Impact of Tailored Messages to Change Towards a Plant-Based Diet: Media Effects, Behavioral Change and Practical Implications

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Abstract

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Impact of Tailored Messages to Change towards a Plant-Based Diet: Media Effects, Behavioral Change and Practical Implications

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Convincing Western society of a "nutrition turnaround" towards more plant-based eating habits is imperative to save the planet and the health of society. Wiemer (2018) examined the media effects of tailored (to internal or external motivations) video messages on people's progress and intention to change towards a plant-based, vegan diet.

Consistent with her hypotheses, participants' intention, perceived behavioral control and moral obligation to follow a plant-based, vegan diet was positively strengthened by watching a tailored intervention message. Pro-vegan advocacy journalists and NGO campaigners are therefore advised to tailor the content of their pro-vegan communication to appeal more effectively to narrower target groups. However, they can better affect their audiences' attitudes and perceived social pressure through campaigns that integrate veganism into everyday life and turn it into a socially accepted and desired behavior over time. Conceptualizing vegan eating habits as social practice, rather than a cognitive choice, opens up new approaches to intervention and advocating communication strategies.

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Chapter 1: Introduction

If people continue to eat like they eat today, we will need the resources of not one but three earths to feed the world's population in 2050 (Bethge, Glüsing & Zand, 2017). Changing our modern day, lavish Western diet heavy in meat and animal products will become inevitable if we want to save this planet and its climate. For Germany alone, such a "nutrition turnaround" would entail that 22 percent of Germans live as vegetarians and eight percent as vegans in 2050 (Wirz, Kasperczyk & Thomas, 2017). In 2016, only around 1.3 million Germans (1.6 percent of the population) stated to be vegan (SKOPOS). Although Germany has become the leading country in vegan food and drink product launches (Mintel, 2017), there are still millions of people left to be convinced of the benefits of a plant-based, vegan diet if this imperative nutrition turnaround is to occur in the near future.

So far, political inaction has left it up to environmental, animal or health activists to highlight the benefits and beneficiaries of veganism in their attempts to educate the public. Here, media representations of veganism spread through the communication channels of mass media come into play; for example, in the form of documentaries such as *Forks over Knives* (2011), *Cowspiracy* (2014), *Hope for All* (2016) and *What the Health* (2017). These documentaries advocate for the vegan cause by applying journalistic standards to their research and objectively investigating injustice, corruption or ill-treatment with the goal to educate and inform people. They portray plant-based eating in a positive light and as a possible solution to many health and environmental problems we face as a global society nowadays. Their titles come up strikingly often in

conversations in the vegan community as a “turning point” or cue to action for people who turned to a plant-based, vegan diet after watching one of them (cf. Guerin, 2014, Nutriciously, 2016).

The documented, striking media effect of these documentaries on people’s intention to change their dietary behavior deserves closer examination. In an online experiment, Wiemer (2018) examined the media effect of tailored messages created from these documentaries on a person’s progress and intention to change towards a plant-based, vegan diet. The study investigated if the challenges of persuasive communication can be mastered more effectively when the content of an advocating message is specifically tailored towards its recipient. The tailoring was based on diverging motivational forces (either internally or externally focused) that might inform someone’s intention to change towards a plant-based, vegan diet. The overarching purpose of the study was to measure if tailoring caused a potential positive shift in participants’ progress of change as well as a positive influence on predictors of behavioral change towards following a plant-based, vegan diet.

Since the plant-based, vegan movement has turned into a global necessity on our way into a sustainable future, media effects research as done by Wiemer (2018) becomes increasingly relevant. Journalistic media representations about veganism have not yet received any extensive attention in communication studies or journalism so far. Research on vegetarianism and veganism has concentrated mostly in the fields of nutrition and food sciences or social studies (e.g., Beardsworth & Keil, 1991, Lea & Worsley, 2003a, 2003b, Fox & Ward, 2008, Greenebaum, 2012a, Radnitz, Beezhold & DiMatteo, 2015).

Since Wiemer (2018) explored a completely new area of research in communication about plant-based nutrition, the purpose of this thesis is to elaborate and broaden the discussion of her findings. In her thesis, she already indicated implications for future pro-vegan intervention designs in general. Hence, this thesis will take a step further and apply her findings to discuss practical implications for pro-vegan advocacy journalism and NGO media campaigns. Overall, this can contribute to the professionalization of communicative actions taken to persuade people to shift towards a more plant-based, vegan diet. Moreover, this thesis will explore the limitations of Wiemer's theoretical approach. Her conceptualization of behavior change as a change in cognitions is not the only possible option, since it can be strongly argued that behaviors and habits are just as much social practices influenced by habit and society.

In recent years, it has become apparent that the plant-based, vegan movement is not a mere fleeting trend but a global necessity for a healthy planet and a thriving, globally connected society. This thesis will contribute insights into how the media can take a more reflected, effective and responsible part in informing and fostering a plant-based, vegan world.

The next chapter is dedicated to a comprehensive review about the literature Wiemer (2018) based her study on. It will discuss the benefits and beneficiaries of veganism, an exploration of values and motivations along the dietary spectrum from omnivores to vegans, and the use of tailored communication messages as cues to action. Chapter 3 will elaborate on the theoretical background of Wiemer's study. In Chapter 4, Wiemer's study design is explained and her results are presented briefly. The fifth

chapter will explore practical implications and recommendations for actions that pro-vegan journalists and NGO media campaigners could take in the light of Wiemer's findings. The sixth chapter will contain a two-part criticism of her theoretical approach, and the seventh chapter is dedicated to a brief conclusion.

Chapter 2: Literature Review

This chapter will discuss the existing research in the food and nutrition sciences, social sciences and health communication sciences in order to answer the What, Who, Why and How questions of the experiment conducted by Wiemer (2018). An introduction to the subject matter of plant-based, vegan eating (What?) is followed by an overview of the dietary spectrum people can be identified on (Who?). Then, distinctions in motivation, as the most important factor in changing to and maintaining a non-conforming diet like veganism, are highlighted (Why?) and applied to a possible approach to set up tailored intervention messages as cues to change towards a plant-based, vegan diet (How?). Finally, an introduction into advocacy journalism and advocacy media campaigns will highlight which communicators could benefit from the insights of Wiemer's study (For whom?).

What: Plant-Based, Vegan Diet - its Benefits and Beneficiaries

The German Society of Nutrition defines a plant-based, vegan diet as a "form of a vegetarian diet where people only eat plant-based foods. All animal-based foods and additives are refused, sometimes honey and other foods which use animal-based parts in their production, too" (DGE, 2016). This type of diet can create personal health benefits as well as contribute to saving the planet's resources and stopping animal suffering in mass livestock farming.

First, studies have proven that omitting meat and animal products from one's diet can improve one's overall health (Campbell & Campbell, 2007). Vegans and vegetarians who follow a healthy, plant-based diet that includes "whole grains as the main form of

carbohydrate, unsaturated fats as the predominate form of dietary fat, an abundance of fruit and vegetables, and adequate n-3 fatty acids" (Williams & Patel, 2017, p. 424) show a lower mortality rate (Appleby et al., 1999), have lower risks of suffering from diabetes (Tonstad et al., 2009, Satija et al., 2016), coronary heart disease (Satija et al., 2017), or high blood pressure (Pettersen et al., 2012). Moreover, people who choose not to consume meat are 16 percent less likely to get any type of cancer, and 34 percent less likely of being diagnosed with a female-specific cancer (Tantamango-Bartley et al., 2012). People who follow a plant-based diet because they want to improve their health also report leading healthier lives in general (with regular exercise and minimal alcohol or smoking practices) that further lower their risks for diseases (Dyett et al., 2013). Obese participants in a dietary study who had to adhere to a vegetarian or completely plant-based diet lost significantly more weight and decreased their cholesterol intake further than participants on other diets (Moore, McGrievy & Turner-McGrievy, 2015). However, one possible area of concern for a plant-based, vegan diet can be a lacking vitamin and mineral intake of calcium, iodine, and vitamin B12 (Waldmann et al., 2003).

The documentaries *Forks over Knives*, *Hope for All*, and *What the Health* illustrate the positive results of numerous nutrition studies to bring across how beneficial a healthy, plant-based diet can be for people - especially in Western society that faces record numbers of chronic illnesses and obesity.

Second, animals kept in mass livestock farming suffer. They are solely bred and fattened to be killed for human needs of their meat, skin, feathers, eggs, or milk. In their drastically shortened lifespan, they have to endure suffering from birth on: ranging from

being killed outright because they have the wrong sex or being separated from their mothers too early, to being held in too small spaces, leading a life in complete apathy, being fed the wrong food dosed with antibiotics, and finally being killed on an assembly line, often with improper anesthesia (Fleischatlas, 2018). Thus, people who decide to protest this cruel livestock industry choose not to buy meat or animal products as a way to express their protest. Their renouncement decreases the demand in meat and animal products and helps to reduce the number of animals being bred in the first place. Here, the animals are the main beneficiaries of vegan empathy: "The habit of meat avoidance is for many animal protectionists the single most important thing an individual can do for animals," as the empathy for animals "and vegetarianism are different sides of the same coin" (Munro, 2005, p. 88).

The documentaries *Cowspiracy* and *Hope for All* give insights into farms and slaughterhouses. They highlight the short and distressing lives of these animals in mass livestock farming and give information on how the capitalistic animal agriculture industry facilitates these conditions.

Third, research conclusively proves that large-scale livestock farming established to meet the global meat consumption is responsible for a whole range of environmental problems: it is incredibly draining on important resources such as water, fertile land, and energy, a major cause for forest decline and species extinction, as well as higher mortality rates in developing countries caused by food shortages due to droughts (Pimentel & Pimentel, 2003, Gerber et al., 2013, Springmann et al., 2016).

Based on misconceptions and lack of information, climate change is most commonly associated with GHG emissions exhausted from coal plants or the transportation industry. When, in fact, mass livestock farming is responsible for 51 percent of annual worldwide emissions. It contributes more than any other industry (Goodland & Anhang, 2009). This fact is not as commonly known because respiration of livestock (animal breath), their land use, and methane emissions are often overlooked or miscounted in most GHG inventories. However, it is misguided to not include these emissions just because they stem from something seemingly as natural as animals, when "livestock (like automobiles) are a human invention and convenience, not a part of pre-human times, and a molecule of CO2 exhaled by livestock is no more natural than one from an auto tailpipe" (Goodland & Anhang, 2009, p. 12).

The international community, political leaders, private and public sectors, and academia have recognized the immediate danger of climate change to our lives on earth. However, they have so far largely refused to enact any greater policy changes for its biggest cause, mass livestock farming, although these changes could significantly help to mitigate the effects of climate change (Gerber et al., 2013, Fleischatlas, 2018).

Similar to vegans who refuse meat and animal products because of their concerns for animal welfare, vegans who refuse meat and animal products based on environmental concerns want to decrease the demand for mass livestock farming as one main contributor to environmental pollution. Thus, their lifestyle helps in lowering GHG emissions, saving water and other resources, as well as protecting the rain forest, for example. Ultimately, the planet benefits from increasing numbers of vegetarians and

vegans living on it. That is why it is an integral part of Greenpeace's model of the future and its proposed "nutrition turnaround" as already mentioned in the introduction.

The documentaries *Cowspiracy* and *Hope for All* discuss these findings as a third area of concern, too. They translate the statistics of water waste, micro plastic in our oceans, and GHG emissions in our atmosphere into visual experiences by using actual footage of destroyed areas on the planet, animated graphics and illustrated comparisons from daily life.

Who: From Omnivores to Vegans - a Dietary Spectrum with Divergent Values

Possibly endless food choices in developed countries around the world have broadened the dietary spectrum and now allow room for flexibility and individuality. Simultaneously, daily food choices act as a form of self-realization and differentiation from other people: Some people vigorously defend their meat consumption. Some people consider themselves vegetarians even if they occasionally eat meat, others would classify these people as "flexitarians." Some people live strictly vegan and have a strong opinion on honey or medication tested on animals. Others choose a vegan diet that is more "doable" in daily life, allowing room for "gray areas" while stressing the fact that veganism is not a religious restriction but a voluntary lifestyle choice (Greenebaum, 2012a).

Wiemer (2018) stressed the importance to distinguish not only between meat eaters and meat avoiders but also between vegetarians (who still consume animal products apart from meat) and vegans, as both intervention messages in her study emphasized the benefits of a plant-based, vegan diet that also excludes animal products

like milk, cheese, and eggs. As the following overview will show, values, characteristics and motivations between these diets starkly differ and can help to understand what issues intervention messages have to address to initiate change.

