



## Out of sight, out of mind: how pescetarians manage dissonance by creating distance

Maja Cullen, Devon Docherty & Carol Jasper

To cite this article: Maja Cullen, Devon Docherty & Carol Jasper (14 Mar 2024): Out of sight, out of mind: how pescetarians manage dissonance by creating distance, Qualitative Research in Psychology, DOI: [10.1080/14780887.2024.2328037](https://doi.org/10.1080/14780887.2024.2328037)

To link to this article: <https://doi.org/10.1080/14780887.2024.2328037>



© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.



Published online: 14 Mar 2024.



Submit your article to this journal [↗](#)



Article views: 1833



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

# Out of sight, out of mind: how pescetarians manage dissonance by creating distance

Maja Cullen, Devon Docherty, and Carol Jasper

Division of Psychology, Faculty of Natural Sciences, University of Stirling, Stirling, Scotland, UK

## ABSTRACT

For many, there exists a cognitive inconsistency between the practice of eating non-human animals and the belief that animals are morally relevant. This juxtaposition has fittingly been described as the 'meat paradox'. However, what can be said about the decision to eat only the flesh of fish? The present research seeks to understand what attitudes lead pescetarians to remove terrestrial animals from their plate but still include aquatic animals such as fish. Semi-structured interviews were conducted with self-identifying pescetarians and analysed using reflexive thematic analysis. Three themes are presented which can be understood by reference to the construal-level theory of psychological distance. Fish were perceived as distant on multiple dimensions which resulted in speciesist (the idea that some species are more important and morally relevant than others) attitudes toward marine animals' capabilities and the justification of pescetarianism as a compromise between debates of feasibility and ethical desirability.

## KEYWORDS

Cognitive dissonance; construal-level theory; meat paradox; fish; pescetarian; psychological distance

## Introduction

Globally, over 290 million cows, one and a half billion pigs, and over 70 billion chickens are killed every year for human consumption (FAO n.d.). Animal-based diets involving the regular consumption of non-human animal bodies and their by-products are widespread and considered to be the social norm with an estimated global average consumption of 122 grams of meat per person every day (FAO n.d.). Moreover, it is expected that the total amount of meat consumed globally will increase by 76% with a growing population and economic shifts in low- and middle-income countries within the next 25 years (Alexandratos & Bruinsma 2012; Godfray et al. 2018). However, this trend is at odds with environmental sustainability, as the rearing of billions of animals required to meet the desires of the population leads to significant emissions of potentially harmful gases (Gerber et al. 2013), freshwater shortages (Hoekstra & Mekonnen 2012), and increased soil erosion (Godfray

**CONTACT** Devon Docherty  [devon.docherty@stir.ac.uk](mailto:devon.docherty@stir.ac.uk)  Division of Psychology, Faculty of Natural Sciences, University of Stirling, Stirling FK9 4LA, Scotland, UK

© 2024 The Author(s). Published with license by Taylor & Francis Group, LLC.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

et al. 2018). Further, reports of harrowing conditions for workers and animals in slaughterhouses evoke significant concerns about human and non-human animal welfare (Winders & Abrell 2021).

Joy (2010) proposes that the prolific consumption of animals has been largely uncontested due to carnism. Carnism is defined as the invisible belief system that conditions people to eat certain animals without question. As a prevailing ideology, carnism is reinforced through social institutions such as education, media and family structures, who encourage individuals to align their perceptions, values, and behaviours with the idea that eating animals is 'natural', 'normal' and 'necessary' (Joy 2010). Further, Piazza et al. (2015) found evidence for an additional significant criterion of justification, that animals taste 'nice'. Together, these criteria are known as the 'Four Ns' of justification (Piazza et al. 2015).

Despite the widespread acceptance of animal slaughter and consumption, many people consider themselves opposed to harming animals, a contradiction which Loughnan, Haslam, and Bastian (2010, 2012) describe as the 'meat paradox'. If the meat paradox is not resolved, cognitive dissonance can continue to be experienced. Cognitive dissonance was termed by Festinger (1962) to explain a discrepancy between two conflicting beliefs or behaviours and the resulting psychological discomfort elicited by this incongruency. Dissonance can be resolved by adjusting incongruent behaviours or beliefs (Festinger 1962). Referring to the meat paradox, people are thought to resolve cognitive dissonance by changing their values (e.g., removing moral concern for animals), changing their behaviour (e.g., stop consuming animals), or by disengaging from the contradictory nature of their incongruent beliefs. The last strategy is common in meat eaters (Gradidge et al. 2021) and involves justifying meat consumption in some way, such as by evoking the Four Ns. It was found that high endorsement of the Four Ns typically leads to the alleviation of dissonance by rationalising meat consumption (Piazza et al. 2015). This rationalisation allows people to uphold a positive self-image and reject personal responsibility for the killing of animals because it frames abstinence from eating animals as unfeasible (Bastian & Loughnan 2016).

More recently, research on the consumption of non-meat animal products (NMAPs) such as dairy and eggs has highlighted the prevalence of dissonance in vegetarians (Docherty & Jasper 2023). Acknowledging animal welfare concerns, vegetarians justified eating NMAPs via arguments largely aligning with the 4Ns. Naturalness, however, was not given as a reason for eating NMAPs, offering an important distinction in the differing perceptions of animal product consumption between meat-eaters and vegetarians. Further, interviewed vegetarians expressed a strong affinity for cheese, whilst simultaneously rejecting cow's milk in its liquid form. It was argued that this preference for more processed dairy which minimises resemblance to the natural animal product allows vegetarians to dissociate food from the animal it came from (Docherty

& Jasper, 2023). Thus, the justifications given by vegetarians and meat-eaters each reflect a perceived psychological distance between the animal and the consumer. However, such findings regarding dissonance have rarely been explored yet in pescatarians.

Additionally, whilst much of the previous research on dissonance and animal-based diets has focused on commonly consumed land animals and their by-products (e.g., Docherty & Jasper 2023; Piazza et al. 2015), it does not consider the approximately two trillion marine animals that are estimated to be captured and killed for commercial fishing purposes each year (Brown & Dorey 2019). These numbers dramatically exceed the annual number of terrestrial animals killed, despite excluding the further billions of marine animals killed as bycatch (non-target species) and the billions of fish killed in aquaculture facilities (Brown & Dorey 2019). When decisions about animal welfare are made based on beliefs regarding moral relevance as measured by perceived cognitive abilities, fish find themselves in a precarious position. Whilst meat-eaters and vegetarians alike ascribe terrestrial animals the capacities to suffer and experience emotions such as sadness and fear (Bilewicz, Imhoff, & Drogosz 2011; Loughnan, Haslam, & Bastian 2010; Wilkins, McCrae, & McBride 2015), the cognitive abilities of fish remain a debated topic. For example, Wilkins, McCrae, & McBride (2015) found that when asked to rate the emotional abilities of different species, their participants ranked fish second to last after mammals, birds, and reptiles, only preceding invertebrates in their perceived capacity to experience primary (sadness, fear, joy) and secondary (empathy, pride, jealousy) emotions. In addition, some research argues that fish are unlikely to experience pain as they lack the essential neuroanatomical structures which are responsible for pain perception in humans (Key 2016). However, this view has been criticised for its misrepresentation of the neuroscience underlying pain awareness and an oversimplified deduction of fish's abilities based on human brain anatomy (Elwood 2016; Merker 2016; Sneddon 2020). In fact, there is mounting evidence strongly suggesting that fish do feel pain and at the very least experience negative states such as stress (Lambert et al. 2022; Sneddon 2015, 2019). When the lips of rainbow trout, for example, were injected with a noxious stimulus, the fish displayed pain-related behaviours by rubbing their lips on the tank and rocking from side to side. These behaviours lessened with the administration of morphine (Sneddon 2003).

