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**WHATS THE BEEF WITH VEG\*NS:  
A MIXED METHOD APPROACH TO ANTI-VEG\*N STIGMA**

by

Caitlin M. Mercier, B.S.

A Dissertation Presented in Partial Fulfillment  
of the Requirements of the Degree  
Doctor of Philosophy

COLLEGE OF EDUCATION  
LOUISIANA TECH UNIVERSITY

August 2022

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THE GRADUATE SCHOOL

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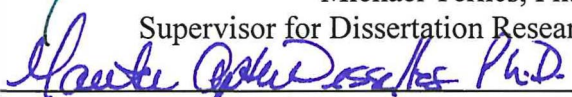
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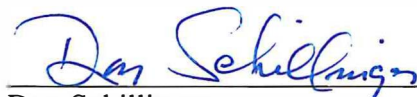
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## ABSTRACT

Despite veg\*n scholarship within psychological science, much of this research examined anti-veg\*n attitudes amongst non-veg\*ns complemented with scarce research on the impact of anti-veg\*n stigma and experiences of veg\*ns. Underpinned by critical feminist framework with a phenomenological approach, the present study, a convergent mixed method design, examined the relationship between anti-veg\*n stigma and multicultural awareness among 165 non-veg\*ns and explored the experiences of 13 veg\*ns in the context of stigma. Path analysis revealed that multicultural awareness and attitudes towards those with different dietary habits (e.g., veg\*n diets, p. 19) was negatively associated with attitudes towards vegans. Additionally, path analysis revealed that attitudes towards vegetarians were negatively associated with attitudes towards different dietary habits and not with multicultural awareness and attitudes. Qualitative analysis revealed 5 salient themes: 1) The Veg\*n Experience, 2) Contextual Concealment and Outness, 3) Anti-Veg\*n Messages and Discrimination, 4) Navigation Strategies, and 5) Centrality of Nonhuman Consumption and Related-Inequalities. These themes characterized participants' experience, perceptions, and navigation of anti-veg\*n stigma at all levels of society as well as perceived benefits and costs related to veg\*n identification. Integration of qualitative and quantitative revealed differences in perceptions of anti-veg\*n attitudes towards veg\*ns. Implications for clinical practice, training, and policy development are discussed.

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Author            Caitlin M. Mercier

Date              05/19/2022

## **DEDICATION**

This is dedicated to marginalized humans and nonhuman animals whom have been subjected to oppression for the sake of consumption, especially from my participation. I remain dedicated to my practice of veganism in my deep desire for liberation for all living being and hope others learn from my activism.

To the veg\*ns who are working towards (non)human liberation in their own way, I dedicate this work to you. May you continue the path onwards and upwards.

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# CHAPTER 1

## INTRODUCTION

### **Diet Change and Meat Consumption**

Very broadly, diet refers to the food and drinks an individual consumes (Oxford University Press, 2020). Throughout human history, humans have practiced a wide variety of diets, and these diets often included animal and plant products as humans are classified as omnivorous. Omnivorous diets are common in Western societies, especially the United States (U.S.), and a commonly practiced omnivorous diet among U.S. American adults is the Western Diet Pattern (WDP), also known as the Standard American Diet (SAD). This diet includes high intake of red meats, processed meats, and refined foods and low intake of vegetables and fruits. Additionally, this diet includes a high intake of refined sugars (e.g., high fructose corn syrup), pre-packaged foods, potatoes, high fat dairy products, eggs, and high-sugar drinks (Grotto & Zied, 2010). Diets not commonly practiced among adults in the U.S. are plant-based diets, including those often characterized as vegan or vegetarian.

