vegan stigma.

## 5. Conclusions

### 5.1. Propositions 1 and 2

Two propositions were offered to answer the research question “How do different framings of veganism affect the stigmatisation of vegan identities?” Proposition 1 is concerned with the isolated framings of veganism, being framings containing only one sub-category. To reiterate, it was proposed that the animal rights and environmental sub-categories would experience more stigmatisation on Twitter than the health sub-category. Proposition 2 looks at combined framings and the potential effects of category straddling on diluting vegan stigma. It was proposed that stigmatisation towards vegans is diluted by combining multiple sub-categories. The quantitative analysis offered at the beginning of this section shows indeed some support for both Propositions 1 and 2.

It was found that the health sub-category showed the least relative amount of stigmatising comments (i.e. least percentage of comments containing stigma out of all comments) out of any isolated framing. This supports Proposition 1. Furthermore, by straddling, i.e. combining sub-categories, with the health sub-category, a less stigmatised category, overall stigma decreases, providing evidence of the effects of category straddling on stigma dilution. Moreover, aggregating framings into single, double, or triple framings showed that stigma dilution is also caused by adding more sub-categories to framings in general. This can be explained by the increasing number of cues sent by the vegan message, making audience members less willing to offer extreme judgments (Vergne, 2012). These findings support Proposition 2.

It is important to note that the effects of category straddling on stigma dilution are thought to largely depend on the saliency of the motive(s) communicated. This was observed most clearly in the triple framing, where all three cases of verbal aggression were observed under tweets that emphasised the animal rights motive (i.e. the most stigmatised motive), for example by attaching a video of animals in slaughterhouses. It may be that stigma dilution is somewhat negated because the emphasised motive (animal rights) is made most apparent to the anti-vegan, thus overshadowing the other mentioned motives. Therefore, for stigma dilution to fully manifest, it is not enough to

simply mention (i.e. straddle) more sub-categories, rather, each sub-category must be given similar emphasis, or the more 'neutral' sub-category the most emphasis.

## 5.2. Qualitative Findings

Going into the qualitative analysis, representative quotes were interpreted to provide deeper insights into how vegan identities are stigmatised online. More specifically, it uncovered how different framings may result in stigmatisers attacking different characteristics or bringing up different arguments. In addition to this, it allowed for some interesting findings concerning the dynamics of pro- and anti-vegan users online. These will also be discussed below.

### 5.2.1. Anti-vegan face-saving strategies

Particularly when replying to pro-vegan tweets using animal rights framings, another finding was that anti-vegans typically resorted to one of two strategies, either deflection or aggression. These strategies are used to discredit vegan beliefs, albeit in different ways. In offering arguments against animal rights tweets, anti-vegans would often highlight other sub-categories, thus deflecting the presented concerns to other topics more favourable to the anti-vegan, such as those relating to the environmental or health sub-categories. Moreover, in combined framings, argumentative replies frequently ignored animal rights aspects and focused on the other sub-categories mentioned in a tweet. This has implications for the quantitative data and may appear misleading. For instance, Table 7 shows the isolated animal rights framing as containing the second most argumentative comments, however, the arguments on which these comments are based mostly did not directly address the animal rights sub-category itself.

However, in cases where anti-vegans did directly address the animal rights sub-category in their replies, they would often resort to verbal aggression or use toxic language. This strategy presents the anti-vegan as hostile and shuts off the possibility of constructive communication with a pro-vegan user. Both deflection and aggression strategies can be understood to serve the function of preserving the self-identity of the anti-vegan, i.e. as face-saving strategies. For instance, disabling constructive debate about the animal rights dimension helps the anti-vegan to avoid an argumentative loss, something which can be emotionally damaging given the characteristics of the animal rights sub-category (elaborated below). This loss aversion indicates a reluctance to confront the animal rights sub-category argumentatively. Furthermore, it may also be that anti-vegans lack effective rational arguments which they deem persuasive enough to put forth, so instead opt to attack other characteristics (elaborated below). This lack of effective rational arguments indicates an inability to confront the animal rights sub-category argumentatively.