Omnivores and their attachment to meat. First, omnivores differ from vegetarians or vegans in their attitude towards animals and meat consumption: "Whereas omnivores have positive explicit and implicit attitudes toward meat, associating it primarily with luxury, status, taste, and good health, vegetarians tend to link meat with cruelty, killing, disgust, and poor health" (Ruby, 2012, p. 145). Especially men justify eating meat with "endorsing pro-meat attitudes, denying animal suffering, believing that animals are lower in a hierarchy than humans and that it is human fate to eat animals, and providing religious and health justifications" (Rothgerber, 2013, p. 363). People who enjoy eating meat and who are more attached to meat consumption in general are less inclined to consider a dietary change. They are likely to eat meat more often, feel social pressure to eat meat and identify strongly as meat eaters (Graça, Calheiros & Oliveira, 2015b).

Second, omnivores connect certain perceived benefits and barriers with adopting a vegetarian or plant-based, vegan diet. In general, people hold the most positive attitudes towards their own diet, and the most negative attitudes towards diets opposite to their own (Povey, Wellens & Connor, 2001). Omnivores indicate that the main perceived barriers to changing towards a plant-based, vegan diet is their meat enjoyment, established eating routines, and a lack of information about plant-based diets (Lea & Worsley, 2003a, Lea, Crawford & Worsley 2006). The main perceived benefits are

increased health benefits such as increased fruit and vegetable intake, decreased fat intake, weight control, or disease prevention (Lea & Worsley, 2003a, Lea et al., 2006). The main predictors of these perceived health benefits are the belief that meat is not necessarily healthy and participants' own effort of researching information (Lea & Worsley, 2003b). If missing information is seen as a barrier to changing one's diet as well as a predictor to be informed about a plant-based diet's health benefits or not, it is imperative that an intervention message for dietary change towards a plant-based, vegan diet successfully conveys information about the benefits of such a diet.

Third, omnivores also harbor certain beliefs about vegetarian or vegan people in general. Ruby (2008) found that a person's judgement about another person is impacted by the fact if that person eats meat or not – even if all other information is held constant. Vegetarians are perceived to be "significantly more virtuous, idealistic, health conscious, likeable, disciplined, and pure than the omnivore targets" (Ruby, 2008, p. 29). Moreover, the perception of male vegetarians seems to have shifted over the last years. Where Ruby and Heine (2011) concluded that vegetarians are rated more virtuous but less masculine, Browarnik (2012) could not confirm these results. Thomas (2016) even detected a shift of prejudiced gender norms along the dietary spectrum towards veganism – "it is the choice to be vegan that leads to lower ratings of masculinity" (p. 85). Although vegetarians might be seen as more virtuous and likeable, vegans are often stigmatized for their rejection of the dominant nutrition culture and confronted with a range of prejudices about health concerns and lack of understanding for their self-imposed restrictions (Corrin & Papadopoulos, 2017). Cole and Morgan (2011) analyzed the general

marginalization of vegans in a qualitative content analysis of UK newspapers. They concluded that the derogation of veganism helps non-vegans to avoid confronting their ethical dilemma and helps to facilitate the normalization of human violence. In the media, vegans "are variously stereotyped as ascetics, faddists, sentimentalists, or in some cases, hostile extremists" leading towards a general "vegaphobia" that "misrepresents the experience of veganism" (ibd., 2011, p. 134).

Fourth, contradictory to the scientific proof cited in Chapter 2.1, meat consumption is still not perceived as the biggest contributor to climate change by omnivores. In focus groups and interviews in Scotland, omnivores lacked awareness of associating their meat consumption to climate change, perceived their personal meat consumption as only playing a very small role in the global problem of climate change, and remained hesitant to reduce their own pleasure of eating meat (Macdiarmid, Douglas & Campbell, 2016). Since the skepticism about a link between meat consumption and climate change persists, people perceive changing other behaviors not related to their diet as more important to stop global warming and as more feasible in their own life (ibd., 2016). In general, attachment to meat is negatively associated with willingness to reduce one's meat consumption for any cause (Graça et al., 2015b). If climate change is not yet commonly associated with meat consumption, it is imperative that intervention messages for dietary change towards a plant-based, vegan diet successfully and comprehensibly explain this connection.

Flexitarians and reduced meat consumption. The moral intensity of climate change does, however, seem to influence intentions of some people to make climate-

friendly food choices (Mäkiniemi & Vainio, 2013). They do not go as far as to eliminate meat completely from their diet in order to protect the environment but rather favor a reduced meat consumption (Graça, Oliveria & Calheiros, 2015a, Lea et al., 2006). These consumers who only eat meat once or twice a week and opt to buy the organic kind are called "flexitarians" or "conscientious omnivores." In recent years, they have gathered more attention as a new dietary behavior on the dietary spectrum. DeBacker and Hudders (2015) found that they differ in their attitude towards animal welfare from full omnivores. They are less focused on their status of authority over animals and are more concerned about animal welfare than omnivores, but still less so compared to vegetarians. In addition, Rothgerber (2015a, 2015b) compared conscientious omnivores to vegetarians and vegans and resumed that they rate lower in idealism, report to violate their diet more, and feel less guilty when doing so, are less likely to say that their diet is something that needs to be strictly adhered to, and do not identify as being in an in-group with vegetarians and vegans.

Cognitive dissonance and meat eating justification strategies. No matter if flexitarians or full omnivores, consumers who are somehow attached to meat experience cognitive dissonance when engaging with vegetarians/vegans or positive representations of plant-based eating in the media. It reminds them of the general "meat paradox" - omnivores usually want to treat animals well but like to eat them, too (Rothgerber, 2014c). In five separate studies, it was found that "vegetarians create in meat eaters emotional states such as anxiety and tension that are associated with the experience of cognitive dissonance" (ibd., 2014c, p. 39).

The *Theory of Cognitive Dissonance* by Leon Festinger (1957) argues that people can experience cognitive dissonance - an inconsistency between the knowledge of two elements in their environment or their beliefs. This dissonance creates pressure to reduce the imbalance and avoid new dissonance because people inherently seek a state of consistency in their beliefs. In order to reduce dissonance, people change their behavior or their beliefs, seek out new information, or try to change the environmental context if it lies in their power (Festinger, 1957).

Thus, meat eaters have two choices to reduce their cognitive dissonance, (1) they can change their behavior and switch towards a vegetarian or plant-based, vegan diet (consumers with a negative or neutral connection towards meat seem more inclined to do so), or (2) they can try to resolve this dissonance by relying on information and beliefs that accommodate their meat consumption – consumers with higher attachment towards meat tend to choose this route and resort to pro-meat justifications or a process of moral disengagement (Graça et al., 2015a).

Pro-meat justifications can take the following forms among others: "denying animals the capacity for pain, to denying their emotional and cognitive states, to endorsing pro-meat justifications, to reducing perceived choice in eating meat, and to the more apologetic underreporting of how much meat they consume" (Rothgerber, 2014c, p. 39). Moreover, women are more likely than men to employ indirect apologetic strategies such as avoiding thinking about what had happened to the animal before they eat it (ibd., 2013). They morally disengage and refuse to ascribe human emotions to them to "minimize the psychological costs of their own actions" (Bilewicz, Imhoff & Drogosz,

2011, p. 208). Wiemer (2018) examined the media effect of these pro-vegan intervention messages on reducing dissonance - if they awaken intentions to change diets or prompt participants to provide pro-meat justifications.

Vegetarians and their motivations. On the next step of the dietary spectrum, vegetarians omit meat from their diet, but still eat animal products such as milk, eggs, and cheese. The recent upward trend in numbers of vegetarians and the growing market for vegetarian and vegan products indicates that it is easier than ever to maintain a vegetarian diet. Vegetarians benefit if they have a strong social network of like-minded people around them and access to environmental resources like vegetarian products and cookbooks (Jabs, Devine & Sobal, 1998a).

Early on in research about vegetarianism, Jabs, Devine and Sobal (1998b) developed the distinction between "ethical vegetarians" and "health vegetarians." Subsequent studies, both in the food and nutrition sciences and social sciences, confirmed and successfully applied this distinction, too (cf. Fox & Ward, 2008, Hoffman et al., 2013, Rothgerber 2014b, Ruby, 2012, Radnitz et al., 2015).[1] Jabs et al. (1998b) distinguished between people who were concerned about animal rights and welfare (ethical vegetarians), and people who do not eat meat due to the associated health risks of meat consumption (health vegetarians). Hoffman et al. (2013) also included weight loss as a possible motivation for health vegetarians; as well as motivations relating to religious, spiritual beliefs or the environment for ethical vegetarians.

[1] Inherent disgust of meat and its properties is another possible motive found in literature (Beardsworth & Keil, 1991, Fessler et al., 2003). Since this is a matter of sensual dislike rather than a cognitive decision against eating meat, the motive will be neglected in this study.

When asked about their opinions and values on various topics, ethical and health vegetarians often differ considerably in their answers - although their dietary choices might look completely alike to outsiders. For example, ethical vegetarians, based on their moral values, find meat more disgusting compared to health vegetarians (Rozin, Markwith & Stoess, 1997, Fessler et al., 2003). Hamilton (2006) concluded that ethical vegetarians are more likely to be concerned about inherently violent actions such as nuclear weapons, capital punishment, and blood sports like hunting or boxing. Ethical vegetarians tend to follow a humanist world view, health vegetarians follow a more normative approach; confirming that one's identity as a vegetarian tends to influence other aspects of life, too (Lindeman & Sirelius, 2001). Rothgerber (2014a) found that ethical vegetarians have a higher regard of animals; they see similarities between human and animal emotions that health vegetarians might not. Concerning dietary strictness, ethical vegetarians show greater restriction and usually have been omitting meat from their diet longer than health vegetarians (Hoffman et al., 2013). However, health vegetarians are not less likely to stay true to their motive for dietary change: They eat more fruit and fewer sweets and watch better over their consumption of soy and vitamin supplements compared to ethical vegetarians (Radnitz et al., 2015). Moreover, middle-aged vegetarians rather indicate health reasons, while younger vegetarians tend to be motivated by ethical reasons (Pribis, Pencak & Grajales, 2010).

Criticism of ethical-health distinction. This dichotomous, simplistic distinction between health and ethical vegetarians and their values has drawn criticism in recent years. Rosenfeld and Burrow (2017) advise to abandon the ethical-health distinction.

They cite as its disadvantages: its ambiguity, limited applicability to other possible motives, its lack in measuring motivational strength, and its sensitivity to historical and sociocultural changes (e.g. rise of the environmental motive over the last years). However, they concede that the ethical-health distinction is the simplest method to divide vegetarians into two groups. Moreover, numerous studies applying this ethical-health distinction were able to identify significant differences between the two groups indicating that there is reason to support its dichotomous simplicity: "These findings support ethical and health dimensions as valid constructs that afford divergent internalizations and externalizations of one's vegetarian identity" (Rosenfeld & Burrow, 2017, p. 459).

Vegans are not vegetarians. So far, vegetarians' attitudes, their values and motives have received more attention in research than vegans who sit on the stricter end of the dietary spectrum. Often veganism is defined as a form of "strict vegetarianism" - without clearly distinguishing between the two - in many of the above-mentioned studies. However, it would be wrong to consider vegetarians and vegans as one homogenous group. First, vegans do significantly differ from vegetarians since they omit meat and all animal products. Second, the few studies that did clearly distinguish between them found divergent values. Vegans are more often motivated by ethical concerns than vegetarians (Rothgerber, 2014a). Compared to vegetarians, ethical and health vegans are even more concerned with the impact of their food choices, animal welfare and protection of the planet (Ruby, 2008). The existence of supportive social networks is of even more importance to vegans in particular (Cherry, 2006).

Vegans, even more so than vegetarians, have to face and manage negative confrontations with omnivores in daily life. In order to successfully handle these tense situations, vegans might employ "face-saving" techniques such as avoiding confrontations altogether, waiting for an appropriate time to bring up the topic of their diet, focusing on health benefits instead of ideology, or leading by example and demonstrating how easy it is to maintain this lifestyle (Greenebaum, 2012b). Romo and Donovan-Kicken (2012) even compared vegetarians and vegans to disabled people in their communication strategies of making omnivores feel more at ease in their presence. Whenever vegetarians or vegans are addressed about their diet, they often have a plan prepared of how to discuss their personal choice to avoid meat and/or animal products, they might minimize others' discomfort by stressing that it is a personal choice, resort to stretch the truth or excuse people for eating meat.

Vegan motivations. The "value-laden" distinction between ethical and health vegetarians has been applied to vegans as well (Greenebaum, 2012a, p. 130). The debate between health and ethical motives might be even fought more fiercely in the vegan community than in the vegetarian one.[2] For health vegans, the benefits of a plant-based diet are revelatory. A health vegan in Fox and Ward's qualitative study, reports: "When you switch to a healthy diet from an unhealthy diet you get this sudden spring in your

[2] In the vegan community, there exists a debate about terminology: Health vegans are said to only follow a plant-based diet, while a "truly" vegan diet is defined by its origins in a holistic lifestyle that also omits animal products from other parts of life (Thomson, 2017). In this thesis: whenever a *plant-based, vegan diet* is mentioned, it covers and addresses both underlying motivations. Otherwise, the terms *plant-based diet* or *ethical vegan diet* are used to mark a clear distinction.

step, so to speak. Every day that I wake up, I feel so much healthier and alive than I used to" (2008, p. 425).