Notably, meat consumption and production in the U.S. increased substantially between 2000 and the present (Daniel et al., 2011) and, consequently, ethical and health concerns associated with meat consumption and production have increased. Meat consumption and production have been linked to environmental challenges (Fiala, 2008;

Illea, 2009), chronic diseases (IARC, 2015; Alexander et al., 2011; Yip et al., 2018), unfair practices to workers in meat production (Cook et al., 2017; Leibler et al., 2017), and concerns with nonhuman animal welfare (i.e., raising and slaughter of nonhuman animals) (Maes et al., 2020). With the rise in concern about the nature of meat production and consumption among U.S. American adults, there has been an increase in abstention by humans from meat consumption and practices associated with nonhuman animal production, and, consequently, a rise in veganism and vegetarianism among U.S. American adults (Beardsworth & Keil, 1991a; Cherry, 2006).

### **Origins of Veganism and Vegetarianism**

The practice of vegetarianism and veganism is well-documented throughout human history, and origins can be traced to ancient Indian religions (i.e., Buddhism, Jainism, and Hinduism). Historians documented the practice of vegetarianism in ancient Greece. Early written references to a vegetarian diet were found in Homer and Herodotus. Early practices and theories of vegetarianism were traced to Pythagoras, an ancient Greek philosopher known for his mathematical theorem and alleged proponent of vegetarianism often called the "Father of Vegetarianism". In fact, a meatless diet advocated by Pythagoras was called the "Pythagorean diet" by his followers (Dombrowski, 2014). Though rare, the practices of vegetarianism and veganism can also be found in the history of Judeo-Christian faiths (Calvert, 2007; Young, 1999). Notably, the extent to which religious and ethical practitioners adhered to abstention from meat consumption varied, and often resulted in greater practice of vegetarianism than veganism. Attitudes towards various dietary patterns and lifestyles and their practitioners, especially those characterized as vegan and vegetarian, have continued to evolve over



time. While vegetarianism and veganism in contemporary times can be linked to religious beliefs, it is predominantly a secular practice (Wrenn, 2019) and linked to environmental, personal health, and human and nonhuman animal welfare concerns (Ruby, 2012; Rosenfeld, 2018).

### **Attitudes and Beliefs Towards Foods**

Humans hold attitudes towards certain diets, and these attitudes stem from beliefs about food. While there are many different definitions of attitude, for the purposes of this study, we will adopt Eagly and Chaiken's (1993) definition, which refers to attitudes as "psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (p.1-2). People express positive and negative attitudes towards certain diets, with negative attitudes often extending to those with diets different from their own (Povey et al., 2001; Wilson et al. 2008), especially towards veg\*n diets (Kenyon & Barker, 1998).

### **Attitudes Toward and Beliefs about Veg\*ns**

Bias towards the practice of vegetarianism is dated back to early human history. Stoics opposed vegetarianism and practitioners as they believed that nonhuman animals lacked reason and, consequently, there were no ethical obligations towards them. During the Inquisition, vegetarians were declared heretics and, consequently, persecuted by the Catholic Church (Kellman, 2000). Additionally, vegetarians faced persecution in China (Kellman, 2000). In their book, Iacobbo and Iacobbo (2004) recollected about a band of pilgrims' escape from religious persecution from Britain to practice vegetarianism, which they believed was aligned with their Christian faith. In early psychological research, discourse about vegetarians was negative. For example, Major Hyman Barahal, then chief

of Psychiatry in Mason General Hospital, Brentwood, (1946) suggested that vegetarians were domineering and secretly sadistic and displayed little to no care for other humans. Additionally, there was belief that vegetarianism was the cause of stammering (Dunlap, 1944). Altogether, discourse about and reactions to vegetarianism has been negative. Notably, while there is scant evidence of negative reactions to veganism in historical discourse, there is some evidence of negative reactions to veganism in modern discourse (Cole & Morgan, 2011; Soifer, 2002). Overall, throughout history, there has been documented evidence of negative discourse about vegetarianism and stigmatization of veg\*ns.