An anti-vegan's reluctance to confront the animal rights sub-category argumentatively may suggest that they are anticipating a losing argument and thus, a significant emotional loss. An anti-vegan may anticipate a losing argument about animal rights as veganism is presented as the only truly ethical (or 'correct') stance on animal welfare because being vegan simply means to completely abstain from any kind of animal product. As a result, they may well face strong counter-arguments from pro-vegans that a vegan lifestyle is actually the best possible option, reminding them that non-vegan lifestyles are therefore 'wrong' or not good enough. The anti-vegan may not be comfortable with admitting this 'wrong' or 'inferior' feature of themselves, let alone confronting it. By doing so, there is the risk of a blow to their moral self-image or an emphasis on their cognitive dissonance.

For instance, an anti-vegan might be attached to the idea that their current lifestyle is already moral or good enough for animal welfare, and this belief is threatened when confronted with a vegan (Monin, 2007; Twine, 2014), who apparently has the best lifestyle for animal welfare. Further, an anti-vegan might support animal welfare (belief) without following a vegan diet (action). Losing an animal rights argument would force them to confront this dissonance. They may anticipate the mental discomfort of having to reconcile beliefs with actions (Festinger, 1957), which could involve going vegan (something they are not ready for). In other words, confronting animal rights argumentatively may create a higher risk of loss aversion kicking in (fear of losing the moral high ground or facing cognitive dissonance). To avoid these potentially uncomfortable interactions, the anti-vegan might address other sub-categories or create a hostile environment (i.e. resort to deflection or aggression).

It may also well be that there is simply an inability to effectively argue and persuade a vegan against their animal rights beliefs. As it stands, current scientific understandings of this sub-category, such as human impacts on non-human animals, non-human animal cognition, and pain and stress experienced by animals on farms, are greatly in favour of a vegan lifestyle. As a result, there exists little scientific evidence which could be used to back up claims of a non-vegan lifestyle being superior for animal welfare. Anti-vegans may therefore feel that it is pointless to engage in rational, constructive debate about these issues, knowing that their claims cannot be readily backed up by scientific evidence. The ability to persuade a vegan, a key goal of argumentativeness, is therefore largely blocked for the animal rights sub-category. As a result, an anti-vegan may see it more productive to try and persuade a vegan along a different sub-category with more scientific backing. Moreover, an inability to persuade argumentatively may also lead to frustration and therefore heightened emotional responses, such as verbal aggression (Infante & Wigley, 1986) or toxic language.

Both reluctance and inability to confront the animal rights sub-category may result in anti-vegans arguing about other sub-categories (i.e. deflection). It was clear from the

comments that anti-vegans felt more comfortable using environmental and health arguments against veganism. Unlike animal rights, where veganism is presented as the only way to completely avoid animal harm, there are other ways one can make a positive impact on the environment or health without being vegan. For example, by reducing waste or consuming animal produce in moderation. This gives anti-vegans the feeling that non-vegan lifestyles can indeed make a positive impact, thus reducing the perceived risk of the aforementioned losses, and also granting anti-vegans the power to persuade.

On the other hand, reluctance and inability to confront the animal rights sub-category could also lead anti-vegans to accompany arguments against animal rights with toxic language or verbal aggression. By doing so, they create a hostile environment which discourages constructive communication. This way, the anti-vegan preserves their self-identity by not allowing a loss to materialise in the first place, while still getting their argument across.

The face-saving strategies used by anti-vegans attempt to explain why and how vegan identities may be stigmatised. They also suggest why some framings may be met with more argumentation rather than verbal aggression (e.g. environmental and health combined framing), and vice versa. In summarising the main inferences made so far: deflection strategies show how anti-vegans may prefer to argue along the environmental and health sub-categories, while the aggression strategy highlights the potential role of animal rights cues in eliciting verbal aggression. Both strategies may point to the potential reluctance and/or inability to confront the animal rights sub-category argumentatively.

### 5.2.2. General Observations

Going into the general observations of vegan stigma dynamics, it is important to note that the following four more observations were interesting findings that are not necessarily tied to answering the propositions.

#### Veganism as a movement against meat consumption

Many examples suggest that stigmatisation of the vegan category is mainly toward the dietary aspects of veganism, particularly the lack of meat, rather than non-food contexts. This finding was consistent throughout the framings. Other animal products such as dairy and eggs, or non-food items such as leather, were not brought up and defended by anti-vegans to the same extent as meat. In other words, anti-vegan audiences may associate the term 'vegan' with a movement that goes against meat consumption. As a result, anti-vegans would often bring up and defend meat in their arguments, even when there is no reference to or mention of meat in a pro-vegan tweet. Further, a common stereotype was that vegans lack food options and eat, for instance,

grass or leaves. In cases where anti-vegans did bring up non-food items, stigmatisation was less intense overall, further indicating the relationship between vegan stigma and diet.