Ethical vegans, however, think of their ethical vegan diet not simply as a diet but a lifestyle, a lifestyle that health vegans, in their opinion, do not share. An ethical vegan framed it this way: "Now, about health vegans. I certainly don't jump for joy just because 'one less animal is killed'. If people only care about themselves and their health, that shows they are selfish and egoistical…" (Fox & Ward, 2008, p. 425). For "pure" vegans, "plant-based eaters" are just people who happen to follow the same diet as a vegan (Greenebaum, 2012a, p. 135). They actively construct an "in-group" of ethical vegans and an "out-group" of health vegans to validate their own authentic identity (ibd., 2012a, p. 132). In his study on hostility between ethical/health vegetarians/vegans, Rothgerber (2014b) summarized that "one's motives for abstaining from meat often play a larger role in this type of intergroup perceptions than one's dietary practices" (p. e96457). However, next to ethical vegans with strong opinions about what is allowed and forbidden in an ethical vegan diet, there are also voices who reason that living a 100 percent vegan life is often simply not possible, but "the pursuit of purity, not the actual achievement, is that which authenticates one's identity as a vegan" (Greenebaum, 2012a, p. 142).

Why: Internal and External Motivations Along the Dietary Spectrum

Up to this point, the full range of the dietary spectrum from omnivores to strict ethical vegans has been discussed, as well as people's reasons to eat meat or to forgo it. In the question "Why?", the fundamental factor to consciously decide against the commonly accepted Western diet is found. A person's motivation based on their

convictions is the “integral element of each individual's vegetarian identity, providing an energizing force that recurrently fosters a sense of purpose in one's food choices” (Rosenfeld & Burrow, 2017, p. 460). It was found to be the single factor with the most profound impact on a person’s conscious decision to transition towards a vegetarian diet (Ruby, 2012). In their years of maintaining a vegetarian diet, people often experience a learning curve that can influence and change their motivation over time, a motive might be added or dropped. Nevertheless, people can usually identify one main motivation that has brought them to the diet and as the fuel that keeps them going (Beardsworth & Keil, 1991, 1992, Fox & Ward, 2008).

So far, the ethical-health distinction between motivations of vegetarians/vegans has been introduced, followed by its critique regarding its over-simplification of various motives (Rosenfeld & Burrow, 2017). Janssen et al. (2016), too, argue that many consumers follow a vegan diet based on more than just one motive. In their study, they found five motives: animal-related motives, self-related motives, environment-related motives, motives related to social justice, and critique of capitalism and the food industry. Indeed, the original “for the animals” versus “for my health” separation of values looks somewhat outdated due to the rise in awareness of the environmental impact of meat consumption (Wirz et al., 2017) and the increasing critique of the mass livestock industry in Germany (Schießl, 2017).

Therefore, Wiemer (2018) followed Fox and Ward’s (2008) slightly different distinction. Rather than drawing the line between specific values about animal rights and health benefits, Fox and Ward broaden the frames to stress the different foci in this

distinction. Participants might focus internally on their own needs and benefits when they think about why they should change their diet (i.e., personal health, weight loss, mental well-being). Other participants might decide to focus externally on the needs and benefits of others and the outside world (i.e., animal welfare, environmental impact). Thereby, externally geared motivation also includes motives related to social justice (focus on equal treatment of other people) as well as critique of capitalism and the food industry (focus on societal structures in general).

How: Bringing about Change Towards a Plant-Based, Vegan Diet

Animals, society, the planet – all would benefit to some degree if more people were to adapt a plant-based, vegan diet. And, indeed, more and more people have become aware of how their daily food choices have a crucial impact on their own health, so that "there is now a window of opportunity for health promoters to design campaigns to try to shift eating behaviors" (Corrin & Papadopoulos, 2017, p. 46).

The next logical step is to question how this change in dietary behavior can effectively be brought about; how people can be persuaded of the positive benefits of a plant-based, vegan diet that might lead to a positive shift in their intention which could lead to a change in behavior eventually. Wiemer (2018) approached this task by looking towards vegans who already have made this active decision at one point in their life. Here, two important components for a successful process of change present themselves: (a) the specific cue that made vegans consciously turn away from meat and animal products by (b) awakening or reinforcing a personal motive.

Cues to action. The moment that a person becomes vegan is often initiated by what Beardsworth and Keil (1991) call a "conversion experience" which can happen in direct contact with animals on a farm, for example, but "sometimes occurred in a more indirect manner, arising out of mass media coverage" (p. 21). Reporting similar experiences, Guerin (2014) found that the vegan participants in her qualitative study "became vegan after being exposed to information about animal agriculture. […] Every vegan reported conducting their own research, predominantly citing alternative media sources such as research activist group webpages, documentaries, and non-profit awareness campaigns" (p. 16f.). Some of them reported that such documentaries - because of their intensity and immediacy - immediately made them change their mind and behavior about their diet.

According to Rosenstock's *Health Belief Model* (1974), these persuading mass media messages can serve as a cue to action which is one of the variables that Rosenstock cites as a necessity to adopt a different health-related behavior. Those cues can take various forms - mass media messages being just one of many. Although all cues require a certain level of intensity depending on the perceived susceptibility and severity of the subject which they try to convey (Rosenstock, 1974). Other constructs of the Health Belief Model (e.g., perceived benefits and barriers) have been used to predict behavior change in general (Carpenter, 2010), dietary behavior in particular (Nejad, Wertheim & Greenwood, 2005, Arash et al., 2016), and even attitudes and perceptions towards vegetarian and plant-based, vegan diets (Corrin & Papadopoulos, 2017). However, cues to action have not received considerable attention over the last decades since their

influence is generally perceived to be more difficult to measure (Rosenstock, 1974, Carpenter, 2010). Since people report lack of knowledge as one of the biggest perceived barriers to adopting a plant-based, vegan diet (Lea & Worsley, 2003a, Lea et al., 2006), these cues to action - in form of easily consumable mass media messages - might help people to overcome this barrier successfully and efficiently. Wiemer (2018) set out to examine this possibility.

Tailored communication. Veganism first and foremost describes a form of diet; and dietary behavior falls into the realm of health behavior. Thus, media messages intended to persuade people of the benefits of veganism can be regarded as health communication. This field of communication has received special attention in communication research do to its importance for a healthy and thriving society as well as its challenges in appropriately and effectively addressing its target audience (Hastall, 2011). Health messages communicate risks for the mental or physical health of people in potential target groups (ibd., 2011). They have to master the balance act of conveying necessary information about risks while not evoking too much fear or agitation in recipients. Two of the biggest challenges of health communication are to reach the target audience in the first place and, secondly, to close the gap between people's attitude about a risky health behavior and their actual enactment or elimination of it (ibd., 2011). Thus, persuasive health messages have to be highly effective in order to convince people to change their attitude and subsequently their behavior.

One way to increase their effectiveness is by tailoring messages. Tailored health communication messages are "intended to reach one specific person, are based on

information unique to that person, are related to the outcome of interest, and have been derived from an individual assessment" (Kreuter et al., 1999a). By matching message contents to an individual's information needs, framing them in a context that matters to a person, using special design elements that attract notice, and providing the information through channels of delivery that actually reach the intended audience, the message can more effectively capture the attention of the addressee since it is of personal relevance for him or her (Rimer & Kreuter, 2006). Thus,

> if tailored messages enhance motivation and opportunity to process health information and deliver compelling new ideas (or reinforce existing ones) that are favorable toward a given health behavior, the resulting attitudes may be more accessible to that person and, in turn, have greater influence on behavior (ibd., 2006, p. 189).

Research on tailored health communication has proven its effects relating towards a variety of health issues, for example heart disease or cancer prevention (Burnkrant & Unnava, 1989, Kreuter, Strecher & Glassman, 1999b, Skinner et al., 2002, Steele-Moses et al., 2009). Campbell et al. (1999) found that the message is more effective when it comes from a trusted source. Kreuter et al. (2004) tested an effective channel of delivery by informing parents of newborns about vaccination deadlines by including them in a family calendar. Moreover, Stanczyk et al. (2016) found that video-based messages are more effective than text-based approaches; although this tendency only holds true for video-based messages that do not create a comprehension deficit and are relatively straightforward in their persuasion efforts (Chaiken & Eagly, 1976).

Although research indicates that tailored messages are more effective than non-tailored, this does not always have to be case. Tailored health communication might offer

individualization in certain behavior variables but cannot take into account factors such as situational context or cultural and personality factors that might also influence a person's ability to process the message (Kreuter et al., 2000). Despite a growing interest in tailored health communication due to its promises of high reach and high efficacy at the same time (Noar et al., 2011), "the optimal shape and contour of tailored communications are far from being decisively pinpointed" (Terre, 2011, p. 128).

Hence, Wiemer's (2018) experiment contributed to the growing body of research by examining yet another shape of tailored health communication: pro-vegan messages which contents are tailored to the addressee's personal motivation.

For Whom: Advocacy Journalism and NGO Media Campaigns

The results of Wiemer's (2018) study can provide relevant insights for two groups of communicators in today's media landscape: advocacy journalists and the producers of media campaigns for non-governmental organizations (NGO) who both have invested interests in informing and educating the public about the benefits of a plant-based, vegan life for one's personal health, animals in mass livestock farming, or the climate of our planet.

Advocacy journalism. The presence of advocacy in journalism is usually frowned upon as it negates one of the highest standards of journalism, objectivity. However, a journalistic piece can never be completely void of advocacy, since even simple daily editorial processes (selection of news-worthy topics, positioning of quotes, etc.) are subject to a certain degree of advocacy. Therefore, Fisher (2016) proposed a theory of continuum of advocacy in journalism ranging from overt displays in opinion

columns, interpretive journalism, or peace journalism, to more subtle elements: "Depending on the wide range of macro, organizational, journalism production, source and personal factors, a story might contain subtle elements of advocacy or it might be a vehicle for an overt display of advocacy and difficult to distinguish from PR" (p. 723). These factors can include among others the political climate, the editorial orientation of the journalism organization or the type of media platform, the selection of sources, the level of trust between reporter and source, the significance of comments or pictures used, or age, education, beliefs and expertise of the reporter (ibd., 2016).

Based on these factors, recent journalistic trends in the U.S. mainstream media could be declassified as "objective journalism" and labeled as a version of advocacy journalism where "advocate-journalists are ubiquitous in news organizations that do not challenge basic premises of the current political-economic system, but unequivocally champion some of its central ideological underpinnings" (Waisbord, 2009, p. 373). In times like these, genuine advocacy journalists located in the alternative or left-leaning press face extreme difficulties to get their voices heard (Waisbord, 2009). Yet, the need for advocacy journalism persists for a variety of causes and silenced voices – and more than ever for environmental issues (Neuzil, 2008).

The threat of climate change started out as an issue that was championed by "green" advocate journalists in the environment beat. Over the last two decades, it has become public consensus for almost all governments in the world. In their powerful position as the fourth estate, journalists do not simply report on this processes of consensus forming; they actively shape and take part in it (Wade, 2011). "By choosing

frames that facilitate consensus, journalists can engage in advocacy and still make claims to objectivity" as they have helped to build the consensus that they can then base their claim for objectivity on; in this influential position, "reporters can act much like activists" (ibd. 2011, pp. 1181-1182). They "collaborate with advocates, harmonize with opinion writers, and use their physical presence and access to newsprint to pressure the state" (p. 1166).

So far, the effects of our meat consumption on our personal health and the planet's climate have not reached a public consensus - although this issue has been in the public eye ever since the publication of the seminal UN report *Livestock's Long Shadow* in 2006 (Steinfeld et al., 2006). In recent years, the media have picked up on this lacking attention and had the "freedom to construct an issue as they like: actively making framing decisions, selecting sources and presenting the issue as controversial or not," and thereby, "journalists may play a role in creating the consensus that also conditions their reporting" (Wade, 2011, p. 1168). The German weekly magazine *Der Spiegel* dedicated three covers and cover stories in 2017 to our society's changing dietary habits in the face of climate change, cruel conditions in mass livestock farming, and increasing numbers of health issues related to bad nutrition (17-08, 17-12, 17-28). Hence, *Spiegel* journalists currently take an active part in shaping public consensus about these issues. This particular media outlet adopted an overarching tone that advises a reduction of one's meat consumption for one's health and the planet. But it dismisses "diets of restriction" such as vegetarianism or veganism as a form of decadent, pretentious "asceticism" in futile search for happiness. In the end, the gusto and pleasure we take in eating are all that

should matter (Amann & Schmundt, 2017). With this confrontational black-and-white discourse dominating German media coverage of alternative diet options digging ideological trenches (cf. Supp, 2016), pro-vegan advocacy journalism actively wants to counteract these tendencies.