### **Concealable Stigmatized Identity**

Concealable stigmatized identity (CSI) refers to an identity that is not immediately knowable and carries social devaluation (Quinn & Earnshaw, 2011). Researchers applied the CSI construct to examinations of a broad range of identities (e.g., history of psychological disorders, rape, molestation, substance use, etc.). Despite the differing origins and characteristics of these identities, they are similar in that they are socially devalued and predispose an individual to prejudice and discrimination. CSI has been examined in research concerning stigma-related stress (Talley & Littlefield, 2014) and psychological health (Quinn & Earnshaw, 2013). CSI includes two primary components (i.e., valenced content and magnitude). Valenced content consists of positive and negative beliefs and experiences associated with the identity and stigma related factors (i.e., anticipated, internalized, and experienced stigma). Magnitude consists of

centrality and salience of the identity (Quinn & Earnshaw, 2011). While the CSI literature has not included veg\*ns, veg\*ns meet the criteria of having a CSI. For example, research documents the positive and negative beliefs and experiences and stigma related factors associated with veg\*n identity (Rosenfeld, 2018) and centrality and salience of veg\*n identity (Rosenfeld, 2018; Rosenfeld and Burrow, 2017).

### **Universal Diverse Orientation**

Very broadly, universal diverse orientation (UDO) refers to the social attitude of awareness and acceptance of similarities and differences that exist among people based upon demographic characteristics (e.g., race, gender, sexual orientation, etc.; Miville et al., 1999). While the construct has been applied to multicultural competency, it has been applied to research concerning personality, emotional intelligence, and psychological wellness and functioning. UDO has been found to be associated with indicators of psychological wellness and healthy personality functioning (Brummett et al., 2007). Notably, there is scant research that utilizes UDO in assessment of prejudice towards others.

### **Statement of the Problem**

While nutritional scientists and philosophers focused on vegetarianism and its variant, veganism, for many years, social scientists examined these broad topics within recent years. Despite a paucity of psychological research examining vegetarianism, there exists a growing understanding of the psychology of vegetarianism. In a comprehensive review of literature on vegetarianism, Ruby (2012) reported underdeveloped theoretical underpinnings of vegetarianism and little empirical research on vegetarianism and practitioners within psychological research. Since Ruby's (2012) review, there has been

an increase in psychological research on vegetarianism and veganism (Rosenfeld, 2018). In a review of recent advances in the psychology of vegetarianism, Rosenfeld (2018) reported an increase of research conducted in the areas of moral values associated with, motivations for, and identity development towards vegetarianism. Rosenfeld (2018) also highlighted a growing area of research that examines the variants of vegetarianism, specifically veganism, suggesting that this area offers "a rich territory for elucidating the phenomena related to dietary motivations, morality, and identity" (p. 132).

Extant psychological research on vegetarianism has focused on perceptions of and attitudes towards veg\*ns (Rosenfeld, 2018). The assessment of negative perceptions of and negative attitudes towards veg\*ns is important such that these attitudes and perceptions enable marginalization of and facilitate discriminatory behavior toward veg\*ns. Negative treatment towards veg\*ns is generally not seen as a societal problem and is largely accepted (Horta, 2018; Soifer, 2002). Additionally, the assessment of these attitudes and perceptions enable further understandings of normalization of negative treatment towards veg\*ns.

Much of the empirical research on these topics focused on the perceptions of and attitudes towards vegetarianism and its practitioners through assessment of ideological beliefs (Rosenfeld, 2018; Ruby, 2012). Little research has examined the perceptions of and attitudes towards vegetarianism and its practitioners through multicultural awareness. The present study seeks to close this gap through the examination of UDO, a concept of multicultural awareness, and its impacts on perceptions of and attitudes towards veg\*ns. Further, there is scant research that examines the impact of negative perceptions and attitudes of veg\*ns. Although there is emerging psychological research on vegetarians

and vegans, there is little psychological research that examines experiences, stigmatization, and well-being of veg\*ns. Given this little research, it is important to assess potential psychological and physical consequences of stigmatization of vegan and vegetarian identity.