Nonetheless, previous research suggests that pescatarians alleviate cognitive dissonance by ascribing fewer mental capacities to fish and thus, displaying higher levels of speciesism (Rosenfeld & Tomiyama 2019). Horta (2010, 244) defined speciesism as 'the unjustified disadvantageous consideration or treatment of those who are not classified as belonging to one or more particular species'. In their sample of pescetarian men, Banyte et al. (2022) found a complete absence of animal welfare concerns when

participants were asked to indicate their reasons for adhering to a pescetarian diet. Aligning with those findings, Rosenfeld (2018) argued that because pescetarianism is less restrictive than a vegetarian or plant-based diet, pescetarians are more likely to be motivated by health reasons than animal welfare concerns. However, comprehensive research on the motivations of pescetarians remains slim. Beyond animal welfare concerns, or the potential lack thereof, lie environmental implications of choosing to consume marine animals. The fishing industry has a complex bidirectional relationship with global climate change. Commercial bottom trawl fishing alone releases as many harmful greenhouse gases into the atmosphere as the entire aviation industry (Sala et al. 2021), thus, directly contributing to anthropogenic climate change. Yet, the fishing industry also gravely suffers under the consequences that climate change has on marine life, including the destruction of marine ecosystems, worsening water quality, and diminishing fish stocks (Brander 2007).

Given the large environmental impact and risk of contributing to large-scale suffering, eating fish and other marine animals has ethical implications comparable to meat consumption. Therefore, the present study poses two research questions: do pescetarians experience cognitive dissonance resulting from their dietary choices and if so, how do they resolve this state of mental discomfort? Answers to these questions can offer novel insight into the perception of marine animals and add nuance to the literature on dietary choice, identity and animal ethics.

## **Method**

This study was approved by the University of Stirling General University Ethics Panel in line with British Psychological Society guidelines. All participants gave informed consent before taking part.

### ***Positionality statement***

Quality qualitative work requires the researchers to reflect on how personal experiences, attitudes, and epistemological viewpoints shape the design, collection, and interpretation of data. The presence of subjectivity in this context is not viewed as a disadvantage but rather as an opportunity to conduct transparent and ethically sound research (Braun & Clarke 2023; Lazard & McAvoy 2020).

All authors of this work identify as ethical vegans and thus, support the reduction of animal consumption wherever practicable. However, we all are historical meat-eaters and our journeys to veganism were diverse and non-linear. Hence, we have empathy for the complexity of dietary norms and the difficulty involved in challenging those conventions. We view this proximity

as an analytical strength (Lazard & McAvoy 2020) allowing us to both interpret and construct meaning from the data rejecting commonly held, positivist notions of bias (Braun & Clarke 2023).

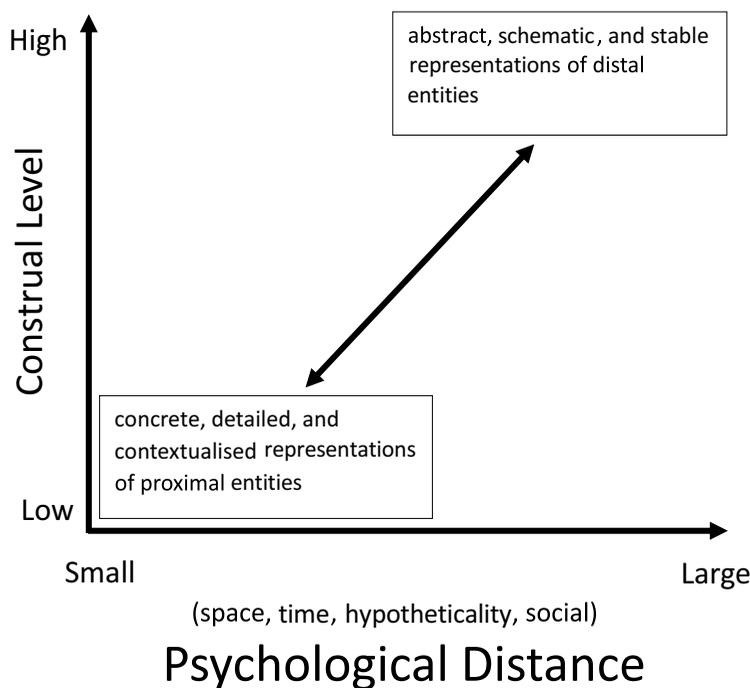
Throughout the entire process, our research relied on us being self-critical and reflexive. In this sense, biweekly meetings were held with the purpose of interrogating any emotions that arose during the data collection and analysis. Further, informal peer-review was sought from a variety of non-vegan individuals to consider alternative perspectives on the data.

### ***Philosophical framework***

The extent of our reflexivity encompasses, besides our immediate attitudes and emotions, our wider ontological and epistemological viewpoints. Ontologically, we align ourselves with a relativist position. Relativism assumes that reality is dependent on time, context, and the individual. There is no one universal reality that awaits discovery through our scientific research (Braun & Clarke 2013). Epistemologically, we follow a social constructionist approach. As constructionists, we believe that humans collectively build knowledge. Knowledge is dependent on the socio-cultural context in which it has been created and will differ vastly across different social milieus (Braun & Clarke 2013). In our study, our relativist and constructionist approaches express themselves through our interest in gaining insight into the perceived realities of the participants. Our focus is thus on the subjective knowledge that our sample of participants has constructed of their diets and marine animals as living creatures. Accordingly, our research is experiential as it provides participants with the opportunity to elucidate how their subjective experiences of the world around them have shaped their personal attitudes (Byrne 2022).

### ***Guiding theory***

The construal-level theory of psychological distance (CLTPD) may offer an increased understanding of people's dietary ideologies regarding their consumption of animals. CLTPD examines how a perceived subjective distance influences how humans think about proximate or distal entities on four dimensions – space, time, hypotheticality, and social distance (Liberman, Trope, & Stephan 2007). Construals are mental interpretations that humans construct of any subject, object, or situation diverting from their current direct experience. Thus, the mediator of construal levels (high or low) is psychological distance (see p.15 for relevant example). Distant and unfamiliar entities are constructed using high-level construals (interpretations), whilst proximate and familiar entities are constructed using low-level construals (see Figure 1). High-level construals focus on the most salient and relevant aspects of an entity within any given context, hence they rely on general and superordinate



**Figure 1.** Visualisation of construal-level theory of psychological distance (CLTPD). Small psychological distance elicits low-level construals which provide specific and contextualised interpretations of proximal subjects, objects, or situations. Increasing psychological distance leads to the development of high-level construals, resulting in schematic and stable representations of distant subjects, objects, or situations.

information. Low-level construals focus on specific and subordinate aspects as they are usually formed when more information is accessible and psychological distance is perceived to be smaller (Liberman, Trope, & Stephan 2007; Shapira et al. 2012; Trope & Liberman 2010). One example of this, focusing on spatial distance, has been offered by Fujita et al. (2006). In their study, university students were invited to observe a video recording of the same conversation between two individuals. One group of participants was told that the conversation took place on the participants' local campus, whilst the other group was told that the conversation took place on a campus in Italy. When asked to recount the interaction, participants in the distant location condition used more abstract (high-level) descriptions than participants who believed the conversation took place in a proximate and familiar location. This suggests that the same situation can be construed differently depending on perceived psychological distance.

Following responses of the participants in the present study, psychological distance appeared to affect pescetarians' dietary choices. This was established by identifying references to perceived distance between the respondents and marine animals across all interviews. Accordingly, the CLTPD was chosen to

analyse the relationship between psychological distance and consumption of fish and other marine animals. Examples of references and consequent application of CLTPD (to gain understanding regarding the occurrence of such references) will be provided throughout the Results and Discussion section.