Here, *Cowspiracy* and the other documentaries advocating for a plant-based, vegan lifestyle that Wiemer (2018) uses for her tailored intervention messages can be regarded as a overt version of advocacy journalism, peace journalism. Peace journalism is focused among other things on making conflicts transparent, giving voice to all parties, conveying empathy and understanding, creating a new understanding for the conflict, humanizing all sides, and exposing untruths and suffering on all sides. Moreover, peace journalists regard people to be in the position to foster their own peace as a result of an on-going commitment to nonviolence and creative new solutions (Galtung, 2008).

The discussed documentaries advocate for nonviolence towards animals and propose a plant-based, vegan solution that would positively affect our society's health and our planet. They see to make the existing conflict between meat consumption and exploitation of animals and the planet more transparent, expose the untruths of governmental agencies that have no interest in restricting the agricultural industry, and try to give voice to all involved parties – in this case the planet and animals in mass livestock farming who obviously cannot advocate for themselves. They do not settle on the more approachable solution of reduced meat consumption but appeal to the urgency of issues, such as rising numbers of obese people and rising sea levels. Lastly, they promote the potentially best solution in their eyes: a diet completely free of meat and

animal products. This form of peace journalism that reveals an inconvenient truth and suggests veganism as the solution stands in stark contrast to the generally dismissive mainstream media coverage of veganism in *Der Spiegel*, for example. Pro-vegan journalists will have to communicate their messages as effectively as possible in their pursuit to build a pro-vegan public consensus. This thesis will employ the results of Wiemer's (2018) study to suggest new, effective communication to advocate for veganism in news media.

NGO media campaigns. The plant-based, vegan movement is not only brought to the attention of the public by advocacy journalists but also by non-governmental organizations (NGOs) like PETA, ProVeg or Albert Schweitzer Stiftung für unsere Mitwelt. PETA, for example, has a long tradition in advocating for animal rights and against mass livestock farming from an ethical viewpoint, whereas organizations like ProVeg have also begun to incorporate a plant-based, health perspective into their communication in the last few years in order to comply with a rising interest of Western consumers in topics related to health and self-improvement.

In general, NGOs seek to educate the public and affect change for various conflicts and crises the world faces on a societal as well as governmental level. To promote their messages, they act as social marketers implementing "programs designed to influence the voluntary behavior of target groups in order to improve their personal welfare and that of the society to which they belong" (Gillespie & Hennessey, 2015, p. 360). Just like general marketing campaigns for products and services, social marketing campaigns of NGOs have professionalized and spread across the globe in the last decade,

partly fueled by the rise of social media and its "many new possibilities for NGOs to advocate interests and to propagate institutional reforms that help implementing the interests they advocate" (Will & Pies, 2017, p. 1081).

A variety of NGO media campaigns have been analyzed for their contents and effectiveness. Research has covered NGO campaigns addressing environmental issues such as climate change, marine environment protection, or toxic chemicals produced in the fashion industry, for example. Success of these campaigns was more likely if the NGOs faced favorable political and policy conditions (Hall & Taplin, 2007). The importance of media exposure for these campaigns was stressed as global mass communication networks are likely to expand even more and improve across the globe (Richards & Heard, 2005). Finally, the dissemination of these campaigns was said to be more effective if certain groups of consumers already sympathetic to these issues are marketed towards first who can "thus attract the remaining "mainstream" consumers' attention" and "promote a rapid diffusion of their campaign in the market" (Grappi, Romani & Barbarossa, 2017, p. 1171)

Alone Laestadius et al. (2013, 2014, 2016) focused their research on the efforts of environmental NGOs to address meat consumption as a contributing factor to climate change and found that they have so far resorted to recommend only small changes, like a slight reduction in meat consumption (e.g., "Meatless Monday"). Environmental NGOs failed to establish dedicated pro-vegan campaigns as done by food-focused or animal protection NGOs. Although many NGOs encourage reduced meat consumption on their websites, active public education campaigns by environmental NGOs are non-existent

(Laestadius et al., 2013). It appears that environmental NGOs see these active campaigns against meat consumption as intrusive towards such a private matter as one's diet and fear a negative feedback loop (ibd., 2014). However, they "must be willing to address the practices of everyday life in order to have a meaningful effect on climate change" (ibd., 2014, p. 39). Many NGOs chose mostly modest and socially acceptable messages with a wide positive appeal. Hence, these "findings raise questions about the willingness of many NGOs to challenge pre-existing value systems more generally" (ibd., 2016, p. 100). Next to a lack of message promotion and message consistency of environmental NGOs, it is further criticized that a mere promotion of decreased meat consumption and only modest changes to one's diet do not seem appropriate given the global, societal changes in nutrition and diet that are necessary to fight climate change: "there is some question about if modest change precludes greater changes" (ibd., 2013, p. 35).

As illustrated here, the literature on NGO media campaigns about effecting dietary change in the public towards a plant-based, vegan lifestyle is scarce, and existing research has indicated the various factors that hinder media campaigners in creating and disseminating pro-vegan messages. Therefore, the media work and media exposure of not only environmental NGOs but especially vegan-focused NGOs might benefit from the practical implications for their media campaigns derived from the results of Wiemer (2018).

Chapter 3: Theoretical Background

This chapter will explain the theoretical background that Wiemer (2018) based her experimental study on; before the study's design and results of the experiment will be discussed in the following chapter. Change in health behavior is a well-researched subject in health and social sciences with a variety of different theories applied to track and predict it (Armitage & Conner, 2000). The *Transtheoretical Model* (TTM) by Prochaska and DiClemente (1982) and the *Theory of Planned Behavior* (TPB) by Ajzen (1991) are two of the most popular social cognition models used in the study of dietary change. Moreover, the Transtheoretical Model is also the most commonly chosen theoretical basis for tailoring studies about dietary interventions (Noar et al., 2011). Aspects of both models served Wiemer (2018) as tools to measure the potential media effects of tailored intervention messages created from journalistic formats.

Stages of Change in the Transtheoretical Model

Independent from motivation or personal factors influencing one's behavior, changing habits and daily decisions will always be bound to be a process of change. Prochaska and DiClemente (1982) developed an integrated framework that allowed to determine and examine this process by taking into consideration major change theories and condensing them into their own model. Among other factors of behavioral change such as the balance of arguments, self-efficacy or temptation, they identified six Stages of Change that every person progresses through in their process of change (Prochaska, Johnson & Lee, 2009).

The six Stages of Change are: *precontemplation* (people are not thinking about or intending to take any action to change their behavior in the next six months), *contemplation* (people are planning to change their behavior in the next six months and are currently pondering the pro and cons), *preparation* (people are planning to take action in the next 30 days and usually already have a plan of action), *action* (people are actively engaged in changing their behavior or have done so in the past six months), *maintenance* (people are trying not to fall for temptation and to relapse into old behavior, people have maintained their behavior for more than six months), and *termination* (people are not likely to relapse and are fully confident in keeping with the new behavior) (ibd., 2009). Some of the critical assumptions of the model to take into consideration are that stages are always both stable and open to change and without directed interventions people would not change from one stage to the next since people lack "inherent motivation to progress through the stages of intentional change" (ibd., 2009, p. 64).

Stages of change in dietary behavior. The first applications of the TTM occurred in interventions for people with addictive behaviors and were used to describe and improve psychotherapy outcomes (Povey et al., 1999, Norcross, Krebs & Prochaska, 2011). Thus, one criticism of the TTM states that the six months and 30 days intervals of the stages of change (SOC) are arbitrary cut-off points and "that time-dependent methods of stage categorization are less appropriate for use with complex and varied health behaviours such as dietary change" (Povey et al., 1999).

However, several studies did successfully apply the SOC to dietary behavior change (Keller & Basler, 1999, Glanz et al., 1994, Lechner et al., 1998, Weller et al.,

2014). Prochaska et al. (1994) included dietary change among one of twelve, highly diverse behaviors (e.g., ranging from quitting cocaine to applying sunscreen) in a large-scale study and concluded that the basic construct of the TTM, the Stages of Change, are indeed generalizable across various behaviors and populations.

One difficulty that studies about the application of SOC to dietary change did face was the subjective assessment of the participants about their current stage. In general, people are inclined to perceive their diet as healthier than it actually is. Lechner et al. (1998) used two classification methods in the same study and found that "many subjects who were in maintenance based on the traditional classification method were classified in the precontemplation stage if the alternative classification method was used, since these subjects were unaware of their unfavourable dietary intake" (p. 1). An alternative to a participant's subjective assessment would be an algorithm based on various dietary behaviors that would classify participants afterwards (Keller & Basler, 1999). However, the subjective misperceptions of participants are only likely to occur if they have to self-assess dietary behaviors that are difficult to define and pinpoint (e.g., "eating a healthy diet" or "eating a low-fat diet") (Keller & Basler, 1999, Povey et al., 1999). If a clear definition of the dietary behavior can be provided to participants alongside their self-assessment, their classification into the SOC becomes more reliable (Keller & Basler, 1999, Maurischat, 2001, Weller et al., 2014). Plant-based eating can be clearly defined. Hence, the self-assessment of participants constituted a viable option for Wiemer (2018).

Stages of change to plant-based eating. Some people might only need a couple of weeks to eliminate all animal products from their refrigerator and to look up new

recipes. Others might struggle for months or years to cook without cheese and milk or to refuse a piece of meat at a dinner party. The process to eating completely plant-based and becoming a vegan might be a longer journey, with more setbacks and new attempts than other behavior changes. The SOC can be helpful to describe and track this particular journey (Mendes, 2013). Participants of a study conducted by Lea, Crawford and Worsley (2006) about consumer's readiness to adapt a plant-based diet could be easily placed in one of the stages. According to in which stage people find themselves, they have different needs when it comes to addressing benefits and barriers of the plant-based diet: "[A]wareness raising of the benefits of plant-based diets and the need for change is necessary for those in precontemplation, while those in contemplation and preparation need practical information, such as on the availability and preparation of healthier foods compared to high-energy, low-nutrient foods" (Lea et al., 2006, p. 350).

Wiemer (2018) employed the SOC to track and measure the potential progression of participants through the stages towards a plant-based, vegan diet before and after they have watched a tailored intervention message about its benefits.

The Theory of Planned Behavior

Wiemer (2018) called upon the Theory of Planned Behavior (TPB) by Ajzen (1991) as a second fundament to her experiment. It assumes that:

> behavioral, normative, and control beliefs provide the basis, respectively, for attitudes toward the behavior, subjective norms, and perceived behavioral control; that these three factors jointly account for a great deal of variance in behavioral intentions; and that intentions and perceived control can be used to predict actual behavior (ibd., 2012, p. 11).

Generally speaking, people hold certain beliefs about physical objects, other people, or specific behaviors. These beliefs might be "biased by a variety of cognitive and

motivational processes, and may be based on invalid or selective information, be self-serving, or otherwise fail to correspond to reality" (Ajzen, 2012, 13). Whatever form these beliefs might take, they are the basis of a person's reasoning. This reasoning does not have to lead to perfectly "planned behavior" or be rational in any form, it can include deliberate as well as spontaneous decision makings (Fishbein & Ajzen, 2010). What does follow in a relatively predictive manner from these beliefs, though, are intentions and actual behavior patterns (Ajzen, 2012).

According to the TPB, beliefs about a potential outcome of a behavior influence one's positive or negative attitude toward a certain behavior. Second, beliefs about societal expectations from others and the motivation to comply with these expectations produce perceived social pressure (PSP). Third, a person's beliefs about their own capabilities and facilities to achieve or follow a certain behavior culminate in into the construct of perceived behavior control (PBC). In turn, attitude toward a behavior, PSP and PBC produce a person's intention to enact a certain behavior. Ajzen (2012) concluded that "as a general rule, the more favorable the attitude and subjective norm, and the greater the perceived control, the stronger is the person's intention to perform the behavior in question" (p. 18). This intention then successfully leads to behavior change if enough perceived behavioral control is given.

The framework of the TPB has been successfully validated in numerous studies on behavior change, including several causal intervention studies (Armitage & Conner, 2001, Webb & Sheeran, 2006). When interventions for behavior change are based on the TPB constructs, their invention messages or materials "target behavioral, normative, and

control beliefs in an effort to produce positive intentions among participants who, prior to the intervention, either did not contemplate performing the behavior or were disinclined to do so" (Ajzen, 2012, p. 22).