### **Justification**

The purpose of the present study will examine the attitudes towards veg\*ns. Specifically, the present study will examine the relationship between adults' social attitudes towards the awareness and acceptance of similarities and differences that exist among people and perceptions of and attitudes towards vegans and vegetarians. The broad topic of vegetarianism has gained considerable attention among scholars and researchers in many disciplines, specifically in philosophy and nutritional sciences. Notably, the topic of vegetarianism expanded into social science research such as sociology and psychology. While psychological research documented bias toward veg\*ns, there is little research that examines this bias with a multicultural approach. Specifically, there is little research that assesses attitudes towards veg\*ns using measures that assess multicultural awareness (e.g., UDO). The present study would contribute to the existing literature on attitudes towards veg\*ns.

The second purpose of the study would highlight how veg\*ns navigate their experience in a society that places high values on meat consumption and production. There is little psychological research on how veg\*ns perceive negative attitudes towards them and experience with stigmatization. Given the lack of psychological literature on veg\*n's' health, it is important to assess psychological and physical consequences of stigmatization. It is an ethical responsibility of psychologists to engage in research that

considers and explores the experiences of marginalized groups. Psychologists should engage in research that acknowledges the ways in which group membership may benefit and harm individual members. Further, this work should inform their clinical work and education (APA, 2017). The present study could add to the growing literature related to the vegetarian and vegan experience that psychologists may use to provide empirically-supported psychoeducation and psychotherapy to vegan and vegetarian clients, apply to the training of emerging psychologists, and dispel myths about vegans and vegetarians.

### **Language**

There are various definitions of veganism and vegetarianism, as well as vegans and vegetarians. For the purpose of this project, veganism refers to abstention from consumption of nonhuman animals for vital and non-vital purposes such as food, clothing, and nonhuman animal experimentation. Vegetarianism refers to abstention from consumption of nonhuman animal flesh. Vegans refers to people who abstain from consumption of nonhuman animals for vital and non-vital purposes. Vegetarians refers to people who abstain from consumption of nonhuman animal flesh but may consume nonhuman animal by-products. In this project, veg\*ns will refer to vegetarians and vegans inclusively unless otherwise stated. There are different types of vegetarians. Lacto-ovo vegetarian refers to vegetarians who abstain from consumption of nonhuman animal flesh and consume fruits, vegetables, and dairy and egg products. Pescatarian refers to vegetarians who abstain from consumption of nonhuman animal flesh and consume fruits, vegetables, and fish products. There are various types of vegans (i.e., health, ethical, religious, raw, fruitarian). Health vegan refers to people who adopt a vegan diet for health reasons or weight loss. Ethical vegan refers to people who adopt a

vegan diet and lifestyle for moral, political, and ethical reasons. Religious vegan refers to people who adopt a vegan diet and lifestyle for religious and spiritual reasons. Raw vegan refers to people who adopt a vegan diet and lifestyle and predominantly consume raw and uncooked vegetables and fruits. Fruitarian refers to those who adopt a plant-based lifestyle and predominantly consume fruits. Omnivores refers to people who consume nonhuman animal flesh and nonhuman animal by-products for vital and non-vital purposes. There are also various definitions of meat. For the purpose of this project, meat refers to the flesh of nonhuman animals with a functional nervous system.

## **Review of the Literature**

### **Diets in Human History**

Throughout human history, humans consumed a wide variety of plant and nonhuman animal flesh and products based upon available vegetation, wild game and aquatic resources (Eaton, 2006). In a review of the nutritional estimates of ancestral humans (i.e., Paleolithic forager groups) and comparison of these estimates to contemporary humans, Eaton (2006) estimated that total fat intake, protein, carbohydrates, fiber, and micronutrients were obtained by combined consumption of plant and nonhuman animal flesh and products. Notably, Eaton (2006) suggested that high intake of vegetables and fruits and minimal consumption of grain and dairy provided the base of ancestral humans' diet. Taken together, while ancestral humans' dietary energy came from a combination of nonhuman animal flesh and products (i.e., honey) and vegetation (i.e., fruits and vegetables), vegetation provided the base of ancestral humans' diet. Researchers noted a shift from a primarily plant-based diet to nonhuman animal products among ancestral humans (Andrews & Johnson, 2019). In examination of the impact of interaction between dietary and environmental changes on human evolution, Andrews and Johnson (2019) compared diets of early hominins and fossil apes. In this comparison, Andrews and Johnson (2019) suggested the primary diet of early hominins was fruit-based due to climate seasons. Andrews and Johnson (2019) noted early hominins consumed small nonhuman animals as well, but the threshold for omnivory was negligible. Andrews and Johnson (2019) noted a dietary shift in that there was an increase in consumption of nonhuman animal flesh as evidenced by cut marks in nonhuman animal bones. Andrews and Johnson (2019) suggested the increase in