### ***Participants and recruitment***

Ten participants volunteered to be interviewed for the purposes of this research. We do not believe data saturation to be relevant to the analysis as it is incongruent with the interpretative and subjective nature of reflexive thematic analysis (Braun & Clarke 2021b). Hence, a sample size of ten was found to provide rich data allowing for the generation of complex themes whilst avoiding superfluous data collection efforts. The only inclusion criterion for participants was that they self-identified as pescetarians.

Snowball sampling was chosen as the most feasible and sensible sampling method. Snowball sampling lends itself well to qualitative research involving the discussion of sensitive subjects as participants are recruited through personal networks, allowing for increased levels of trust and credibility (Atkinson & Flint 2001; Biernacki & Waldorf 1981). Three of the ten participants were part of the interviewer's (MC) social network and knew them personally prior to the commencement of the research. The other seven participants were referred either through the participants directly or through personal and professional acquaintances.

Aligning with a constructionist approach, we decided that participants had to self-identify as pescetarians. This choice was made to mitigate any personal assumptions about what constitutes a pescetarian. Furthermore, this study is concerned with illuminating 'grey zones' of dietary commitment, thus, it was relevant to investigate what motivates people to label themselves, whilst adopting an identity that may be incongruent with their behaviour. Participants identified as pescetarian for a time range of two months to 36 years. Prior to the transition to pescetarianism, four out of ten participants declared that they had been following a vegetarian diet for various amounts of time. The remaining six participants had previously been meat-eaters. Motivations for adopting a pescetarian diet were diverse. They included health benefits deduced from receiving essential nutrients by eating fish whilst also avoiding potentially harmful components found in meat products, deep-rooted care for terrestrial animals, and the unsustainability of the meat industry.

This work is not meant for comparison to, or generalisation of, a larger population based on variables such as age or ethnicity, nor have any of these characteristics been interrogated during the analytical process. Nonetheless, participants varied in their gender, age, and nationality. Further, we would like

to stress that all participants found themselves in the position of being able to choose to engage with or abstain from eating animal products. We do not endorse extending the findings of this research to people who cannot viably follow a diet absent in any one or multiple animal products for health, accessibility, or any other reason.

### **Data collection**

The chosen method of data collection for this study was individual semi-structured interviews (see Appendix for interview guide). Flexible in their nature, semi-structured interviews lend themselves well to inductive coding approaches aiming to capture complex beliefs. Individual interviews with each participant were conducted by the primary researcher MC to create a trustworthy and intimate atmosphere. This allowed participants to take time in forming their answers and lessen fears of judgement from other potential participants (Kruger et al. 2019).

Interviews lasted an average length of 41 minutes resulting in a total of over 55 000 words of data gathered. Each participant was randomly allocated a pseudonym.

### **Data analysis**

We conducted a latent reflexive thematic analysis using an inductive coding approach. Reflexive thematic analysis is a qualitative research method aimed at actively identifying patterns within a data corpus and generating themes to illustrate the richness of data provided (Braun & Clarke 2006, 2021a; Finlay 2021). It relies on the researchers' self-awareness of how they shape the research project, as discussed in the positionality statement. Our analysis was latent as we aimed to construct meaning beyond the descriptive content of the participants' responses (Byrne 2022).

As we followed Braun and Clarke's (2006) six phases of thematic analysis, our analysis began with the manual verbatim transcription of the data allowing for full immersion in the data corpus. Then, we re-read our body of data, highlighting noteworthy data extracts that we considered to be relevant and making annotations. Based on these initial codes, we generated and redefined our themes until agreement between the researchers was achieved through extensive discussion surrounding the themes' relevance and nuance. The themes were then analysed in relation to the construal-level theory of psychological distance by applying the concept of construals to participants' responses in order to gain insight into their attitudes toward marine animals (see Results and Discussion section). Whilst our inductive coding approach facilitated the exploration of the data corpus without an a priori coding scheme, the CLTPD allowed us to contextualise and attempt to understand

the participants' dietary choices. None of the researchers were familiar with CLTPD until themes were generated, thus neither the data collection nor the process of generating themes was influenced by any one theory. CLTPD was identified and chosen as suitable following discovery of the impact of psychological distance facilitated by participants' responses. The most succinct participants' quotes were chosen to exemplify the chosen themes and to show how these were grounded in the data corpus.

## Results and discussion

Prior to the discussion of results, we find it necessary to mention that there are over 32 000 recognised species of fish (Brown 2015), thus, it is likely inaccurate to make general assumptions about all fish. Nonetheless, throughout this paper, we will refer to the term 'fish' within the context that it was used by the participants. Further, the usage and ordinary understanding of the words 'fish' and 'meat' deserve to be questioned. However, for the purposes of readability and comprehension we concede the frequent usage of 'meat' as referring to terrestrial animal flesh and 'fish' as referring to the flesh of non-mammalian aquatic animals throughout the paper.

Most participants predominantly referred to eating commonly consumed fish species (e.g., salmon, tuna, cod) with no extraordinary exceptions, whilst only some discussed the consumption and their perception of other marine animals (e.g., crabs, oysters, octopuses). Furthermore, when discussing the consumption of marine animals, participants consistently and unanimously referred to non-mammalian marine animals. To our knowledge, none of the participants endorsed the consumption of mammalian aquatic animals.

Further nuance and depth of the participants' responses will now be analysed in relation to the following three themes: *A Fishy Identity*, *Eating Fish as the Lesser Evil*, and *How to Become Invisible* (see Table 1). The first theme, *A Fishy Identity*, centres around the pescetarian identity. It explores

**Table 1.** Theme table summarising *A fishy identity*, *eating fish as the lesser evil*, and *how to become invisible*.

Theme Name	Theme Content	Example Extract
<i>A Fishy Identity</i>	Perceived proximity between pescetarians and vegetarians or vegans Future plans to change diet	'I'm just I guess a vegetarian who occasionally eats fish.'
<i>Eating Fish as the Lesser Evil</i>	Feasibility vs desirability of reducing fish consumption Pragmatism Self-control	'I was talking about it with my mum that like if I were super rich and if I had a personal chef, I would easily go vegan. But right now, I'm not in the point of my life where I can find the energy to make that choice.'
<i>How to Become Invisible</i>	Social power Spatial and social distance between humans and fish Self-awareness	'Maybe it's just the fact that we don't interact with them to the same extent as we do with land mammals, you know. And because of that, we don't empathise with them as much.'

the discrepancy between the expressed values and performed actions of the participants. *Eating Fish as the Lesser Evil* addresses how the participants frame eating fish as a compromise in the debate concerning the desirability versus feasibility of eliminating marine animals from their diets. The last theme, *How to Become Invisible*, focuses on how social distance, social power, and spatial distance influence each other and may help to explain why most aquatic animals are perceived to be less morally relevant than terrestrial animals.

### ***A fishy identity: incongruent self-perception and a low commitment to the pescetarian identity***

Despite asking for self-identifying pescetarians, most participants appeared less confident in their identity as pescetarians than anticipated. This was expressed through the interchangeable usage of the words ‘vegetarian’ and ‘pescetarian’:

I think in my youth I probably did do it because clearly when I first became vegetarian or, sorry, pescetarian [...]. (Deborah)

Initially, I was trying to go total vegetarian. (Kenneth)

By utilising the word ‘total’ Kenneth appeared to imply that pescetarian diets fall under the umbrella of vegetarian diets. Indeed, his views were supported by three other participants when they were asked to define what they think a pescetarian is:

For me, a pescetarian diet would be a vegetarian diet plus fish. (Deborah)

Just someone who’s a vegetarian but eats fish occasionally. (Steven)

I’m just I guess a vegetarian who occasionally eats fish. (Bob)

Some participants even likened their dietary practices to predominantly plant-based ones, despite their consumption of various animal products:

If somebody asked me, I would say on the whole we are wholefood plant-based, but we do eat fish. (Lauren)

‘Eating a mostly plant-based diet with no other meat but consuming fish’ (Sandra).