Theory of planned behavior and dietary behaviors. The Theory of Planned Behavior has been applied to a range of health-related behaviors, among those dietary behaviors as well. Its constructs proved to be a reliable predictor of intentions and behavior patterns ranging from more restrictive eating patterns such as low-fat dieting (Armitage & Conner, 1999), dieting in general or fasting (Nejad et al., 2005) to more positive healthy eating intentions such as intentions to eat five portions of fruit and vegetable a day or more organic vegetables (Sparks & Shepherd, 1992, Povey et al., 2000, Conner, Norman & Bell, 2002). Moreover, the assumption that TPB is a "solid foundation for those seeking to increase adherence to health-promoting dietary patterns" (McDermott et al., 2015, p. 155) was validated in a causal experimental intervention study that designed TPB-based intervention messages to reduce the fat intake amongst hospital workers (Armitage & Conner, 2002). It showed that the specific targeting of salient beliefs improved attitudes towards healthy eating and lead to dietary changes.

While dieting and healthy eating patterns have long since been the focus of intervention research, veganism and plant-based eating have only recently been more closely examined by means of the TPB. Several studies confirm that the intention to follow a plant-based, vegan diet can be successfully predicted by the theory (Povey et al., 2001, Wyker & Davison, 2010, Diaz, 2017).

However, the importance of each predictor for behavioral changes in personal diets seems to vary. While one meta-analysis of several TPB studies about healthy eating patterns concluded that, next to intention, it was PBC that was closest associated with change in behavior (McDermott et al., 2015), another meta-analysis found attitude to be the most significant predictor (Riebl et al., 2015). Povey et al. (2001) found that perceived social pressure does not predict the intention to follow a vegetarian diet, only an omnivore, flexitarian, or vegan diet. Wyker and Davison (2010) summarized that attitude and perceived social pressure are overall more relevant to following a plant-based diet than perceived behavior control.

Yet, perceived social pressure is often only found to be a weak predictor of intention in general, partly attributed to its poor measurement (Armitage & Conner, 2001). Here, it is important to stress Fishbein and Ajzen's (2010) conceptualization between injunctive and descriptive norms that make up perceived social pressure: "Injunctive norms refer to perceptions concerning what should or ought to be done, (…) whereas descriptive norms refer to perceptions that others are or are not performing the behavior in question" (p. 131). Whereas the original concept of social pressure only related to injunctive norms, recent studies have taken care to include descriptive norms as well. They cite an increased validity of the whole theory if descriptive norms are included (Rivis & Sheeran, 2003). Hence, Wiemer (2018) chose to measure both injunctive and descriptive norms explicitly.

As no single predictor of the TPB theory has been cited as the most important one for a person's change in their dietary behavior, Wiemer (2018) included all predicting

TPB constructs – intention, attitude, perceived social pressure (informed by injunctive and descriptive norms), and perceived behavioral control – as referents for potential media effects of tailored intervention messages about following a plant-based, vegan diet.

Excursus #1 – extending TPB to moral obligation. Ever since the conception of the Theory of Planned Behavior, Ajzen (1991) welcomed possible extensions that would increase the amount of accounted variance in various intentions and behaviors. If confronted with an ethically charged behavior, he allowed that "perceived moral obligation could add predictive power to the model" (ibd., 1991, p. 199). Moral norms that elicit a feeling of "responsibility to perform, or refuse to perform, a certain behavior" (ibd., 1991, p. 199) have explained additional variance in several studies examining unethical decision-making (Beck & Ajzen, 1991, Randall & Gibson, 1991, Conner & Armitage, 1998). More recently, Fishbein and Ajzen (2010) have framed moral norms as a possible addition to measuring perceived social pressure (next to injunctive and descriptive norms) and have called for formative research in this area.

The intention to follow a plant-based, vegan diet can as much be a decision founded in health-related reasons as in ethical considerations, as has been discussed already. Therefore, it might be assumed that moral obligation plays just as important a role as the other constructs of the TPB when it comes to changing dietary behavior towards a plant-based, vegan diet. Wiemer (2018) included the feeling of moral obligation as a factor that might be reinforced by a specifically tailored intervention message that addresses already existing motivations since these messages reinforce the

notion that it is morally wrong to eat meat and that one should feel obligated to eat only food that makes one's body and conscience feel good.

Excursus #2 – psychological reactance. The construct of psychological reactance describes the motivational state of people who see their personal freedom disturbed when a previously free and independent behavior is eliminated by an authority or threatened to be eliminated. To reestablish one's personal freedom and choice, the content of the threatening message is rejected and viewed negatively as a way to challenge the authority (Miron & Brehm, 2006). Intervention messages – which can be perceived as threatening to one's personal freedom of choice – could therefore potentially elicit psychological reactance in people exposed to these messages.

Additionally, intervention messages can be laden with communication about injunctive norms – explaining why a certain behavior ought to or ought not to be observed. This can hold especially true for any kind of intervention messages regarding dietary changes. In fact, Stok (2014) found that "injunctive norms, when posed in a forceful manner, may induce reactance and may in fact have negative effects on (intended) healthy eating" (p. 123).

Since a plant-based, vegan diet is in its core a restrictive diet that cuts out foods which the typical Western diet naturally embraces, messages promoting and encouraging this self-imposed restriction can be perceived as a threat to one's personal freedom. Pro-vegan intervention messages also communicate by default injunctive norms: reasons why someone ought not to eat meat or animal products and ought to focus on plant-based foods instead. Wiemer (2018) assumed that the strategy of tailoring intervention

messages so they become personally relevant to their viewers could counter this potential threat of message rejection. If the content of the message is aligned with the personal motivation, people who not yet follow a plant-based, vegan diet should not feel as much need to challenge the authority and its imposed injunctive norms. Since the message appeals to values that they are already familiar and agree with, it might not be perceived as disturbing to their personal freedom as a message that stresses the opposing motivation.

Chapter 4: Overview of Study Design and Results

This chapter will provide an overview of Wiemer's study design and how she created the two tailored stimuli. Then, the demographic composition of the sample will be presented, followed by a brief discussion of the results based on her proposed hypotheses (cf. Wiemer (2018) for a more detailed presentation of the results).

Study Design

In order to test the proposed hypotheses, participants in Wiemer's (2018) study consumed a tailored or non-tailored intervention message (independent variable). The tailoring process was initiated by a quasi-experimental variable which asked for the participant to indicate the potential personal motivation to adapt a plant-based, vegan diet (internally or externally focused motivation). Through random assignment the participant then watched one of two differently tailored media messages. One focused on the internal benefits of a plant-based, vegan diet (i.e. improved personal health and well-being), the other discussed external benefits (i.e. protecting the environment and minimizing) animal suffering.

The material for the messages was taken from the four advocating documentaries: *Forks over Knives* (2011), *Cowspiracy* (2014), *Hope for All* (2016) and *What the Health* (2017). Both stimuli had roughly the same length of about seven minutes. In their length and look, they resembled short video messages that advocating journalists or pro-vegan NGOs might share on their social media channels. As positive intervention messages stressing the benefits of a plant-based, vegan diet, they were tailored to address either internal or external motivational benefits.

Keeping the characteristics and values of omnivores and flexitarians discussed in Chapter 2.2 in mind, the stimuli sought to fill potential knowledge gaps which have been perceived as one of the main barriers to adapting a plant-based, vegan diet. While the first stimulus emphasized why an excessive meat attachment can be detriment to one's health, the second stimulus drew a connection between climate change and heavy meat consumption. Both tried to dispel feelings of "vegaphobia" by showcasing the benefits and reasoning of this (to omnivores foreign) diet.

Based off of the constructs of the Theory of Planned Behavior, both stimuli stressed positive attitudes about plant-based, vegan living and communicated positive injunctive and descriptive norms by giving personal examples or sharing insights of doctors, activists and former people involved in the industry. Overly graphic depictions of sick or dead animals inside slaughterhouses were excluded in the message about external benefits to guarantee that both messages had a similar level of empathic appeal. Although the messages did not provide "hands-on" tips and suggestions of how to make the change towards a plant-based, vegan diet, both messages emphasized that it absolutely is in the behavioral control of every viewer to make the change. They filled potential knowledge gaps by informing either about personal health benefits or the connection between climate change and heavy meat consumption. Both messages relied on doctors, experts and activists as trusted sources. They were straight-forward and direct in their persuasive efforts since they were video- and not text-based messages.

Wiemer's (2018) tailoring process created two conditions in total (tailored or non-tailored intervention) in which both motivations were represented. The experimental

group (that received tailored media) included (1a) participants indicating a tendency for internal motives who were exposed to a media message that stressed internal benefits, and (1b) participants indicating a tendency for external motives who were exposed to a media message that stressed the diet's external benefits. Accordingly, the control group (that received non-tailored messages opposed to their own personal motivation) consisted of (2a) participants indicating a tendency for internal motives who were exposed to a media message that stressed external benefits, and (2b) participants indicating a tendency for external motives who were exposed to a media message that stressed the diet's internal benefits.

After the participants had seen one of the two media messages, Wiemer (2018) measured the following dependent variables: intention, attitude, perceived social pressure, perceived behavioral control, moral obligation, dissonance reducing strategies, reactance. Moreover, participants were asked to self-assess their personal stage in the Stages of Change of the TTM before and after their exposure to the media message for a pre-post comparison.

Participants

In total, 121 participants took part in Wiemer's study: 73 percent were female and 26 percent male; they were on average 32.5 years old. Twenty-nine percent of all participants had earned a bachelor's degree, 27 percent received their "Abitur" and another 17 percent their "Mittlere Reife." Asked about their daily dietary behavior, 35 percent indicated to be vegan, 30 percent considered themselves to be omnivores, and 17 percent to be "flexitarian." Only three participants were pescetarian and nine participants

declared to follow a version of a vegetarian diet (ovo-lacto-vegetarian, lacto-vegetarian, ovo-vegetarian). The intervention message that focused on internal motivations was watched 61 times, the intervention messaged that focused on external motivations was watched 60 times.

Initially, 70 of 121 participants reported no clear preference between internal or external motivations to change their diet, 16 leaned more towards internal motivations and 29 more towards external motivations. When forced to choose between one of the two motivations, 64 participants indicated internal motivations as their primary motivation and 67 participants cited external motivations. This resulted in 62 instances where participants watched a message tailored to their preferences and 59 instances in which the message was non-tailored and addressed the opposite motivation. The "matches" and "non-matches" were moreover roughly equally distributed between the two motivations: 28 "matches" watched the internally motivated intervention message, 34 "matches" watched the externally motivated message. Accordingly, 33 "non-matches" watched the internally motivated message although they indicated to be externally motivated, 26 "non-matches" watched the externally motivated message although they indicated to be internally motivated.

Results

The benefits of a plant-based, vegan diet for people's health and well-being, for animal welfare in mass livestock farming and for the future protection of the planet demonstrate that journalistic formats promoting plant-based eating and veganism have a right to exist. These media have the potential to reach a diverse dietary spectrum ranging

from convinced omnivores attached to their daily meat to strict vegans striving to live a 100 percent "pure" life. Characteristics, values and views towards veganism naturally differ along this spectrum. A starting point to reach as many people on this wide spectrum as effectively as possible can be to specifically address their personal (internally or externally focused) motivation – as motivation is one of the main factors contributing to any kind of dietary change.

Hence, Wiemer (2018) assumed that video-based intervention messages promoting a plant-based, vegan diet which are tailored towards a recipient's internal or external motivation can act as more effective cues to action which positively affect a progress of change and predictors for behavior change than messages that address a different motivational preference. Moreover, potential cognitive dissonance strategies, psychological reactance and moral obligation were included in her experiment.

The evaluation of the data showed that the intervention messages promoting a plant-based, vegan diet and tailored to one's personal motivation did not serve as a transformative cue to action for a large majority of participants. Wiemer (2018) reported only eleven cases of 121 in which participants indicated a positive progress of change that was noticeable for their own subjective assessment. Otherwise, the intervention messages created for this study– tailored or not – overall did not initiate an immediate "conversion experience" (Beardsworth & Keil, 1991) or a wake-up call to change diets in the next 30 days. The TTM claims that successful processes of change also need the careful balancing of arguments, developing of self-efficacy and establishing of resistance to temptations (Prochaska et al., 2009). Wiemer (2018) concluded that a short video

message consumed online on a social media platform as part of a marketing campaign of an animal protection or environmental NGO does not seem able to replace all necessary components for a change process that concerns something as substantial and profound as one's daily food intake.

But even though the short messages did not set off "conversion experiences" in most cases, some media effects of these tailored messages based on a person's personal motivation were still traceable. An intervention message tailored to the personal motivation of its viewer had a more positive effect on her or his intention to follow a plant-based, vegan diet than a non-tailored intervention message. If someone motivated to eat healthy watched an intervention message addressing the benefits of a plant-based diet for one's overall health, she or he reported a higher intention to adapt this type of diet. Following Fishbein and Ajzen (2010), intention is the single most important predictor to change one's behavior. Thus, the positive shift in intention caused by the tailored intervention message makes future behavior change more likely. Although it has to be stressed that Wiemer (2018) did not measure actual behavioral change at a later point in her study design and therefore could not prove if actual change occurred in the participants.