Perhaps due to this association with diet, it was not uncommon for veganism to be framed alongside a carnivore diet. Some anti-vegan users contained 'carnivore' in their username or X bio, just as some vegan users would have 'vegan' in their username or bio. A carnivore diet is seen as a direct opposition (or protest) to vegan health beliefs. It goes beyond supporting healthy, balanced diets containing both animal products and fruits and vegetables. It appears to reject the health benefits of the latter altogether, showing how humans can thrive on a diet containing exclusively animal products. Such claims seem to respond to the vegan (health) belief that vegan alternatives benefit personal health, and therefore attempt to preserve or level the health attribute of animal product consumption with the health attribute of vegan foods.

#### Animals involved in vegan stigma

Interestingly, by far the most common animal referenced throughout the sample (tweets and replies) were cows. This applies to both pro- and anti-vegan users. Pro-vegan users would refer to cows as being 'milk slaves' or post media with cows. Anti-vegans would refer to cows by using words such as "steak" and "burger" or through posting media with cows or steak. Other commonly factory-farmed animals, such as pigs and chickens, were not referenced as much in stigmatising interactions.

Furthermore, the only two posts which referenced fish and reptiles (crocodiles), and urged audiences to stop supporting cruelty, were met with verbal aggression and toxic language. It might be that by trying to extend vegan advocacy efforts to even less sentient beings, such as fish and reptiles, anti-vegans resort to more intense stigma.

#### Intersectionalities of pro- and anti-vegan identities

Looking at vegan users themselves, there appeared to be a group of people noticeably more concerned with advocating for or against veganism, with some even dedicating their entire online presence to such causes. For instance, it was common to see the same pro- or anti-vegan user in various comments. Moreover, there were some recurring keywords found in the usernames and bios of both groups. Pro-vegan users would contain words such as 'vegan', 'animal lover/rights/liberation', 'environmentalist', 'liberal', and 'feminist', etc. In contrast, for anti-vegan users, it was 'anti-vegan', 'carnist', 'animal-based', 'pro-abortion', 'farmer', 'patriot', 'trump', and 'conservative', among others. This reveals the interconnectedness of vegan support or opposition (i.e. stigma) with other identity-related categories, particularly ones often politicised in society. In other words, from the observations, it seems that vegan advocates are more likely to

show left-leaning political affiliations while anti-vegans displayed more right-leaning ones.

Contrastingly, profile information relating to the health sub-category is not as revealing, with both pro- and anti-vegan users indicating their interest in 'health' and 'nutrition'. This suggests that the health sub-category straddles vegan beliefs and non-vegan beliefs more so than the animal rights and environmental sub-categories. As such, health concerns might be a more common ground for discussion, even between those with differing stances on veganism.

### The contentious role of science in vegan debates

When presenting arguments for or against veganism, both pro- and anti-vegan users often appeal to scientific understandings of veganism and its sub-categories. While there is quite some consensus that a vegan diet favours the welfare of animals, this does not mean that anti-vegans do not employ scientific reasoning here.

To illustrate, a pro-vegan may imply that animals feel pain just as humans do. As a response, an anti-vegan may claim that plants also feel pain. Both arguments appeal to scientific understandings of how different organisms feel pain and emotion. Likewise, a pro-vegan may argue that vegan diets use less land, water, and resources in general (tweet not included in results as there was no stigma), while an anti-vegan may rebuttal by saying vegan lifestyles are just as resource intensive, or that a lot of vegan food must be imported. These arguments appeal to scientific understandings of vegan diets and resource intensities. Lastly, a pro-vegan may advise people how to follow a healthy vegan diet, while an anti-vegan may contend that vegan diets are nutrient deficient. Again, these appeal to scientific understandings of vegan diets and health.

Furthermore, there may be a potential mediating role of how heavily researched a sub-category is within the scientific discourse on the stigma observed. For instance, research on animal sentience and pain is a relatively new scientific venture compared to research on the environmental impacts of food systems or the health effects of certain foods. This difference in scientific maturity could indicate a weaker societal embedding of animal rights values compared to the latter two sub-categories. As a result, it could be that animal rights advocates are perceived as the most disrupting, pushing for the most significant societal change. It may also be that the lack of robust scientific understanding creates uncertainty and confusion which may result in sceptical and irrational attitudes toward a category.