consumption of nonhuman animal flesh and product associated with the emergence of stone tool technologies, and, of note, the increase in brain size and bipedalism.

Additionally, migration from woodland areas to open areas, as well as use of fire for cooking nonhuman animal flesh, facilitated the increase in consumption of nonhuman animal flesh and product. In summary, the results of the aforementioned studies suggest that ancestral humans consumed primarily plant products and little nonhuman animal products until the emergence of stone tool technologies, bipedalism, and migration into different areas. With this emergence, ancestral humans consumed greater amounts of nonhuman animal flesh and products compared to plants.

### **Meat Consumption in Human History**

With the dietary shift from plants to nonhuman animal flesh, researchers noted the fundamental role consumption of nonhuman animal flesh and products in human nutrition and emergence of human society (Baltic & Boskovic, 2015). Scholars suggested the significance of consumption of nonhuman animal flesh and products were linked to nutritional and evolutionary significance (Mann, 2013; Mann, 2018). Mann (2013) argued that ancestral humans primarily relied on nonhuman animal flesh and products for energy, protein, and micronutrients (i.e., B12, zinc, iron, and long chain n-3 fatty acid). In a historical review of meat consumption within ancestral human history, Mann (2013) argued that the transition from a plant-based diet to nonhuman animal diet largely facilitated adaptations among ancestral humans. Specifically, the consumption of nonhuman animal flesh and products facilitated an increase in brain size and altered gut structure among ancestral humans.

Other scholars suggested the consumption of nonhuman animal flesh and products were linked to cultural and economic significance in Western history (Chiles & Fitzgerald, 2018; Lundström, 2019). In their genealogical critique, Chiles and Fitzgerald (2018) examined explanations that focus on meat as a materialistic object and its extrinsic value. Specifically, they reviewed the biophysical and political-economic explanations of meat production and consumption through nine periods of human history. The biophysical explanation for meat consumption asserted that nonhuman animal flesh has always and continues to provide essential nutrients to humans. The political-economic explanation for meat consumption asserted that the consumption is based upon the means of production and the power of government and corporations. In their review, Chiles and Fitzgerald (2018) found that, in earlier human societies, nonhuman animal agriculture served basic human needs. However, as human societies grew increasingly complex, the importance of meat reflected the changing of cultural contexts that shaped human's lives. Lundström (2019) critically examined the political and economic development of global meat consumption through multiple scholarly perspectives and reported meat consumption as a "political affair" (p. 99). Specifically, Lundström reported profits drive global meat consumption, resulting in the objectification of nonhuman animals as property and marginalization of small-scale farmers through intense dependence on agri-food companies and expensive technical upgrading. Overall, Lundström associated meat consumption and production with exploitation of small-scale farmers and nonhuman animals. The results of the aforementioned findings suggested that the historical importance of meat consumption has been driven by political, economic, and sociocultural affairs.