According to the TPB, intention predicts behavioral change and is in turn predicted by attitude, perceived social pressure and perceived behavioral control. Attitude and perceived social pressure were not significantly affected by the reception of a tailored intervention message. No matter if someone saw an intervention message that was tailored or not-tailored to his personal motivation, his attitude (however negative or

positive towards the subject beforehand) did not significantly change in a positive direction nor did watching the tailored message significantly increase the perception of social pressure from his peers or his doctor to become vegan.

However, Wiemer (2018) could report a positive effect on the predictor of perceived behavioral control after the reception of a tailored intervention message. If a participant saw a tailored intervention message that address her or his own personal motivations, she or he perceived to have more behavioral control over her own choice to do so. This positive shift in PBC is especially noteworthy since it is not only one of three predictors of intention for behavior change but can also serve as a proxy to measure actual behavioral control (Fishbein & Ajzen, 2010). Actual control is needed as a "catalyst" between people's intentions and their acting on these intentions. Especially for dietary change to a restrictive plant-based, vegan diet, one's perceived behavioral control comes very close to one's actual control; it does not require skills but rather personal willpower, and the environmental circumstances in Germany as the leading country in production of vegetarian and vegan food products are nearly ideal. Wiemer (2018) summarized that since the strategy of tailoring the message towards a person's motivation positively influenced participants' intention to become vegan and increased their perceived behavioral control (thereby also their actual control), this tailoring strategy seemed more likely to initiate change towards plant-based, vegan eating than a non-tailored intervention message.

In addition, Wiemer (2018) could report a positive influence of the reception of a tailored intervention message on moral obligation. Participants of the study who watched

an intervention message tailored to their personal motivation reported significantly stronger feelings of moral obligation. That means, if someone motivated to eat healthy watched an intervention message addressing the benefits of a plant-based diet for one's overall health, she felt worse for eating animal products, felt like it went more against her personal principles, and it made her feel like she acted morally wrong – more so than someone who had watched a non-tailored message. Thus, by framing the message in a context that is relevant to that particular person, the tailored message successfully captured the attention of the addressee and positively influenced three of five personal cognitions - intention, perceived behavioral control and moral obligation - that can predict future behavior change.

Moreover, Wiemer (2018) measured the occurrence of reactance to analyze if tailored intervention messages can be a suitable option to lessen this psychological reaction. Participants who watched a tailored intervention message experienced slightly less reactance than participants who watched the message opposed to their own personal motivation. This difference in means was not statistically significant, however. It nonetheless indicated that a tailored message might slightly help to reduce the risk that people reject the contents of an openly persuasive intervention message.

Furthermore, Wiemer (2018) inquired if participants in the precontemplation stage indicated one or more dissonance reducing justification strategies after having watched a media message promoting a plant-based, vegan diet. People who did not plan to follow a plant-based, vegan diet in the next six months reported that they believed it is human destiny to eat meat ("Science proves that our teeth are made for it"), avoided

thinking about what their meat consumption means for animals in mass livestock farming, dissociated with the act of eating a being that once lived, genuinely liked its taste, differentiated between pet animals and animals bred for consumption, saw humans as superior to animals, or gave health justifications ("Meat is part of a healthy diet"). Only the two strategies of denial ("Animals don't really suffer when being raised and killed for meat") and religious justification ("God intended for us to eat animals") were on average rejected as justifications for meat consumption.

Lastly, Wiemer (2018) was able to make some general observations across her sample: Women were more often externally motivated, men more often internally motivated. Young people below the age of 30 were more often externally motivated, and older people above the age of 50 more often concerned with internal motivations, i.e. their health. Moreover, the omnivores in her sample tended to be internally motivated. With regard to moral obligation, women and younger people reported a stronger sense of moral obligation concerning this subject than older people and men, validating Rothgerber (2013). In contrast to omnivores, flexitarians appeared to listen more closely to their conscience as they felt considerable more moral obligation to stop their meat consumption for a clear conscience. Thus, Wiemer's findings concurred with DeBacker and Hudders (2015) who found that flexitarians are more concerned about animal welfare (and thus its moral implications) than omnivores.

Focusing on vegetarians alone as people who are already "on the verge" to being vegan and therefore might be more receptive of pro-vegan messages, externally motivated vegetarians had more intention to follow a plant-based, vegan diet, perceived

more social pressure and felt stronger moral obligation to not consume meat than internally motivated vegetarians. Yet, internally motivated vegetarians perceived to feel slightly more in control about their dietary behavior choices. Wiemer's results confirmed previous studies about differences between health and ethical vegetarians (Pribis et al., 2010, Hofman et al., 2013, Rothgerber, 2013). Moreover, Wiemer (2018) found that vegans alone (no matter which motivation they indicated) showed an overall very strong intention to follow this diet, a strongly positive attitude towards this lifestyle and felt very much in control of their behavioral choices.

Chapter 5: Practical Implications for Communicators

Wiemer (2018) already discussed what her results could mean for intervention campaigns in general and how they could inform a potential decision by intervention campaigners to invest in tailored media massages as a means to initiate action towards change in their addressees. Based on her general discussion, this chapter will delve deeper and elaborate on practical implications for communicators in today's media landscape.

From Health Campaigns to Media Advocacy

If practical implications for journalists and NGO campaigners are to be derived from Wiemer (2018), the process of creating intervention campaigns for the health sector (where the research of tailored communication is primarily based) has to be first transferred to the field of advocacy journalism and NGO communication strategies. Interventions in the health sector are designed to convince people to change detrimental lifestyles and behaviors, e.g., smoking, physical inactivity, eating unhealthy or too much food. In their traditional form, they are conducted as school-based programs, through mass media campaigns or at regularly frequented "points of contact" in a community prone to the specific detrimental behavior. As an advancement of this more general distribution, tailored intervention campaigns seek to individualize this communication by approaching narrow target groups or even single individuals with a persuasive message personally tailored to their needs across a range of variables: e.g., information needs, relevant context, design elements, channels of delivery (Rimer & Kreuter, 2006).

Traditional intervention campaigns are often conducted by public health departments; sponsored by the government they often have the means to contact and reach a wider audience. Successful health intervention campaigns such as the "Truth" campaign in the early 2000s in the United States accounted for 22 percent of the overall nationwide eight percent decline in youth smoking (Farrelly et al., 2005). In Germany, three years after the nationwide anti-alcohol campaign for youths "Alkohol? Kenn dein Limit!" was initiated, the number of young people who binge drink once a month had declined from 20.4 to 15.2 percent (BZgA & PKV, 2012). In a meta-analysis, Wakefield, Loken and Hornik (2010) reviewed the effects of health intervention campaigns in mass media published from 1998 onwards and concluded that these campaigns do, in fact, affect direct and indirect positive changes across large populations. Contributors to these positive outcomes can be multi-staged interventions, access to key services and products, or the creation of policies that support the behavior change. Moreover, "public relations or media advocacy campaigns that shape the treatment of a public health issue by news and entertainment media also represent a promising complementary strategy to conventional media campaigns" (ibd., 2010, p. 1268). Here, it is up to advocacy journalists and NGO campaigners to provide these complementary strategies.

However, journalists and NGOs advocating for veganism cannot rely on large-scale government campaigns, they have to find different communication approaches. Pro-vegan journalists try to expose the conflict between meat consumption and exploitation of animals and the planet, reveal the half-truths of governmental agencies that have no interest in restricting the agricultural industry, and try to give voice to all involved

parties. They do so in their position as reporters who research, speak to sources, collect information and tell their stories to an audience. Their jobs rely on the utilization of mass media so that their news can be heard. However, traditional mass media (newspapers, radio, and TV) still prefer to broadcast a more or less objective version of journalism. Therefore, advocacy journalists who seek to intervene by offering new, less traditional viewpoints and disclosing previously unknown facts often focus on publishing on online communication channels (e.g. utopia.de) or present their reporting in long-form documentaries as an informational entertainment format (e.g. *Cowspiracy*, etc.).

Pro-vegan NGOs communicate primarily online nowadays, too. In order to educate the public and affect change, they launch their own versions of intervention campaigns on their websites and spread them across their social media channels. NGOs realize the potential that social media holds with its "many new possibilities for NGOs to advocate interests and to propagate institutional reforms that help implementing the interests they advocate" (Will & Pies, 2017, p. 1081). In addition, personal campaigns in the streets or attention-seeking, public "stunts" are part of their communication strategies. This type of "buzz marketing" manages word of mouth. Although it can appear subversive or disruptive, NGOs engage in this kind of marketing because it is an inexpensive strategy that does not require buying expensive ad space or promotions. Because of its extraordinary or shocking value, it attracts attention not only from the public but also from potential donors and, maybe most importantly, the traditional mass media who report on these incidents and thus create even more publicity (Gillespie & Hennessey, 2015).

Suggested Actions for Advocacy Journalists and NGO Campaigners

Wiemer (2018) showed that the communication strategy of tailoring the media message in an intervention campaign towards a person's motivation positively influenced the addressees' intention to become vegan, increased their perceived behavioral control and made them feel more morally obligated to change something about their current eating habits.

For advocacy journalists, this implies that it is imperative to know for which audience they write. This, of course, is taught in every fundamental journalism course but holds especially true for tailored persuasive communication. In their goal to form a new public consensus (Wade, 2011) about veganism, pro-vegan journalists have to know what their audience cares about first and foremost, and then adapt their persuasive writing accordingly. Their decision on how to adapt their writing so that it is tailored to their readers' interest or motivation can partly be made based on the media outlet which one works for or is asked to contribute to. A pro-vegan journalist covering the opening of the first fully vegan kindergarten in Germany will frame the story differently in his report in *Eltern* than in a blog post for PETA. Since the (presumably mostly omnivore) readers of *Eltern* would be more concerned about the well-being and adequate nutrition of their children in such a kindergarten, the journalist would be advised to tailor his writing to these concerns by stressing the health benefits of the colorful and balanced lunch that will be provided as well as the additional employment of a nutritionist specifically for the kindergarten. In contrast, readers of the PETA blog who might raise their children as vegetarians based on their considerations for animal rights could be convinced to enroll

their kids in the new kindergarten based on the journalist's remarks on how the kindergarten teachers will avoid zoo visits.

For NGO media campaigns, the tailoring of campaign messages towards the addressee's personal motivation can improve their appeal, too. One of the most decisive factors that hinder media campaigners from creating and disseminating pro-vegan messages is the fear that overtly anti-meat and pro-vegan messages are perceived as too intrusive and thereby create a negative feedback loop (Laestadius et al., 2014). Accordingly, many NGOs choose mostly modest and socially acceptable messages with a wide positive appeal.

However, the findings of Wiemer (2018) suggest that a wide positive appeal should rather be neglected for a more specifically tailored addressing if NGO campaigners hope to positively affect intention, PBC and moral obligation as three indicators for future behavior change. NGO campaigners committed to educating the public about the benefits of veganism would be advised to create messages that focus either on their addressees' internal or external motivations instead of choosing widely appealing messages. These messages then should be specifically disseminated to certain groups of the public who are already interested or sympathetic to that specific issue.

In practice, this tailoring process is often already partly decided by the cause that the NGO is advocating for. Naturally, environmental NGOs like the WWF distribute messages that focus on external motivations, health-oriented NGOs like the Physicians Committee for Responsible Medicine highlight personal benefits of a plant-based, vegan diet. Especially on social media channels, NGOs often already address a suited audience

for whom these messages were tailored since people typically choose to follow these organizations on social media because they are interested in their actions.

To reach people beyond the audience of their direct social media followers, these NGOs should then seek to spread their content in groups or forums that are also dedicated to their common cause - either online or offline. For example, campaigners of the Physicians Committee for Responsible Medicine could try to share their specifically tailored messages with people going through cancer treatment, either by contacting support groups online or distributing leaflets in chemotherapy clinics (if access is granted).

Another option for NGOs would be to collaborate with bloggers that cultivate a specific image (health, food or "green" bloggers). As a recent example of an organization-blogger collaboration, the Whale and Dolphin Conservation invited several "green" bloggers that write about topics of sustainability to a workshop about the growing threat of plastic in our oceans and then to a whale watching trip on the Baltic Sea in order to raise awareness for the endangered porpoises. The bloggers incorporated the content and facts provided by the NGO in their own blogposts, brought a personal perspective to it and reached a larger audience that might not have been familiar with the organization beforehand (Marjanovic, 2017). At the same time, this larger audience is already prone to be interested in content about sustainability because they are readers of these "green" blogs. True to Laestadius et al. (2013), the Whale and Dolphin Conservation as an environmental NGO shies away from media campaigns promoting veganism as a solution to lessen the threat of oceanic wildlife (such as whales and

dolphins which are caught as by-catch in the fish and seafood industry). If they were to do so, they could have used their blogger collaborations as another channel to distribute their externally tailored media content (e.g., "plant-based, vegan diets as a way to protect whales and dolphins") which would in turn have matched with the external motivations of the readers of these sustainability blogs.