This section has summarised the results in light of the research question and propositions. The qualitative analysis also led to some interesting observations. These observations provide a broader insight into vegan stigma dynamics, which may help to show vegan stigma in a new light. For instance, it was observed that anti-vegans

associate veganism with mainly diet and meat in particular. Certain animals (i.e. cows) were also involved in stigmatising interactions more than others. Moreover, there was the potential influence of political affiliations in determining pro- and anti-vegan users. Finally, scientific understandings of the different sub-categories may play a role in shaping vegan discourse online.

## 6. Discussion

### 6.1. Theory

The theories used provided a productive framework for understanding the complexities of vegan stigma online. It was demonstrated that animal rights and environmentally motivated vegans may indeed face greater stigma online. This was not as clear with the environmental sub-category, however, as anti-vegans at least were willing to confront the sub-category constructively. Nonetheless, anticipated moral reproach, as depicted by Monin (2007), served as a useful lens to view stigmatising interactions online, and more generally, why vegan stigma may exist in the first place. Concerning category straddling and stigma dilution, Vergne's (2012) understanding of the phenomena enabled insights into a tool which can be used to effectively reduce the stigma experienced when communicating about veganism.

### 6.2. Navigating Vegan Stigma

Some recommendations can be made to mitigate vegan stigma when communicating about the lifestyle. For instance, vegan advocates may choose to emphasise the health motive to reduce overall stigma. This is in line with the recommendation by Greenebaum (2012a) to focus on the health aspects of veganism. Health, showing the least stigma, is understood as appealing to both pro- and anti-vegans, potentially connecting the two through a shared value. This sub-category additionally sees less intersectionalities with politics involved, which may greatly influence how a vegan is perceived. Further, health is also the most established in the scientific literature, enabling more structured, rational debate.

Focusing on health may, however, suppress the true motives of a vegan. In this case, the vegan is advised to use a combined framing, one which does not leave out their true motive, but also one which (preferably) includes the health sub-category. Moreover, a vegan may opt to communicate all three motives, thus promoting a holistic understanding of the 'vegan' category. It is important to keep in mind that the most salient (or most emphasised) motive is likely to determine the nature of the

conversation. Therefore, it is recommended that combined framings pay equal, if not more attention to the sub-category with less stigma (e.g. health).

A vegan motivated by animal rights or environmental concern, and wanting to reduce stigma, would frame their motive in a way that appeals to the health sub-category. For instance, they may push the narrative that animals under stress make less healthy products, or that air pollution from farming harms health, etc. Over time, such connections to the health sub-category will become inherent in the meaning of veganism.

These recommendations are based on online interactions. Despite online and offline interactions potentially being significantly different (Suler, 2004), the underlying principles of promoting a shared goal (health) and diluting stigma through category straddling are assumed to be consistent with offline interactions. Therefore, these recommendations go beyond vegan advocacy in social media and may be applied in face-to-face conversations.

More generally, due to the inconclusive scientific understandings of the different sub-categories, it is recommended that pro-vegans support their advocacy efforts with clear scientific evidence, such as linking claims to peer-reviewed articles. Doing so might reduce the uncertainty of vegan impacts and promote an evidence-based, rational structure to debates surrounding veganism rather than normative, irrational ones. At the same time, open scientific issues may be brought to the fore, which can motivate the research agendas of scientists and funding agencies.

### 6.3. Navigating Contention in Innovative Categories

These recommendations can be applied to innovative categories in general. The vegan movement is a strong example of a social innovation. While not entirely 'new', a vegan lifestyle is being presented and adopted in innovative ways. The meaning of the term 'vegan' has evolved to adopt values of not just animal wellbeing, but more recently of environmentalism and human health. It is a new way to think about diet and other lifestyle aspects with the potential for positive societal change. Therefore, the findings of this thesis may be generalised to other innovations.

The newness of innovations can pose threats to existing, often valued societal norms. As such, there may be retaliation by hegemonic practitioners. While not necessarily resulting in stigma, this retaliation serves a similar function: to reestablish the traditional roles and identities as more desirable. Because of this favouring of traditional roles and identities, there must be a way for the innovation to appeal even to these opposing groups.