Whilst Bem (1967) argued that people infer their identity from their repeated actions, this does not appear to apply to the participants of this project who expressed close identifications with vegetarianism despite regularly consuming non-vegetarian food:

[...] even now when I’ve started eating more fish, I keep saying that I am vegetarian, and I sometimes eat fish which pretty much means that I’m pescetarian. But, again, I think if

I put that label that I'm pescetarian that kind of I feel like it puts me in this box that I can't change if that makes sense. (Sandra)

But I think if I went home at Christmas, I might still say to my family that I am still vegetarian. [...] It's easier to just say I'm vegetarian, you know, rather than when it's like 'I'm vegetarian, but sometimes I eat fish'. (Bob)

Bob briefly mentioned the impact of his social milieu on the way he chooses to express his dietary identity. However, most participants maintained a stable identity across contexts and merely referred to varying levels of understanding and support from their social networks:

My grandma gives me chicken and says 'Don't worry! It's just chicken, not meat.' [...] So no, she's not happy with it. But my mum doesn't really care. (Arabella)

The extent of the perceived proximity between pescetarians and vegetarians appears to be a common observation. In their respective samples, Rosenfeld and Tomiyama (2019) found that 25% of self-identifying vegetarians consumed fish, whilst Barr and Chapman (2002) reported that 41% of self-identifying vegetarians consumed fish. This leads us to question why pescetarians often associate themselves with vegetarians and vegans considering that a significant attribute of their diets could be defined as the consumption of certain groups of animals. We can understand this comparison in relation to the construal-level theory of psychological distance (Liberman, Trope, and Stephan 2007).

To reiterate, psychological distance can be understood as the mental divergence from our current experiences in the here and now, known as the zero-distance point (Liberman, Trope, and Stephan 2007). Thus, to partake in abstract thinking involving alternative scenarios, the past, the future, or far-away places and creatures, humans rely on high-level construals (interpretations) which classify an entity based on its broader and more schematic characteristics. Low-level construals are reserved for subjects and objects within proximity to us. To give a relevant example, when participants were asked to think about the characteristics of cows, one participant mentioned that she has a favourite cow that she passes every day on her way to work. She thinks of this cow using low-level construals making specific references to the cow's distinct personality as she experiences spatial, temporal, and social proximity to her favourite cow. Conversely, when asked to think about the characteristics of a salmon, participants generally applied more high-level construals offering abstract responses such as 'sea' or 'food'. Values and morals function as high-level construals, while performed behaviours typically rely on more low-level construals (Trope, Liberman, and Wakslak 2007). We would argue that when discussing their diet and more fundamental aspects of their identity, participants will engage in more abstract thinking as it requires them to view themselves from a distal point of view. Accordingly, their commonly

expressed values of caring about animal welfare and environmental impact hold more significance to them than whether they consumed a tuna sandwich for lunch. This abstract line of thinking becomes apparent when participants express their strong dislike of animal harm, despite engaging with it to some extent:

I don't like the thought of how animals, and fish in the sea is fished either, but yeah, animals I don't like to think of what their fate is going to be. (Lauren)

I really care about animals. So, like I would feel, I don't know, I feel like super compassionate of animals as well so like I wouldn't . . . Because I picture the animals, you know, being butchered and eaten as well. (Emily)

And one thing is I don't like cruelty to animals or children or anything like that. [. . .]  
I just don't like cruelty of any kind. (Kenneth)

As these values are most likely to be shared with the core beliefs of vegetarians and vegans it makes the reduction of social distance between the participants and what they perceive to be like-minded individuals more conclusive. Furthermore, this comparison might allow pescetarians to socially distance themselves from meat eaters and thus, makes their choice to consume only marine animals appear more ethical (Bandura 1999). This is a potentially advantageous comparison that functions to alleviate cognitive dissonance by creating a more positive and moral self-construct (Rothgerber 2014).

The low commitment that participants expressed regarding pescetarianism as an identity also influenced how they envisioned their future. Only three people said they do not consider making any changes to their diet. The remaining seven participants displayed varying desires to go vegetarian or vegan at an unspecified point in the future:

And now I'm at the point where I'm still enjoying the fish, but I'm pretty sure that in the future if I manage to to change that I would like to go vegetarian. Completely stop seafood and fish. (Olivia)

I was actually thinking of going vegan at some point. (Emily)

But, you know, I'm probably tending towards becoming vegan. (Kenneth)

The relatively large proportion of aspiring vegetarians and vegans may have been influenced by a raised public self-consciousness elicited by being interviewed and recorded by the vegan researcher MC. CLTPD argues that this kind of self-awareness encourages people to highlight behaviours that align with their values (Lieberman, Trope, & Stephan 2007). Additionally, temporal distance increases a person's confidence in the prediction that their future behaviour is more likely to be guided by their overarching morals than their immediate behaviour is (Eyal et al. 2009; Lieberman, Trope, & Stephan 2007). Thus, participants felt more confident that they could and would exclude

marine animals from their diet at some point in the future. In this argument, the desirability of being vegetarian or vegan holds more importance than the feasibility of cutting aquatic animals out of their daily diet. In other words, being pescetarian is feasible now, but being vegetarian or vegan is desirable in the future.

### ***Eating fish as the lesser evil: a personal compromise***

This leads us to examine how decisions about feasibility and desirability are made. Participants cited several reasons for maintaining their current dietary choices. These reasons varied from social influences to the enjoyment of the way fish tastes, to a lack of cooking skills deemed necessary to support a healthy fish-free diet:

Well, it's catering for everyone's taste because some friends feel very strongly about the fact that they want meat. And I thought, 'Well, this is a compromise'. (Lauren)

I can't be bothered. I'm sorry. I can't be bothered. So, I want some heavy comfort food, so to speak, and taking raw vegetables and turning them into something filling and satisfying, I don't know, it feels like very time-consuming and difficult. (Johnny)

Participants further expressed that they could easily adopt an animal-free diet if they had the financial means and somebody to prepare their meals for them:

I was talking about it with my mum that like if I were super rich and if I had a personal chef, I would easily go vegan. But right now, I'm not in the point of my life where I can find the energy to make that choice. (Arabella)

To be honest, if I felt I could go vegan, I would go vegan. See if I was a celeb and I had-, like I was eating out all the time or I had a chef, I would definitely be vegan. I just feel like it's not sustainable for me to be vegan and just live life where I'm still enjoying what I'm eating. (Steven)

Deborah mentioned an essential keyword in her line of argument: pragmatism. She explained why she has included aquatic animals in her diet for over 35 years:

But actually, I do stick with it. Partly, because I like it. But partly because there is a pragmatism to me eating it. It's easy to bang a bit of fish in the oven and cook it or-, do you know what I mean? And it doesn't take a lot of my lack of cooking skill to do it as well. So, I think it's a combination of practical plus health reasons for me.

The pragmatic self has been identified by Kivetz and Tyler (2007) as the opponent to the idealistic self. Aligning with CLTPD, the idealistic self is encouraged by high-construal values whilst the pragmatic self is motivated by immediate low-level construals. The mediator between these two selves, Kivetz and Tyler (2007) argued, is temporal distance. Thus, since a diet is a complex choice affected by a multitude of factors, it is likely to be the

pragmatic self that determines what is to be consumed daily. To make an informed choice, the pragmatic self relies on the evaluation of ‘pros’ and ‘cons’. Generally, con arguments are subordinate to pro arguments when deciding if to pursue an action. This is because if an action has no benefit, it is not viewed as desirable regardless of the number of drawbacks or lack thereof. However, the salience of con arguments increases the closer an action is to the present time. Accordingly, people find it easier to find reasons not to perform a behaviour in the here and now than they do in the future (Eyal et al. 2004). These findings may explain why the participants of this study were able to provide a multitude of justifications for their current consumption of aquatic animals. Eating fish appears to be viewed as a congruent compromise in the debate over desirability versus feasibility. As feasibility is a subjective perception that can neither be proven nor disproven by objective arguments, it may effectively alleviate dissonance.