In contrast to NGOs with a clear environment or animal rights profile, there are also NGOs that promote veganism in general as a solution to various societal problems. However, they usually do not have a clear preference of either internal or external motives and resort to a wider, general approach, too (e.g., proVeg). These NGOs might want to take away from Wiemer's (2018) results that their mission of affecting change in the larger society can be more successful if they decide to invest in the dissemination of tailored messages to more specified target groups, even if this comes along with increased efforts and costs. For example, proVeg sends out weekly newsletters to people who signed up for it on their website. Next to asking about a person's first and last name as well as their email address they could include an inquiry after that person's primary motivation. Based on these data, the proVeg campaigners could tailor their weekly newsletter (that usually covers around four or five different topics) by arranging the content in an agenda that would cater to the addresse's motivation (e.g., health or animal/environmental or social justice topics first). The additional programming efforts and costs that this small adjustment entails would certainly be justified; if it meant that recipients of the newsletter would see more personalized topics in the headline of the newsletter, would therefore be more inclined to browse through it which in turn could

lead to increased intention, perceived behavioral control and moral obligation to test out the newest recipe at the end of the newsletter.

Further Learnings for Advocacy Journalists and NGO Campaigners

Wiemer (2018) also found that the two other predictors for intention - attitude towards veganism and perceived social pressure - were not significantly affected by tailored intervention messages. She elaborated that a positive attitude about veganism and its benefits might be first and foremost developed when this diet is tried and tested personally – and not necessarily by exposure to a short video message found online when scrolling through social media, as part of a news report, or newsletter. In practice, this means that NGOs also need to invest in more creative, hands-on campaign strategies to truly affect positive changes in attitudes.

The charity "Veganuary," which launched in the UK in 2014, might be a good template for other pro-vegan NGOs in that regard. It is "dedicated to changing public attitudes, while providing information and practical support required to make the transition to veganism as easy and enjoyable as possible," and it is "the support offered to answer *How to go vegan* that truly sets Veganuary apart" (Veganuary, 2018). With the beginning of each new year in January, it calls upon people to "pledge" to only eat plant-based for the duration of that month, thereby appealing to people's New Year resolutions and their generally increased motivation for a fresh start at that time of year. Next to a variety of resources and links, the website of the campaign offers a "Vegan Starter Kit" with lists of vegan products, nutritional information, local vegan social groups, tips for eating out, and recipes and baking guides. The yearly campaign with rising numbers of

participants is credited with the steady increase of vegans in the UK in general (McGregor, 2018).

Campaigns of NGOs "must be willing to address the practices of everyday life in order to have a meaningful effect" (Laestadius et al., 2014, p. 39). Veganuary's campaign tries to initiate change in one particular practice of everyday life, eating, and tries to make this change as easy and as convenient as possible. In doing so, they are more effective in changing attitudes long term since this designated vegan "trial phase" shows the benefits of veganism in everyday life, rather than just talking about them in an informational video. Next to virtually binding their participants to this trial phase and offering continued support, slightly tailored intervention content addressing the individual issues of animal welfare, health, environment and nutrition is offered on the website. The on-going success of this yearly campaign might very well be rooted in this mix of information supply and committing people to trying something new at the "risk" of seeing their attitudes about veganism change.

Perceived social pressure was neither significantly influenced by the reception of tailored intervention messages. Wiemer (2018) argued that this overall low level of social pressure in the participants of her study originates in the overall low level of social pressure to be vegan in Germany. While smokers are more commonly frowned upon and urged to quit by family members or society at large, not even two percent of Germans are vegan and frown upon meat consumption respectively. The chances that a person perceives social pressure to become vegan are thus very slim; since society at large has yet to accept a large number of vegans as the "new normal".

Advocating journalists and pro-vegan NGOs want to change this – and are uniquely equipped to do so. Advocacy journalism can actively shape and take part in the process of consensus forming (Wade, 2011). They might "collaborate with advocates, harmonize with opinion writers, and use their physical presence and access to newsprint to pressure the state" (ibd., 2011, p. 1166). With the means of the Internet as a vehicle for nationwide and global communication, it has never been easier for advocating journalists to create or find a platform for their message and extend its reach (i.e. through websites like utopia.de or vegan-news.de). Once these platforms have found their footing online and begin to stick out from the mass of online content that is put up daily, it often does not take long for traditional news media to base their own coverage on this free online content. Advocates for veganism currently find themselves in this particular stage of the process of consensus forming: extensive TV reports air on public broadcasting channels (e.g., "Esstrend Vegan" on WDR) and special interest magazines for consumer protection dedicate whole issues to vegan food products (e.g., ÖKO-Test, 05/2018). Over the last few years, increased outspokenness from pro-vegan journalists, their presence online and also increasingly in the traditional mass media have contributed and continue to contribute to shape a public consensus that is increasingly accepting and accommodating of vegans in society (Kreutz, 2017).

Likewise, NGOs have a chance to take part in this process of consensus-forming. Their social marketing campaigns are more likely to initiate a domino reaction if they are first marketed towards people who are already open-minded towards the cause, who "thus attract the remaining "mainstream" consumers' attention" and "promote a rapid

diffusion of their campaign in the market" (Grappi, Romani & Barbarossa, 2017, p. 1171). However, it is especially difficult to attract the "mainstream" consumers' attention for a subject if they show no interest in it because it is not tangent to their lives. Wiemer (2018) has come across this problem in the recruitment of participants for her study. Although she wanted to test the effect of the two tailored stimuli primarily on non-vegans, the recruitment posts of the study appealed first and foremost to a large number of vegans who are, of course, by nature more aware of and interested in a study that examined media messages' influence on a person's decision to become vegan. Omnivores, in contrast, usually do not question their choice to eat meat, they naturally hold more sceptic attitudes towards eating habits that are opposed to their own, and often do not want to invest the time and effort that is needed to resolve the barrier of their lack of information about vegetarianism or veganism (Povey et al., 2001, Lea et al., 2006). Also, some omnivores might harbor feelings of "vegaphobia" (Cole & Morgan, 2011). All of these characteristics lower the chances that omnivores are willing to engage with anything that relates to the subject.

Just like Wiemer faced difficulties to recruit staunch omnivores for her study, NGOs will be challenged to attract their attention to any media campaigns. Thus, instead of targeting the mainstream directly, a diffusion of their campaigns starting with people who are already inclined towards less meat consumption could create a more effective ripple effect. Pro-vegan NGOs are likely to come across open ears when they gear their communication strategies towards vegetarians and flexitarians first. Vegetarians already share similar motivations with vegans, and (in many cases) vegetarianism is used as a

stepping stone to eventual veganism. In contrast to omnivores, flexitarians are already aware of the consequences of their meat consumption and have decided to take the first step to reduce their consumption. And although they do not identify to be in an in-group with vegetarians or veganism (Rothgerber, 2015b), their increased awareness for the health or ethical benefits of a meat-reduced diet makes their willingness to engage with NGO initiatives such as the "Veganuary" trial month more likely.

If journalists and NGO media campaigns can achieve to establish a public consensus that regards veganism not as a current food trend but as a global societal shift in values that makes it as "natural" to be vegan as it would be to not smoke, perceived social pressure for those who still consume meat and animal products would increase accordingly. Continued advocacy in journalism and comprehensive NGO media campaigns are necessary to invoke in people the feeling that they should not miss out on something that an increasing number of vegans in their social circle already do and want them to do, too.

Additional Tailoring Options for Advocacy Journalists and NGO Campaigners

Lastly, Wiemer (2018) proposed additional tailoring options based on her findings of demographic differences and cognitive dissonance reducing strategies in omnivores. Messages might not be only tailored to a person's motivation but also to their demographics. According to Wiemer's (2018) findings, this implies: pro-vegan messages that address external motivations such as animal welfare and the protection of the planet with a strong moral appeal should be sent out to young women, whereas messages highlighting the benefits of a plant-based diet for one's heart health which do not

especially focus on any moral implications would reach older men more successfully. In general, vegetarians with internal motivations would benefit from more attention since they indicated not as much intention to shift fully towards a plant-based, vegan diet as compared to externally motivated vegetarians.

Tailoring content based on motivations as well as demographics would lead to increased attention from the addressees to consume the message and could result in increased intention to change one's behavior. Of course, efforts and costs for journalists and NGOs would increase, too, with this additional personalization. These tailored messages could not be simply shared over general social media channels anymore with just a click of a button or randomly handed out as flyers in city centers. Journalists would need access to the demographics of their (online) readership, so they could tailor their reporting even further. Readership surveys could provide this kind of information. NGO campaigners could distribute their tailored content through online advertisements on social media, for example. Here, it is relatively easy to determine which demographic group will be exposed to which advertisement.

Another additional tailoring option could be to take an addressee's current Stage of Change into account. People in different stages have different informational and motivational needs (cp. Lea et al., 2006). People in the precontemplation stage might only have to be exposed to information about the harm that animal products can do to their coronary arteries or the conditions of animals in mass livestock farming to raise their awareness and consequently push them into the contemplation stage. On the other hand, people in the preparation stage are usually already familiar with this information. It

would not suffice as a cue to action since their motivational needs are different. For them, resources such as detailed meal plans might make a progression to the action stage more likely.

Yet, apart from an experimental setting, there are not many practical options for journalists or NGO campaigners to assess an addressee's current SOC in order to then provide her or him with tailored content for her or his specific stage. Journalists and NGO campaigners can nonetheless work around these practical challenges. The desired progression through the SOC could successfully be helped along when people are exposed to longer or several, different cues and resources that allow people in different stages of the process to seek out the information or support they individually need (e.g., documentaries like *Cowspiracy* or campaigns like Veganuary).

As a third additional tailoring option, Wiemer (2018) proposed that pro-vegan content for omnivores could be tailored based on the justification strategy they offer when their meat consumption is questioned. Pro-vegan journalists and NGO campaigners in the pro-vegan movement want omnivores to abandon pro-meat justifications that make them sidestep their cognitive dissonance; they want omnivores to choose the other route that would dissolve their dissonance completely – behavior change. These strategies for "mental protection" are one of the biggest obstacles to overcome in any transition to veganism. Media messages that seek to "debunk" specific "myths" (cf. Veganuary campaign) that a person is holding onto could potentially address the very root of why that person has not changed their behavior yet. Thus, a tailored message that successfully and convincingly refutes the justification strategy of its addressee could indeed become

the transformative moment that advocacy journalists and especially NGO campaigners seek to inspire. However, such highly individualized tailoring is almost impossible to conduct via mass media outlets. NGO campaigners, for example, would have to rely on face-to-face communication, e.g. personal campaigning in the streets.

Finally, it has to be stressed that all three additional tailoring strategies are potential recommendations based on Wiemer's (2018) explorative findings of demographic differences and cognitive dissonance justification strategies in omnivores. They have not been tested in an experimental setting yet and thus should only be regarded as suggestions for future actions.

Chapter 6: Criticism of Theoretical Approach

Wiemer (2018) already elaborated on the limitations of her study design. Hence, this critique of her study will take a step back to assess the larger picture and indicate how the study could have been based on a different theoretical background altogether. Wiemer could have either extended her study further to include not only behavioral intentions but also implementation intentions; or she could have approached dietary behavior as a social practice rather than a cognitive decision.

Successful Implementation of Behavior Change?

A common mistake that is made in developing intervention strategies is to assume that initiating behavior change is just about appealing to people's common sense: if a behavior is unhealthy and carries a great risk, then simply ask people to stop it. If it was that simple "we would all be able to make whatever changes we wanted to whenever we wanted, but we do not," instead lasting behavior change "requires sustained motivation and support" (Kelly & Barker, 2016, p.110).

Wiemer (2018) followed this appeal to common sense when she theorized that intervention messages should address behavioral intention and its predictors of attitude, perceived social pressure, perceived behavioral control and moral obligation – all of these are cognitions that people think about, make (common) sense of and might base their decisions on. She was able to prove that tailored messages successfully captured the attention of their addressees and positively influenced three of these five cognitions - intention, perceived behavioral control, and moral obligation. However, in most cases

these positive shifts had no transformative impact that persuaded participants then and there to transition to a plant-based, vegan diet in the immediate future of the next 30 days.

A possible explanation for this could be that the "sustained motivation and support" - that Kelly and Barker (2016) describe as essential for any successful intervention - are missing from Wiemer's (2018) study. An intervention should span two phases: it should (1) motivate people to perform the behavior but also (2) ensure that the behavior will be carried out afterwards. These are the two main objectives of any intervention seeking behavior change (Ajzen, 2012). To cover these two phases, an expanded intervention strategy that surpasses the reception of only one single stimulus is needed. Interventions based solely on the cognitive framework of the Theory of Planned Behavior can cover the first phase since they seek to establish behavioral intention based on formed attitude, perceived social pressure, and perceived behavioral control. However, for successful behavioral change, a second phase - the volitional phase in which people actually make specific plans and map out strategies to act out the behavior - is needed to form an implementation intention, next to the already mentioned behavioral intention (Gollwitzer, 1999).