As the results of this thesis have shown, innovations may appeal to a wider audience if the groups are bound together by shared norms and values. Pro-vegans and anti-vegans both share an interest in good health, thus, they can perceive each other as similar, and not fundamentally different based on moral character.

Furthermore, scientific understandings may play a role in determining the type of retaliation an innovation may experience. As explained in the previous sections, research on a sub-category provides structure to vegan debates, fostering constructive, rational discussion. If an innovation is framed to fit within a more scientifically established category, it would enable an evidence-based, constructive discussion, and would help to avoid irrational, normative arguments against the innovation.

Therefore, it is recommended that innovations pay attention to the potential categorical associations that may form, and try to connect more to shared norms and values, particularly those readily backed up by scientific evidence. Overall, this creates a shared and deeper understanding of the innovation, creating appeal and reducing ambiguity.

Over time and through contention, the innovation may become established and taken for granted. Then, the innovation is not debated as much, categorical associations are given less salience, and the innovation becomes a category on its own (Grodal, Gotsopoulos & Suarez, 2015).

Importantly, the goal of these stigma (or contention) navigating recommendations is not to manipulate the meaning of the category to gain acceptance but rather to communicate them clearly and respectfully while creating alignment with the status quo.

## 6.4. Limitations and Future Research Recommendations

There are several limitations of this research. First, no statistical tests were carried out. The main reason for this has been the limited number of observations. Second, political intersectionalities were not part of the theoretical framework. It was observed from user bios that both pro- and anti-vegans had a political leaning, except for those framing veganism with the health sub-category. Third, congruence and status effects were also not considered for the theoretical framework. For instance, no attention was paid to the type of account which posted about veganism (e.g. organisations, individuals, influencers, celebrities), or the number of followers a user has. All of these may have a mediating role in stigma (Rao, Monin & Durand, 2003). Fourth, only the initial reply of an anti-vegan was analysed. This prevented insights into how communication on vegan topics may evolve. Fifth, the nature of pro-vegan tweets was not emphasised. It could indeed be that the language used in pro-vegan tweets differs by sub-category, and that this may have an effect on how an anti-vegan reacts.

These limitations provide potential avenues for future research on vegan stigma:

1. While maintaining a vegan sub-category perspective, studies can take a more quantitative approach to measuring the stigma dilution effects of category straddling. This would provide a more robust understanding of stigma dilution effects within the vegan category. A more quantitative approach would necessitate an effort to collect a larger corpus of data.
2. Regarding the political orientations of those active in vegan debates, researchers are advised to pay attention to the potential political intersectionalities involved in societal perception of veganism. Veganism may be entangled with broader political issues (Vestergren & Uysal, 2022), and certain political affiliations may influence the type of stigma experienced. This lens can be used to formulate questions such as, to what extent is vegan stigma politically motivated, and what sub-categories are more likely to be the targets of politically motivated actors? This can be approached by analysing correlations between user bios on Twitter (indicative of the broader identity of a user) and language used in vegan debates.
3. Another topic of interest is the potential congruence of status effects at play in vegan stigma online. Considering these effects may be useful to optimise how vegan advocacy is carried out online. For example, it may be that a health coach advocating veganism receives less stigma than a make-up influencer because they are more congruent with the less stigmatised sub-category (health), or that stigma received is directly correlated with the number of followers a pro-vegan has. There may be a significant role of such congruent or high-status actors in public perception of veganism (Lundahl, 2018), seeing that they have increased visibility and trendsetting potential.
4. Future research could also look to include entire discussions in the analysis rather than the initial reply/reaction. Analysing entire threads, especially among high-profile users, may show what key debates are ongoing and how these are changing over time. This can be traced by taking a longer time horizon in data collection.
5. Lastly, researchers can give more attention to the specific language used by pro-vegans rather than the general ways in which veganism is framed. In doing so, researchers can gain a deeper understanding of the potential sources of vegan stigma or contention, particularly the influence language has on eliciting different reactions. For instance, studies can examine what words or phrases might 'trigger' more intense forms of stigma, and those that are more likely to lead to constructive dialogue. Furthermore, it may be that certain sub-categories are more likely to use certain triggering words or phrases than other sub-categories.

This can be analysed quantitatively. Recommendations can be made to avoid such pitfalls and construct more effective communication strategies overall.