We would argue that dilemmas concerning self-control are an additional likely psychological distance variable to consider when attempting to understand the dietary choices of pescetarians. On a construal level, self-control is influenced by a disagreement between high-level and low-level construals. A pescetarian’s high-level construal may be a moral inclination to condemn animal harm, whilst their low-level construal may be the urge to eat fish for dinner. A temporary reduction of self-control is then defined as choosing low-level desires over high-level ones (Fujita et al. 2006). Ergo, in their studies, Fujita et al. (2006) found that eliciting high-level construals (interpretations) in their participants led to greater amounts of self-control and more negative perceptions of temptations. Within CLTPD, reminding oneself of one’s ‘why’ is viewed as essential to engaging in behaviours aligning with one’s values (Liberman, Trope, & Stephan 2007). This is because questioning why one aspires to perform an action relates to superordinate goals, and thus, high-level construals, whilst questioning how an action is performed refers to a concrete representation of an action void of motivations. However, this raises the question of both why and how pescetarians manage to exert substantial self-control in their abstinence from consuming terrestrial meat, but not aquatic flesh in the imminent future.

### ***How to become invisible: removing fish from the moral circle by creating distance***

When asked why participants continued to eat aquatic animals but not terrestrial ones, limited cognitive abilities and an incapacity to feel pain were consistently cited as reasons for their decision:

I mean you have the arguments that people usually say when they’re pescetarian like fish don’t feel pain as much, their lives are shorter, and they don’t understand the concept of

living as much. And that like their attention span goes away so fast that they don't even realise they're living because their memory refreshes so often, you know?(Arabella)

I don't want to sound rude, but fish seem a bit dumber. (Emily)

I think they've got pure instincts. I don't think there's any more than that. I'm not convinced at all that they're sentient. (Kenneth)

I have less issue eating fish I suppose. I don't know why. I can't really put my finger on it. It's not that they're not conscious. It's just that some of them are a bit less conscious. Sounds a bit weird. (Bob)

The debate around the sentience and intelligence of fish is ongoing. However, evidence of cognitive abilities and pain perception in fish is mounting. The idea that fish have extremely short memories and attention spans is a common misconception that has now been disputed. Conversely, studies indicate they have excellent spatial and long-term memory skills (Bshary, Wickler, & Fricke 2002). Furthermore, they have been shown to count, use tools, and display Machiavellian intelligence (the ability to engage with complex social structures by various means such as deception and cooperation) (Agrillo et al. 2012; Bshary, Wickler, & Fricke 2002). Additionally, evidence strongly suggesting pain awareness in fish is increasing (Sneddon 2015, 2019). It appears that our participants choose to articulate information that allows them to constrict fish's moral status based on their perceived limited abilities. Indeed, Loughnan, Haslam, and Bastian (2010) have identified the dismissal of an animal's moral status as a strategy to resolve the meat paradox and thus, lighten the burden of cognitive dissonance.

Another significant consideration of participants' was that of similarity. In this context, the similarity of fish to humans was put into direct comparison with the similarity of land animals to humans:

The faces and the eyes that certain terrestrial animals make. I just feel maybe more connection also because they are more similar to us. (Olivia)

Maybe it's just the fact that we don't interact with them to the same extent as we do with land mammals, you know. And because of that, we don't empathise with them as much. We can't really relate to them as much. (Johnny)

Research across social psychology has consistently shown that humans struggle to empathise with individuals who are dissimilar to them (e.g., Krebs 1975; Majdandžić et al. 2016). These findings are supported by CLTPD in which socially distant beings are perceived as more dissimilar and thought of in more abstract terms (Lieberman, Trope, & Stephan 2007). Another insightful contribution CLTPD can offer in this discussion is the concept of social power.

Power can be defined as a disproportionate domination over a resource (Magee & Smith 2013). Research concerning social power has been largely anthropocentric, exploring the power relations between humans. We wish to

extend this concept to the power relationship between humans and fish. In this analogy, the precious resource is the life of the fish, and humans are the beings in power who exert control over this resource. Smith and Trope (2006) found that more powerful individuals engage in more high-level construals (interpretations) and perceive greater social distance between themselves and others. Within our sample, two arguments appeared to relate to power. The first one of which is the naturalness argument. Participants expressed that they felt more comfortable eating aquatic animals, as out of all animals they viewed themselves as most mentally and physically capable of killing fish. In this context, references were made to genetic predispositions stemming from far-removed ancestors and innate survival mechanisms. Despite its hypotheticality, participants viewed this as a conclusive argument justifying their consumption of pre-processed marine animals:

I also have the mentality that like if you can like kill what you can eat is also more logical than eating what you couldn't kill, you know? [...] It's almost that primate genes that you have in humans, right? (Olivia)

I know I couldn't kill a bigger animal, but I feel like out of all the animals . . . If I was starving, I think like a survival instinct would kick in that I could do it. (Steven)

Steven indicated the second argument in the discussion of power dynamics: size. Participants occasionally mentioned size when asked what aquatic animals they would not consider eating:

Oh, like, you know, those fishes that are like-, I would never have one of those fishes that's like a hundred years old and huge. I would not. I would not. (Arabella)

What classifies as 'huge' in this argument remained unspecified. However, concluding from these statements, we would argue that humans might feel more powerful over fish versus land animals, based on a perceived ability to kill fish, and the comparatively small size of many commonly consumed marine animals.

Besides explanations around the assumed cognitive abilities of fish and social power over them, spatial distance appeared to be another significant factor leading participants to largely restrict non-mammalian aquatic animals from their moral circles, an exclusive zone of moral concern. Indeed, visibility was frequently addressed when participants were prompted to think about what shaped their attitudes toward fish:

It might be just because, you know, I can see cows, sheeps [*sic*] like everywhere. Especially when I live in Italy. It's full of like fields with animals. And like fish, it's more like they're far away. I don't see them. (Emily)

"And fish to me is a bit more remote and a bit more distant if that makes sense. Because I don't see it in a field or a farmyard or anything like that. So, I can I suppose I can mentally distance myself from it a little bit more. (Deborah)

But fish is, you know, out of sight, out of mind, you know? (Kenneth)

These findings align with arguments made by Bandura (1999) and Joy (2010) who viewed invisibility as one of the most central routes to dissociating from injustices and harm. According to CLTPD, spatial distance leads to salience of high-level construals (Liberman, Trope, & Stephan 2007). As derived from participants' responses, aquatic animals are thought of in abstract, schematic terms. Conversely, the shared common space with land animals allows for more low-level construals. It is important to mention here that social distance and spatial distance find themselves in a bi-directional relationship. Humans seek to spatially distance themselves from socially distanced and stigmatised others (e.g., Dotsch & Wigboldus 2008; Goff, Steele, & Davies 2008; Toppenberg et al. 2015). Additionally, spatial distance leads to greater perceived dissimilarity (Liberman, Trope, & Stephan 2007). Thus, psychological distance is self-regulatory as it maintains itself on a construal level. This is a concept that can be extended to the relationship between humans and non-human animals. While birds, such as chickens, may be dissimilar but spatially near and mammalian marine animals, such as dolphins, may be spatially far but perceived as similar; non-mammalian aquatic animals such as fish and shellfish find themselves in the unfortunate position of being both dissimilar and far away. Whilst we do not wish to understate the impact of cultural food norms (i.e., eating mammalian marine animals is rare and largely perceived as immoral within Western societies) for our participants, we would, nonetheless, conclude that the accumulation of distance on multiple levels may explain why pescetarians appear to disengage from ethical concerns regarding fish.