These two intentions differ in their acknowledgement for detail: a behavior intention just states that the person intends to carry out the behavior ("I intend to follow a plant-based, vegan diet"), but an implementation intention would also specify where, when and how that specific behavior will be carried out (Gratton, Povey & Clark-Carter, 2007). The success of generating lasting behavior change after establishing implementation intentions in intervention settings has been proven for healthy eating

behaviors in various settings (Verplanken & Faes, 1999, Armitage 2004, Gratton et al., 2007).

Wiemer (2018) did not address the development of implementation intentions in her study. In future tailoring studies, this sensible addition might lend the intervention message more transformative power and would turn it into a true cue to action. For example, an intervention message tailored to one's personal internal or external motivation could be followed by materials that help to implement the behavior immediately in one's daily life. These materials in turn could be tailored to that person's motivation. If one's personal health is the motivating factor that might convince someone to start eating plant-based; supporting materials could take the form of detailed grocery lists or meal plans that focus on healthy and nutritionally-balanced meals and give directions for daily exercises at the same time. Thus, the tailored intervention message would positively influence the addressee's behavioral intention to adopt a plant-based diet (as found by Wiemer (2018)). Also, the additional tailored supporting materials would establish the intention to implement this behavior right away by giving her or him simple-to-follow instructions of how to eat plant-based (e.g., "I intend to eat a healthy, plant-based diet by preparing this healthy recipe of a bean burger and roasted veggies for lunch next Monday.").

Accordingly, tailored supporting materials for people who are externally motivated and want to stop animal suffering or reduce environmental pollution could benefit from detailed grocery lists and meal plans as supporting materials, too. But instead of focusing on explicitly healthy meals, they would rather provide additional

motivation and information by indicating how much resources or animal lives are saved with each conscious vegan meal (e.g., "I intend to be vegan and be aware of my food choices by preparing this bean burger for lunch next Monday (instead of a steak). This will save 3,750 liters of water."). Thus, the package of a short video intervention message that conveys facts and additional (also tailored) supporting material would help to make people feel motivated to change their diet and would also ensure that they actually start the transition to a vegan diet since they received step-by-step instructions. Research that include implementation intentions for behavior change to healthy eating has already proven their potential success in practice. A study on behavior change towards plant-based, vegan eating initiated by these expanded interventions could bring further practical implications for intervention designers to the surface.

Health Behavior as a Social Practice?

As mentioned in the previous chapters, Wiemer (2018) chose to measure the effectiveness of the intervention message by conceptualizing dietary change with the help of two social cognition models - Prochaska's Stages of Change from the Transtheoretical Model and Ajzen's Theory of Planned Behavior. Both are based on the same underlying principle: "that the driving force of human behaviour is that people seek to maximise their pleasure or their gains and profits and to minimise their pains, losses and costs" (Kelly & Barker, 2016, p. 111). They assume that people (who are confronted with information that conveys the risks of one detriment behavior and the benefits of another healthier behavior) rationally strive towards the change that they would profit the most from. Many health interventions follow this approach of common sense and rational

deduction. Campaigns often include advice from doctors or experts in the field because "passing on expertise means passing on information," and it is assumed "that if we tell people the negative consequences of eating too much or exercising too little, they will change their behaviour accordingly" (ibd., 2016, p. 111).

Thereby, the above-mentioned social cognition models and typical intervention campaigns neglect the important caveat that humans do not always act rationally. Much rather, our behavior is an "interplay between habit, automatic responses to the immediate and wider environments, conscious choice and calculation, and is located in complex social environments and cultures" (Kelly & Barker, 2016, p. 110). While some actions can indeed be subject to a "rational calculus approach" in which people cognitively process information and then decide to act on the basis of an informed opinion (i.e. buying decisions); many other behavior practices are "ingrained in people's everyday lives and their routines and habits" and "embedded in social life, not one-off events triggered by information or prevented by remedying information deficits" (ibd., 2016, p. 122).

Conceptualizing health behaviors solely as a rational, cognitive decision - that is made anew every day after processing all relevant information that comes along with it - omits the social and habitual aspects that inform these behaviors. This is why social practice theory highlights "the role these practices have in people's lives, the meanings they hold and the ways in which such actions serve to express and are formed by a person's situations and circumstances" (Holman & Borgstorm, 2016, p. 145). It acknowledges that the structure of society and the social interactions within this structure

influence why people act out certain behaviors and are reluctant to adopt others (ibd., 2016).

Probably no other health behavior is so deeply ingrained in people's everyday lives and embedded in social life as one's eating habits. More than 40 years ago, the German Nutrition Society already stated that eating habits belong to the most stable of all human behaviors and that it would be a naive assumption to believe that a few arguments can convince someone of the fact that his way of eating and drinking is wrong and that he has to change his behavior to not risk his health (DGE, 1976). One has to think of a person's eating habit as a habit first and foremost; a habit that has formed over a lifetime of three meals a day, based on a foundation that is established and set in stone right from the start of life influenced by socio-economic factors and cultural and family-based conventions (Herde, 2007).

In focus groups with young mothers, Kelly & Barker (2016) heard from young mothers that "it is not that they do not know that they and their families should be eating a healthy diet with more fruit and vegetables. What they say is that a host of other things in life get in the way of them doing this" (p. 111). These "host of other things" are taken into consideration when dietary behavior is seen as a social practice, and not a cognitive choice. Applied to the practice of following a plant-based, vegan diet, a social practice perspective would therefore forgo one's cognitive intention to become vegan and rather examine a variety of social and socio-economic factors: if someone is able to afford to buy fresh produce which can often be more expensive than packaged meat (economic capital), if someone has the know-how to shop for and cook vegan meals (cultural

capital), and if someone lives in a setting where veganism is seen if not as the norm, at least completely accepted (social capital) (cf. Holman & Borgstorm, 2016).

Moreover, habitual practices - that need very little conscious engagement but are simply done like they have always been done - are important for one's sense of self (Kelly & Barker, 2016). People are who they are because of what they do on a regular basis. This notion rings especially true for the habitual practice of eating. People are who they are because of what they eat or not eat: "I eat therefore I am" (Amann & Schmundt, 2017). This makes the success of any intervention that seeks to alter this important aspect of one's own identity by providing rational arguments questionable at the least:

> The idea that simply providing people with information to make them understand things and that once they have the facts they will change their sense of who and what they are, i.e. seek to be a different person to the one they are now, is specious in the extreme (Kelly & Barker, 2016, p. 112).

If one regards the meat consumption of omnivores not as a daily, rational choice but as a social habit that they have carried out with little conscious engagement all their lives, this might explain some of the limitations in Wiemer's (2018) study. First, it could explain why more than half of the participants were unable to indicate a preferred motivation for their hypothetical decision to follow a plant-based, vegan diet. Most people eat what they eat out of social habit, they do not connect specific intentions or motivations to their food choices. Moreover, people can eat whatever they want and do not have to limit their own choices, especially in affluent countries where one does not have to gather or hunt for food and convenient food options in restaurants, cafés or supermarkets can be found on every corner.

Second, this social practice approach would discourage the distinct categorization of people into specific diets along the dietary spectrum; as it imposes certain qualitative and quantitative parameters on people that often do not apply to reality. There might be pescetarians who would never think to turn down the traditional meat loaf on Christmas, or vegans who still eat dairy products when they come across them and see that they would go to waste otherwise (Wiemer, 2018). Any normative categorization of diets oversimplifies fluid eating habits that allow room for exceptions, personal tastes or adjustments, traditions and rituals which have formed through years of practicing one's very own personal diet.

Third, this new perspective could explain why the assessment of a person's current Stage of Change was not "the perfect choice" as Wiemer (2018) put it. As a social cognition model, the SOC is concerned with cognitive intentions for behavior change. It measures this intention by asking people to indicate the time frame in which they do or do not "plan to" adopt a new behavior. However, the conceptualization of behavior as a social practice or habit forgoes the existence of any conscious intention by arguing that our behavior often works like "an automatic system which responds to environmental and social cues in a way that requires very little conscious engagement" (Kelly & Barker, 2016, p. 112). If eating habits usually do not follow intentional planning, a study about the potential influence of an intervention message on dietary change can not effectively measure its effects by inquiring about most likely non-existent plans for the future.

Fourth, Wiemer (2018) already pointed out that the constructs of the TPB have been proven to predict a certain amount of variance of behavior changes, although there

could always exist unknown, untested variables with a stronger impact on people's behavior. According to social practice theory, social-economic factors, cultural or family-based conventions would be such unknown variables which are not taken into account by the original TPB.

In conclusion, if intervention campaigns were to take on the perspective of social practice theory, they would be set up to initiate change in habits by trying to shape societal circumstances or the perception of those. If "health behaviour is incredibly complex and cannot be reduced to individual psychological factors" (Holman & Borgstorm, 2016, p. 145), intervention designers should refrain from focusing their campaigns only on shifting cognitive-based intentions. Rather, interventions are called for that aim to generate and improve economic, cultural and social capital which have a stronger impact on behavioral practices engrained in people's everyday life.

Chapter 7: Conclusion

The world is in need of more vegans if we want to slow down climate change and global warming. Excessive meat consumption harms one's own health, makes animals unnecessarily suffer in mass livestock farming and pollutes the planet. If people learn about the benefits of a plant-based, vegan diet for their own health, animals suffering in livestock farming and the environment, they might be motivated to change their behavior. Wiemer (2018) sought to answer this question by examining if pro-vegan messages can more effectively reach people in their mission to persuade people to follow a plant-based, vegan diet when the content of these intervention messages is tailored.

Therefore, she discussed the different characteristics and values of people along the dietary spectrum and identified personal motivation as the main rationale for why people decide what to eat and what not. A well-established dichotomy divides vegetarians and vegans into "health" or "ethically" motivated people. Wiemer (2018) rephrased the dichotomy to group people based on their "internal" or "external" motivations to account for additional environmental or social justice concerns in the second category. She argued that intervention messages might act as transformative cues to action if they are tailored towards addressing either one of these two motivations, compared to the reception of an intervention message that addressed the exact opposite reasoning.

She measured the potential effect of the tailored intervention messages by means of a pre- and post-comparison of participant's Stage of Change as well as mean comparisons of participant's intention, attitude, perceived social pressure, perceived

behavioral control and moral obligation. According to the Theory of Planned Behavior, these cognitions are predictors for an eventual behavioral change. Tailoring intervention messages towards a person's potential personal motivation to change their diet positively influenced their intention to adapt this diet, increased their perceived behavioral control, and elicited stronger feelings of moral obligation. However, Wiemer (2018) could only detect a progression through the Stages of Change in a handful of cases. Attitude, perceived social pressure and feelings of psychological reactance were not significantly influenced by the tailoring strategy either. Thus, she concluded that short intervention messages distributed via mass media in a format similar to those found on social media channels do not serve as immediate cues to action that persuade their viewers to make such a drastic change in their life as a new diet would constitute. Nevertheless, tailoring based on personal motivation did cause positive shifts in intention, perceived behavioral control and moral obligation that might lead to future behavioral change.

Advocating journalists and NGO media campaigners can learn from Wiemer's findings that the increased efforts and costs of tailoring messages can pay off by successfully attracting the attention of their audiences and causing a positive intentional shift in people to consider veganism – the goal of the persuasive communication employed by advocacy journalism and NGO campaigns. However, a broad change in attitudes might be better achieved by long-term campaigns that encourage people to test veganism for themselves in their daily life. In addition, perceived social pressure on omnivores can only be intensified if society at large is exposed to continued pro-vegan

advocacy journalism and NGO media campaigns; until following a plant-based, vegan diet is accepted as a normal and even socially desired behavior.

These practical recommendations for communication that seek to embed veganism more easily into everyday practices and societal structures make apparent: it does not suffice to regard behavior change as a cognitive choice that is solely made based upon rational intention- and opinion-forming. Instead, eating is a habitual behavior and social practice that is influenced by socio-economic factors that will either facilitate or hinder this daily routine. Ideally, pro-vegan intervention campaigns, advocacy journalism and NGO media campaigns will motivate behavioral intentions to eat plant-based and also provide resources that will strengthen people's implementation intentions by addressing and improving the socio-economic resources and structures that have made omnivore eating habits the simpler and easier practice so far.

Lastly, although it is tempting to get lost in trying to prove the powerful effect of mass media in general and persuasive journalism or media campaigns in particular, one should keep in mind that "it is still very difficult to say with any certainty how individual people will behave in any given situation" (Kelly & Barker, 2016, p. 113) and that human reactions and behaviors to outside (media) influences will always be as unique and surprising as humans themselves.

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