## References

- Ahlgren, M. (2023, November 18). *Top 55+ twitter statistics, Facts & User Demographics for 2023*. Website Rating.  
<https://www.websiterating.com/research/twitter-statistics/#chapter-2>
- Almalki, S. (2016). Integrating quantitative and qualitative data in mixed methods research—challenges and benefits. *Journal of Education and Learning*, 5(3), 288.  
<https://doi.org/10.5539/jel.v5n3p288>
- Aroyo, L., Dixon, L., Thain, N., Redfield, O., & Rosen, R. (2019). Crowdsourcing subjective tasks: The case study of understanding toxicity in online discussions. *Companion Proceedings of The 2019 World Wide Web Conference*.  
<https://doi.org/10.1145/3308560.3317083>
- Bolderdijk, J. W., & Cornelissen, G. (2022). “How do you know someone’s vegan?” they won’t always tell you. an empirical test of the do-gooder’s dilemma. *Appetite*, 168, 105719. <https://doi.org/10.1016/j.appet.2021.105719>
- Bresnahan, M., Zhuang, J., & Zhu, X. (2016). Why is the vegan line in the Dining Hall always the shortest? understanding vegan stigma. *Stigma and Health*, 1(1), 3–15. <https://doi.org/10.1037/sah0000011>
- Chai, B. C., van der Voort, J. R., Grofelnik, K., Eliasdottir, H. G., Klöss, I., & Perez-Cueto, F. J. (2019). Which Diet has the least environmental impact on our planet? A systematic review of vegan, vegetarian and omnivorous diets. *Sustainability*, 11(15), 4110. <https://doi.org/10.3390/su11154110>
- Clarke, V., & Braun, V. (2016). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297–298. <https://doi.org/10.1080/17439760.2016.1262613>
- Cole, M., & Morgan, K. (2011). Vegaphobia: Derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers. *The British Journal of Sociology*, 62(1), 134–153. <https://doi.org/10.1111/j.1468-4446.2010.01348.x>
- Cooper, K., Dedehayir, O., Riverola, C., Harrington, S., & Alpert, E. (2022). Exploring consumer perceptions of the value proposition embedded in vegan food products using text analytics. *Sustainability*, 14(4), 2075.  
<https://doi.org/10.3390/su14042075>

- Craig, W. (2009). Health effects of vegan diets. *The American Journal of Clinical Nutrition*, 89(5). <https://doi.org/10.3945/ajcn.2009.26736n>
- de Sousa, A. (2023, November 7). *Rising Livestock Emissions Undermine World's Climate Fight*. Bloomberg.com. <https://www.bloomberg.com/news/articles/2023-11-07/rising-livestock-emissions-undermine-world-s-climate-fight>
- Eichelmann, F., Schwingshackl, L., Fedirko, V., & Aleksandrova, K. (2016). Effect of plant-based diets on obesity-related inflammatory profiles: A systematic review and meta-analysis of intervention trials. *Obesity Reviews*, 17(11), 1067–1079. <https://doi.org/10.1111/obr.12439>
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6). <https://doi.org/10.15406/bbij.2017.05.00149>
- Eynon, R., Schroeder, R., & Fry, J. (2009). New techniques in online research: Challenges for Research ethics. *Twenty-First Century Society*, 4(2), 187–199. <https://doi.org/10.1080/17450140903000308>
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Goffman E. (1963). *Stigma: Notes on the Management of Spoiled Identity*. Englewood Cliffs, NJ: Prentice Hall
- Greenebaum, J. B. (2012a). Managing Impressions: “Face-Saving” Strategies of Vegetarians and Vegans. *Humanity & Society*, 36(4), 309–325. <https://doi.org/10.1177/0160597612458898>
- Greenebaum, J. B. (2012b). Veganism, identity and the quest for authenticity. *Food, Culture & Society*, 15(1), 129–144. <https://doi.org/10.2752/175174412x13190510222101>
- Grodal, S., Gotsopoulos, A., & Suarez, F. F. (2015). The coevolution of technologies and categories during industry emergence. *Academy of Management Review*, 40(3), 423–445. <https://doi.org/10.5465/amr.2013.0359>
- Hada, R., Sudhir, S., Mishra, P., Yannakoudakis, H., Mohammad, S. M., & Shutova, E. (2021). Riddit: Norms of offensiveness for english reddit comments. *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (Volume 1: Long Papers)*. <https://doi.org/10.18653/v1/2021.acl-long.210>