Much of construal-level thinking may be subconscious, but each participant expressed an explicit self-awareness of the logical fallacies in their arguments and the instability of their attitudes:

And I think it's not-, it's not right obviously. An animal is an animal. I think it's engrained speciesism that's in me. (Arabella)

Some participants seemed to lower this self-awareness by a lack of information-seeking:

And if I don't think about the fish, if that makes sense, I can enjoy a bit of fish. (Deborah)

I feel if I was to dig too deep into it, I definitely could be put off fish. (Steven)

In contrast, Sandra appeared to manage the emotional burden of dissonance she experienced when consuming aquatic animals by actively reflecting on the lives and practices involved in the making of her food:

I try to remind myself that this was a living being and that it's been caught and that it came from somewhere. And that there's like a lot of parts to me having what I have on my plate, both from the whole process of it coming to my plate but also from me thinking about the fact that it is an animal.

These clashing coping mechanisms exemplify the negative affect articulated by the participants in contemplation of their choice to eat fish. To mitigate negative emotions when consuming marine animals, participants stressed their efforts to consciously choose what they perceived to be the most ethical fish products. Participants emphasised that they prefer locally caught fish purchased from a fishmonger:

You know, I buy it locally. Yeah. Yeah, I don't tend to buy it from Tesco or from other supermarkets. Yeah, very rarely. (Johnny)

Now, I do prefer local fishing. I like going to fishers' markets and stuff. (Olivia)

I would never buy it in a supermarket because I don't think it's fresh and I don't know where it's come from. I don't know how the fish has been treated. (Lauren)

Whilst participants agreed on the importance of locally bought fish, their preferences for farmed or wild fish differed:

So, if I buy farmed one at least I know that I'm not . . . I mean I'm obviously still contributing to it obviously. [. . .] I am just not contributing to wild stocks depletion when I have the option of buying farmed which is obviously more regulated. It's more streamlined and it's just a closed circle compared to getting it from somewhere that it shouldn't be coming from in my opinion at the moment. (Sandra)

[. . .] I mean this sounds bad, but aquaculture fish is like grown to be eaten instead of like wild fish. They are living their life freely in the water. So, they're like depriving them of a life out there. (Emily)

And a friend's son worked on a fish farm one summer in Scotland, and it was absolutely horrific the tales that he had. So, I've never touched salmon since. (Lauren)

Discussing the implications of different fishing practices is beyond the scope and aim of this paper, however, the diverse opinions of the participants highlight their proactive efforts to lower dissonance by attempting to align their consumer choices with their moral perceptions of wild and farmed fish. Nonetheless, some participants remained critical of the information provided to them when buying fish products alluding to a lack of transparency within the fishing industry:

Lots of times they don't say the truth, let's be honest here. I try and trust it as much as I can even though I'm still feeling a bit, you know, sceptical about it, right? (Olivia)

Considering the responses of the participants, and continued display of critical self-awareness, we would argue in conclusion, that our sample of pescetarian participants appeared to regularly experience cognitive dissonance. Participants appeared to alleviate dissonance through their construction of a moral proximity to vegetarians and vegans, and the minimisation of empathic concern for non-mammalian aquatic animals by means of increasing spatial and social distance. Eating fish was

rationalised as a pragmatic compromise, albeit not an ethical ideal. Nonetheless, their susceptibility to issues of animal welfare and environmental impact may be the reason why participants still experienced cognitive dissonance in relation to their dietary choices.

## Conclusion

In this study, we aimed to evaluate whether pescetarians experience cognitive dissonance in relation to their dietary choices and if so, what strategies they use to resolve it. We discussed three themes relating to the creation of psychological distance on multiple dimensions that offer an increased understanding of the perspective of pescetarians.

The first theme, *A Fishy Identity*, revealed how participants constructed their identity within moral proximity to vegetarians and vegans. Social distance was decreased through this favourable comparison and linking of the pescetarians' abstract high-level values to those who eschew more animal products. This strategy allowed for a more positive self-perception and accordingly, for the potential resolution of dissonance. The second theme, *Eating Fish as the Lesser Evil*, argued that pescetarianism functions as a compromise between what is viewed as desirable in the future and what is feasible now. The participants expressed a variety of reasons why it would currently be impractical for them to remove marine animals from their diet. Aligning with CLTPD, con arguments in this debate were perceived as more salient because diet is a daily, hence proximate, choice to be made. A reduced self-control, when faced with conflicting desires, further explained why pescetarians were reluctant to change their diet, although participants viewed change as aspirational. The rationalisation of their choice was identified as another mechanism to lessen the mental burden of cognitive dissonance. Lastly, the theme *How to Become Invisible* explored the distinctions pescetarians make between land animals and marine animals. Whilst arguments about low cognitive abilities, dissimilarities, and social power were made, a lack of visibility stood out as the common denominator in the calculation of marine animals' moral significance. However, spatial distance alone did not appear as a significant justification for the consumption of all marine animals, as was expressed through participants' objection to eating mammalian aquatic animals. Thus, we argued that the accumulation of social *and* spatial distance unique to non-mammalian aquatic animals is a likely reason for the lower moral regard for fish and other marine animals and their consequential consumption by pescetarians. Nonetheless, participants continually expressed an awareness of their cognitive inconsistencies and resulting discomfort.

## **Strengths**

This paper offers an in-depth qualitative analysis of the complex relationship between pescetarians and the sea-dwelling animals they choose to include in their diets.

We analysed our participants' constructions of fish in reference to CLTPD, which revealed that fish's physical distance and perceived dissimilarity to humans may be a key driver in their exclusion from – or relatively low position within – pescetarians' moral circles. We believe this offers a new perspective on an important yet understudied topic. The method of reflexive thematic analysis offered an increased understanding and contextualisation of the relationship between dietary identity and ethics. Hence, this work provided insight beyond that which is accessible with quantitative data, and we hope it may be used as a point of reference for future research.

## **Limitations, and future research directions**

Though this work offered exciting insights, it naturally had limitations that we wish to address. The most significant limitation can be found in the snowball sampling method. Through an embedded familiarity between the participants and the primary researcher MC, all participants were aware of MC's position as an ethical vegan. Whilst the participants who knew the researcher personally were aware of this prior to the interview, we made the decision to inform the participants that were not previously acquainted with MC about their veganism. It was a choice that we made to allow for consistency across interviews and transparency between the participants and the researchers. MC assured them at the beginning of data collection that they did not condemn their dietary choices on a personal level and aimed to create a comfortable atmosphere. Nonetheless, it is possible that the presence of a vegan researcher has influenced the responses of our participants. A further limitation may be that discussions around the perception of crustaceans – such as crabs, lobsters, and shrimp – fell short and in hindsight should have been prompted more to add further nuance to the data. The absence of responses discussing the moral relevance of these species may indicate an even larger psychological distance and lower ethical concern.

To mitigate the limitations of this present work we have suggestions for potentially fruitful future research. It might be insightful to conduct similar projects involving a non-vegan researcher to explore how the presence of a meat-eating or pescetarian researcher may influence the extent of response bias among the participants. Additionally, more thorough research on perceptions of crustaceans may be beneficial to marine life and thus, worth exploring. Furthermore, as the lack of visibility of fish was highlighted as the most critical reason for humans' ambivalence towards non-mammalian marine animals,

studies investigating the influence of raised visibility on the perception of fish may offer a useful foundation for interventions aiming to increase welfare standards for non-mammalian marine animals and reduce harms associated with their consumption.

### Disclosure statement

During her contributions to this manuscript, DD worked as a paid freelance writer for the non-profit animal rights' organisation Surge Activism. Surge Activism played no role in the design, conduct, findings or reporting of this research.

### Notes on contributors

*Maja Cullen* is a graduate of the Clinical Health Psychology Master's course at the University of Strathclyde and qualitative research assistant working with women affected by breast cancer. Her professional interests lie predominantly in the fields of mental health and dietary behaviours, including people's perception and consumption of animals.

*Devon Docherty* is a graduate of the Master's programme Human-Animal Interactions and a teaching assistant at the University of Stirling. She is interested in investigating and improving the relationship between humans and the animals they perceive as food.

*Carol Jasper* is a lecturer at Stirling University, teaching social psychology and qualitative research methods. She is interested in exploring unequal social relations including those between human and non-human animals.

### Author contributions

MC: Conceptualisation, research design, data collection, data analysis, writing – original draft. DD: Writing – reviewing and editing. CJ: Supervision, writing – reviewing and editing. All authors approved the present version of this manuscript.

### Data availability statement

The data that support the findings of this study are not available to protect against any compromise to the privacy of our participants, who did not agree to share their data outside of the research team.

### References

- Agrillo, C., L. Piffer, A. Bisazza, B. Butterworth, and S. F. Brosnan. 2012. Evidence for two numerical systems that are similar in humans and guppies. *Public Library of Science ONE* 7 (2):e31923. doi:10.1371/journal.pone.0031923.
- Alexandratos, N., and J. Bruinsma. 2012. World agriculture towards 2030/2050: The 2012 revision. ESA Working paper No. 12-03, FAO, Rome.
- Atkinson, R., and J. Flint. 2001. Accessing hidden and hard-to-reach populations: Snowball research strategies. *Social Research Update* 33 (1):1–4.

- Bandura, A. 1999. Moral disengagement in the perpetration of inhumanities. *Personality and Social Psychology Review* 3 (3):193–209. doi:10.1207/s15327957pspr0303\_3.
- Banyte, A., I. V. di Lauro, A. Mitova, C. Schauman, E. Simoniello, and F. J. A. Perez-Cueto. 2022. Why do men choose and adhere to a meatless diet? *International Journal of Gastronomy and Food Science* 27:100446. doi:10.1016/j.ijgfs.2021.100446.
- Barr, S., and G. E. Chapman. 2002. Perceptions and practices of self-defined current vegetarian, former vegetarian, and nonvegetarian women. *Journal of the American Dietetic Association* 102 (3):354–60. doi:10.1016/S0002-8223(02)90083-0.
- Bastian, B., and S. Loughnan. 2016. Resolving the meat paradox: A motivational account of morally troublesome behaviour and its maintenance. *Personality and Social Psychology Review* 21 (3):278–99. doi:10.1177/1088868316647562.
- Bem, D. J. 1967. Self-perception: An alternative interpretation of cognitive dissonance phenomena. *Psychological Review* 74 (3):183–200. doi:10.1037/h0024835.
- Biernacki, P., and D. Waldorf. 1981. Snowball sampling: Problems and techniques of chain referral sampling. *Sociological Methods & Research* 10 (2):141–63. doi:10.1177/004912418101000205.
- Bilewicz, M., R. Imhoff, and M. Drogosz. 2011. The humanity of what we eat: Conceptions of human uniqueness among vegetarians and omnivores. *European Journal of Social Psychology* 41 (2):201–09. doi:10.1002/ejsp.766.
- Brander, K. M. 2007. Global fish production and climate change. *PNAS* 104 (50):19709–14. doi:10.1073/pnas.0702059104.
- Braun, V., and V. Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3 (2):77–101. doi:10.1191/1478088706qp063oa.
- Braun, V., and V. Clarke. 2013. *Successful qualitative research: A practical guide for beginners*. London: Sage Publications.
- Braun, V., and V. Clarke. 2021a. One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology* 18 (3):328–52. doi:10.1080/14780887.2020.1769238.
- Braun, V., and V. Clarke. 2021b. To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-sizes rationales. *Qualitative Research in Sport, Exercise, and Health* 13 (2):201–16. doi:10.1080/2159676X.2019.1704846.
- Braun, V., and V. Clarke. 2023. Toward good practice in thematic analysis: Avoiding common problems and be(com)ing a knowing researcher. *International Journal of Transgender Health* 24 (1):1–6. doi:10.1080/26895269.2022.2129597.
- Brown, C. 2015. Fish intelligence, sentience, and ethics. *Animal Cognition* 18 (1):1–17. doi:10.1007/s10071-014-0761-0.
- Brown, C., and C. Dorey. 2019. Pain and emotion in fishes – fish welfare implications for fisheries and aquaculture. *Animal Studies Journal* 8 (2):175–201. doi:10.14453/asj.v8i2.12.
- Bshary, R., W. Wickler, and H. Fricke. 2002. Fish cognition: A primate's eye view. *Animal Cognition* 5:1–13. doi:10.1007/s10071-001-0116-5. 1
- Byrne, D. 2022. A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity* 56 (3):1391–412. doi:10.1007/s11135-021-01182-y.
- Docherty, D., and C. Jasper. 2023. The cheese paradox: How do vegetarians justify consuming non-meat animal products? *Appetite* 188:106976. doi:10.1016/j.appet.2023.106976.
- Dotsch, R., and D. H. J. Wigboldus. 2008. Virtual prejudice. *Journal of Experimental Social Psychology* 44 (4):1194–98. doi:10.1016/j.jesp.2008.03.003.
- Elwood, R. W. 2016. A single strand of argument with unfounded conclusion. *Animal Sentience* 3 (19). doi:10.51291/2377-7478.1056.

- Eyal, T., N. Liberman, Y. Trope, and E. Walther. 2004. The pros and cons of temporally near and distant action. *Journal of Personality and Social Psychology* 86 (6):781–95. doi:10.1037/0022-3514.86.6.781.
- Eyal, T., M. D. Sagristano, Y. Trope, N. Liberman, and S. Chaiken. 2009. When values matter: Expressing values in behavioral intentions for the near vs. distant future. *Journal of Experimental Social Psychology* 45 (1):35–41. doi:10.1016/j.jesp.2008.07.023.
- FAO. n.d. FAOSTAT. Last modified March 24, 2023. Accessed August 21, 2023. <https://www.fao.org/faostat/en/#data>
- Festinger, L. 1962. Cognitive dissonance. *Scientific American* 207 (4):93–106. doi:10.1038/scientificamerican1062-93.
- Finlay, L. 2021. Thematic analysis: The ‘Good’, the ‘Bad’, and the ‘ugly’. *European Journal for Qualitative Research in Psychotherapy* 11:103–16.
- Fujita, K., M. D. Henderson, J. Eng, Y. Trope, and N. Liberman. 2006. Spatial distance and mental construal of social events. *Association for Psychological Science* 17 (4):278–82. doi:10.1111/j.1467-9280.2006.01698.x.
- Fujita, K., Y. Trope, N. Liberman, and M. Levin-Sagi. 2006. Construal levels and self-control. *Journal of Personality and Social Psychology* 90 (3):351–67. doi:10.1037/0022-3514.90.3.351.
- Gerber, P. J., H. Steinfeld, B. Henderson, A. Mottet, C. Opio, J. Dijkman, A. Falcucci, and G. Tempio. 2013. *Tackling climate change through livestock – a global assessment of emissions and mitigation opportunities*. Rome: Food and Agriculture Organization of the United Nations.
- Godfray, H. C. J., P. Aveyard, T. Garnett, J. W. Hall, T. J. Key, J. Lorimer, R. T. Pierrehumbert, P. Scarborough, M. Springmann, and S. A. Jebb. 2018. Meat consumption, health, and the environment. *Science* 361 (6399). doi:10.1126/science.aam5324.
- Goff, P. A., C. M. Steele, and P. G. Davies. 2008. The space between us: Stereotype threat and distance in interracial contexts. *Journal of Personality and Social Psychology* 94 (1):91–107. doi:10.1037/0022-3514.94.1.91.
- Gradidge, S., M. Zawisza, A. J. Harvey, and D. T. McDermott. 2021. A Structured Literature Review of the Meat Paradox. *Social Psychological Bulletin* 16 (3):3. doi:10.32872/spb.5953.
- Hoekstra, A. Y., and M. M. Mekonnen. 2012. The water footprint of humanity. *PNAS* 109 (9):3232–37. doi:10.1073/pnas.1109936109.
- Horta, O. 2010. What is speciesism? *Journal of Agricultural and Environmental Ethics* 23 (3):243–66. doi:10.1007/s10806-009-9205-2.
- Joy, M. 2010. *Why we love dogs, eat pigs, and wear cows*. Newburyport, MA: Red Wheel.
- Key, B. 2016. Why fish do not feel pain. *Animal Sentience* 1 (3). doi:10.51291/2377-7478.1011.
- Kivetz, Y., and T. R. Tyler. 2007. Tomorrow I’ll be me: The effect of time perspective on the activation of idealistic versus pragmatic selves. *Organizational Behavior and Human Decision Processes* 102 (2):193–211. doi:10.1016/j.obhdp.2006.07.002.
- Krebs, D. 1975. Empathy and altruism. *Journal of Personality and Social Psychology* 32 (6):1134–46. doi:10.1037/0022-3514.32.6.1134.
- Kruger, L. J., R. F. Rodgers, S. J. Long, and A. S. Lowy. 2019. Individual interviews or focus groups? Interview format and women’s self-disclosure. *International Journal of Social Research Methodology* 22 (3):245–55. doi:10.1080/13645579.2018.1518857.
- Lambert, H., A. Cornelia, A. Elwin, and N. D’Cruze. 2022. A kettle of fish: A review of the scientific literature for evidence of fish sentience. *Animals* 12 (9):1182. doi:10.3390/ani12091182.
- Lazard, L., and J. McAvoy. 2020. Doing reflexivity in psychological research: What’s the point? What’s the practice? *Qualitative Research in Psychology* 17 (2):159–77. doi:10.1080/14780887.2017.1400144.