- Hauser, M. D. (2006). *Moral minds: How nature designed our universal sense of right and wrong*. Ecco.
- Heinonen, K., & Medberg, G. (2018). Netnography as a tool for understanding customers: Implications for service research and Practice. *Journal of Services Marketing*, 32(6), 657–679. <https://doi.org/10.1108/jsm-08-2017-0294>
- Howard, H. (2021). *The beef with vegans: Managing stigma in Britain's hegemonic meat culture* (thesis).
- Hsu, G. (2006). Jacks of all trades and Masters of None: Audiences' reactions to spanning genres in feature film production. *Administrative Science Quarterly*, 51(3), 420–450. <https://doi.org/10.2189/asqu.51.3.420>
- Infante, D. A., & Rancer, A. S. (1996). Argumentativeness and verbal aggressiveness: A review of recent theory and research. *Annals of the International Communication Association*, 19(1), 319–352. <https://doi.org/10.1080/23808985.1996.11678934>
- Infante, D. A., & Wigley, C. J. (1986). Verbal aggressiveness: An interpersonal model and measure. *Communication Monographs*, 53(1), 61–69. <https://doi.org/10.1080/03637758609376126>
- Insko, C. A., Pinkley, R. L., Hoyle, R. H., Dalton, B., Hong, G., Slim, R. M., Landry, P., Holton, B., Ruffin, P. F., & Thibaut, J. (1987). Individual versus group discontinuity: The role of intergroup contact. *Journal of Experimental Social Psychology*, 23(3), 250–267. [https://doi.org/10.1016/0022-1031\(87\)90035-7](https://doi.org/10.1016/0022-1031(87)90035-7)
- Janssen, M., Busch, C., Rödiger, M., & Hamm, U. (2016). Motives of consumers following a vegan diet and their attitudes towards Animal Agriculture. *Appetite*, 105, 643–651. <https://doi.org/10.1016/j.appet.2016.06.039>
- Jigsaw LLC. (2023). *FAQs: What is Toxicity?*. Perspective. [https://support.perspectiveapi.com/s/about-the-api-faqs?language=en\\_US](https://support.perspectiveapi.com/s/about-the-api-faqs?language=en_US)
- Jones, E. E. (1984). *Social stigma: The psychology of marked relationships*. W.H. Freeman.
- Khara, T. (2018, November 5). *Why do vegans have such bad reputations?*. The Conversation. <https://theconversation.com/why-do-vegans-have-such-bad-reputations-103683>

- Kim, H. (2022, May 13). *Increase in veganism: Is veganism growing in 2022? how fast is it growing?*. Sentient Media. <https://sentientmedia.org/increase-in-veganism/>
- Kozinets, R. V. (2002). The field behind the screen: Using Netnography for marketing research in online communities. *Journal of Marketing Research*, 39(1), 61–72. <https://doi.org/10.1509/jmkr.39.1.61.18935>
- Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatisation: The functions of social exclusion. *Psychological Bulletin*, 127(2), 187–208. <https://doi.org/10.1037/0033-2909.127.2.187>
- Kustar, A., & Patino-Echeverri, D. (2021). A review of environmental life cycle assessments of diets: Plant-based solutions are truly sustainable, even in the form of Fast Foods. *Sustainability*, 13(17), 9926. <https://doi.org/10.3390/su13179926>
- Lehner-Mear, R. (2019). Negotiating the ethics of netnography: Developing an ethical approach to an online study of Mother Perspectives. *International Journal of Social Research Methodology*, 23(2), 123–137. <https://doi.org/10.1080/13645579.2019.1634879>
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, 27(1), 363–385. <https://doi.org/10.1146/annurev.soc.27.1.363>
- Lundahl, O. (2018). Dynamics of positive deviance in destigmatisation: Celebrities and the media in the rise of veganism. *Consumption Markets & Culture*, 23(3), 241–271. <https://doi.org/10.1080/10253866.2018.1512492>
- 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>
- Minson, J. A., & Monin, B. (2011). Do-gooder derogation. *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.
- Phelan, J. C., Link, B. G., & Dovidio, J. F. (2008). Stigma and prejudice: One animal or two? *Social Science & Medicine*, 67(3), 358–367. <https://doi.org/10.1016/j.socscimed.2008.03.022>
- Rabès, A., Seconda, L., Langevin, B., Allès, B., Touvier, M., Hercberg, S., Lairon, D., Baudry, J., Pointereau, P., & Kesse-Guyot, E. (2020). Greenhouse gas emissions, energy demand and land use associated with omnivorous, Pescovegetarian, vegetarian, and vegan diets accounting for farming practices. *Sustainable Production and Consumption*, 22, 138–146. <https://doi.org/10.1016/j.spc.2020.02.010>
- Rao, H., Monin, P., & Durand, R. (2003). Institutional change in Toque Ville: Nouvelle cuisine as an identity movement in French gastronomy. *American Journal of Sociology*, 108(4), 795–843. <https://doi.org/10.1086/367917>
- Rao, H., Monin, P., & Durand, R. (2005). Border crossing: Bricolage and the erosion of categorical boundaries in French gastronomy. *American Sociological Review*, 70(6), 968–991. <https://doi.org/10.1177/000312240507000605>
- Ritchie, H., & Roser, M. (2013, November 13). *Land use*. Our World in Data. <https://ourworldindata.org/land-use>
- Rothgerber, H. (2014). Horizontal hostility among non-meat eaters. *PLoS ONE*, 9(5). <https://doi.org/10.1371/journal.pone.0096457>
- Scarborough, P., Clark, M., Cobiac, L., Papier, K., Knuppel, A., Lynch, J., Harrington, R., Key, T., & Springmann, M. (2023). Vegans, vegetarians, fish-eaters and meat-eaters in the UK show Discrepant Environmental impacts. *Nature Food*, 4(7), 565–574. <https://doi.org/10.1038/s43016-023-00795-w>
- Shamoi, E., Turdybay, A., Shamoi, P., Akhmetov, I., Jaxylykova, A., & Pak, A. (2022). Sentiment analysis of vegan related tweets using mutual information for feature selection. *PeerJ Computer Science*, 8. <https://doi.org/10.7717/peerj-cs.1149>
- Suler, J. (2004). The online disinhibition effect. *CyberPsychology & Behavior*, 7(3), 321–326. <https://doi.org/10.1089/1094931041291295>



- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *SSRN Electronic Journal*.  
<https://doi.org/10.2139/ssrn.3205035>
- The Vegan Society. (2014). Ripened by human determination - the vegan society.  
<https://www.vegansociety.com/sites/default/files/uploads/Ripened%20by%20human%20determination.pdf>
- The Vegan Society. (n.d.). *Definition of veganism*.  
<https://www.vegansociety.com/go-vegan/definition-veganism>
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research. *Sociological Theory*, 30(3), 167–186. <https://doi.org/10.1177/0735275112457914>
- Twine, R. (2014). Vegan killjoys at the table—contesting happiness and negotiating relationships with Food Practices. *Societies*, 4(4), 623–639.  
<https://doi.org/10.3390/soc4040623>
- Twine, R. (2021). Emissions from animal agriculture—16.5% is the new minimum figure. *Sustainability*, 13(11), 6276. <https://doi.org/10.3390/su13116276>
- Twitter. (2023, September 29). *X terms of service*.  
<https://twitter.com/en/tos#intlTerms>
- Vergne, J.-P. (2012). Stigmatized categories and public disapproval of organizations: A mixed-methods study of the Global Arms Industry, 1996–2007. *Academy of Management Journal*, 55(5), 1027–1052.  
<https://doi.org/10.5465/amj.2010.0599>
- Vestergren, S., & Uysal, M. S. (2022). Beyond the choice of what you put in your mouth: A systematic mapping review of veganism and vegan identity. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.848434>
- Williams, E., Vardavoulia, A., Lally, P., & Gardner, B. (2023). Experiences of initiating and maintaining a vegan diet among young adults: A qualitative study. *Appetite*, 180, 106357. <https://doi.org/10.1016/j.appet.2022.106357>
- Wunsch, N.-G. (2023, January 30). *Top motivations for Veganuary 2022*. Statista.  
<https://www.statista.com/statistics/1264382/top-motivations-for-veganuary/>
- Young, S. L. (2004). Factors that influence recipients' appraisals of hurtful communication. *Journal of Social and Personal Relationships*, 21(3), 291–303.  
<https://doi.org/10.1177/0265407504042833>