- Liberman, N., Y. Trope, and E. Stephan. 2007. Psychological distance. In *Social psychology: Handbook of basic principles*, ed. A. W. Kruglanski and E. T. Higgins, 353–81. New York: The Guilford Press.
- Loughnan, S., B. Bratanova, and P. Puvia. 2012. The meat paradox: How are we able to love animals and love eating animals? *In-Mind Italia* 1:15–18.
- Loughnan, S., N. Haslam, and B. Bastian. 2010. The role of meat consumption in the denial of moral status and mind to meat animals. *Appetite* 55 (1):156–59. doi:10.1016/j.appet.2010.05.043.
- Magee, J. C., and P. K. Smith. 2013. The social distance theory of power. *Personality and Social Psychology Review* 17 (2):158–86. doi:10.1177/1088868312472732.
- Majdandžić, J., S. Amashauffer, A. Hummer, C. Windischberger, and C. Lamm. 2016. The selfless mind: How prefrontal involvement in mentalizing with similar and dissimilar others shapes empathy and prosocial behaviour. *Cognition* 157:24–38. doi:10.1016/j.cognition.2016.08.003.
- Merker, B. H. 2016. The line drawn on pain still holds. *Animal Sentience* 3 (46). doi:10.51291/2377-7478.1104.
- Piazza, J., M. B. Ruby, S. Loughnan, M. Luong, J. Kulik, H. M. Watkins, and N. Seigerman. 2015. Rationalizing meat consumption. The 4Ns. *Appetite* 91:114–28. doi:10.1016/j.appet.2015.04.011.
- Rosenfeld, D. L. 2018. The psychology of vegetarianism: Recent advances and future directions. *Appetite* 131:125–38. doi:10.1016/j.appet.2018.09.011.
- Rosenfeld, D. L., and A. J. Tomiyama. 2019. How proximal are pescatarians to vegetarians? An investigation of dietary identity, motivation, and attitude towards animals. *Journal of Health Psychology* 26 (5):713–27. doi:10.1177/1359105319842933.
- Rothgerber, H. 2014. A comparison of attitudes toward meat and animals among strict and semi-vegetarians. *Appetite* 72:98–105. doi:10.1016/j.appet.2013.10.002.
- Sala, E., J. Mayorga, D. Bradley, R. B. Cabral, T. B. Atwood, A. Auber, W. Cheung, C. Costello, F. Ferretti, A. M. Friedlander, et al. 2021. Protecting the global ocean for biodiversity, food and climate. *Nature* 592(7854):397–402. doi:10.1038/s41586-021-03371-z.
- Shapira, O., N. Liberman, Y. Trope, and S. Rim. 2012. Levels of Mental Construal. *The SAGE handbook of social cognition*, In S. T. Fiske and C. N. Macrae. ed. 229–50. London: Sage Publications.
- Smith, P. K., and Y. Trope. 2006. You focus on the forest when you're in charge of the trees: Power priming and abstract information processing. *Journal of Personality and Social Psychology* 90 (4):578–96. doi:10.1037/0022-3514.90.4.578.
- Sneddon, L. U. 2003. The evidence for pain in fish: The use of morphine as an analgesic. *Applied Animal Behaviour Science* 83 (2):153–62. doi:10.1016/S0168-1591(03)00113-8.
- Sneddon, L. U. 2015. Pain in aquatic animals. *The Journal of Experimental Biology* 218 (7):967–76. doi:10.1242/jeb.088823.

- Sneddon, L. U. 2019. Evolution of nociception and pain: Evidence from fish models. *Philosophical Transactions of the Royal Society B* 374 (1785):20190290. doi:10.1098/rstb.2019.0290.
- Sneddon, L. U. 2020. Can fish experience pain? In *The welfare of fish*, ed. T. Kristiansen, A. Fernö, M. Pavlidis, and H. van de Vis, 229–49. New York: Springer.
- Toppenberg, H. L., A. E. R. Bos, R. A. C. Ruiter, D. H. J. Wigboldus, and J. B. Pryor. 2015. HIV-related stigma in social interactions: Approach and avoidance behaviour in a virtual environment. *European Journal of Social Psychology* 45 (2):169–79. doi:10.1002/ejsp.2082.
- Trope, Y., and N. Liberman. 2010. Construal-level theory of psychological distance. *Psychological Review* 117 (2):440–63. doi:10.1037/a0018963.
- Trope, Y., N. Liberman, and C. Wakslak. 2007. Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of Consumer Psychology* 17 (2):83–95. doi:10.1016/S1057-7408(07)70013-X.
- Wilkins, A. B., L. S. McCrae, and E. A. McBride. 2015. Factors affecting the human attribution of emotions toward animals. *Anthrozoös* 28 (3):357–69. doi:10.1080/08927936.2015.1052270
- Winders, D. J., and E. Abrell. 2021. Slaughterhouse workers, animals, and the environment: The need for a rights-centered regulatory framework in the United States that recognizes interconnected interests. *Health and Human Rights* 23 (2):21–33.

## Appendix

### *Interview Guide*

*Opening* (discussions about consent, confidentiality, disclosure of MC being vegan)

### *Interview*

For how long have you been a pescatarian now?

How would you define being a pescatarian?

What motivated you to adopt a pescatarian diet?

What motivates you to stick to a pescatarian diet?

Why have you chosen to consume marine animals but not land animals?

Are there ever moments when you are tempted to consume meat? Or do actually consume meat?

Is there a difference between marine animals and land animals to you? If yes, could you please explain it to me.

What characteristics would you ascribe to a salmon?

What characteristics would you ascribe to a cow?

What benefits does a pescatarian diet have in your eyes?

What concerns do you hold about your pescatarian diet?

What criteria matter to you when deciding what marine animal to consume and where to get it from?

What do you know about fishing practices, i.e., how the food ends up on your plate?

Do you have any plans to change anything about your diet?

*Closing* (debrief, signposting)