## **Meat Consumption in Contemporary Human History**

With this significance of meat consumption and production, there has been a documented increase in meat consumption across the globe (Kanerva, 2013; Sans & Combris, 2015), especially the United States (U.S.) (Daniel et al., 2011; Wang et al., 2010). Using the data from the 1988-1994 and 1999-2004 National Health and Nutrition Examination Survey (NHANES) and 1994-1996 Continuing Survey of Food Intakes by Individuals (CSFII) and Diet and Health Knowledge Survey, Wang and colleagues (2010) examined the trends in meat consumption among 17,061 U.S. American adults. In their study, meat consumption consisted of total meat (all nonhuman animal food source), red meat (e.g., beef, pork, lamb, veal, and game), poultry (chicken, turkey, duck, and other poultry), seafood (fish and shellfish), and other meat products (e.g., nonhuman animal organs, sausage, meat mixtures). In their study, Wang and colleagues (2010) found a curvilinear trend with meat consumption between 1988-1994 and 1994-2004. Specifically, there was a decrease in meat consumption between the years 1988-1994 and 1994-1996 and an increase in meat consumption between the years 1994-1996 and 1999-2004. Daniel and colleagues (2011) examined trends in meat consumption using data from the Food and Agricultural Organization (FAO) and United States Department of Agriculture (USDA) among U.S. Americans. Daniel and colleagues (2011) documented an increasing trend in meat consumption, specifically in poultry consumption, within the last two decades. While there was an increase in poultry consumption, red meat continued to be the largest amount of meat consumed. The findings of the aforementioned studies suggested that an increase in meat consumption within the U.S.

## **Reasons for Meat Consumption**

Researchers have cited several reasons for meat consumption. Some researchers cited perceived dietary and nutritional benefits of meat consumption (Bohrer, 2017; De Smet & Vossen, 2016; McAfee et al., 2010; Van Wezemael et al., 2014). For example, in review of research findings, Biesalski (2005) argued that meat is an important source for micronutrients such as iron, zinc, selenium, protein, and B12. Additionally, McAfee and colleagues (2010) found that greater meat consumption was associated with greater protein, vitamins (i.e., B12), and minerals (i.e., selenium, iron, zinc, and heme). Olmedilla-Alonso and colleagues (2013) suggested a focus on the utility of meat as a functional food for improvement of human health and reduction of chronic diseases. Some researchers cited positive attitudes towards meat as benefits for meat consumption (Berndsen & Van der Pligt, 2004; Ruby et al., 2016; Kubberød et al., 2002). In a qualitative study among 30 high school students, Kubberød and colleagues (2002) found that sensory attributes were drivers for meat consumption. For example, majority of the participants referred to meat as “good and tasteful” (p. 57). Among a sample of 110 undergraduate students, Berndsen and Van der Pligt (2004) examined the association between ambivalence towards meat, beliefs about meat consumption, and the act of meat consumption. Compared to ambivalent participants, less ambivalent participants reported greater positive attitudes and beliefs about meat and less concern with moral issues about meat consumption. Ruby and colleagues (2016) examined attitudes toward beef products as well as liking, desire to eat, and consumption of beef among 1,695 undergraduate students in Argentina, Brazil, France, and the U.S. In a free association activity,

participants reported their attitudes toward beef. Among all groups, “tasty” and “juicy” were listed in the top ten attitudes. Ambivalence towards beef was not prevalent among this sample with the exception of Brazilian women, who reported greater ambivalence towards beef (42.5% reported ambivalence) compared to other groups. Negativity towards beef was not prevalent among this sample with the exception of U.S. women such that female US participants reported greater negativity towards beef, at 25.2%, compared to other groups. Positivity towards beef was prevalent among this sample, particularly among Argentinean (82% positive) and French (71.9% positive) male participants. Ruby and colleagues (2016) noted gender differences among this sample such that male participants were more likely to report positivity towards beef and greater desire to eat and greater consumption of beef than female participants. The findings suggested gender and country differences in attitudes toward beef such that men were more than likely to report positive attitudes toward beef and compared to women and that Brazilian and Argentinian participants were more than likely to report positive attitudes towards beef.

### **Psychology of Meat Consumption**

In examination of meat consumption among humans, researchers and scholars suggested a morally complex relationship between humans and nonhuman animals, pointing to “meat paradox” (Loughnan et al., 2010, Loughnan et al., 2014). Specifically, these researchers pointed to the reasoning that humans care for nonhuman animals and do not want to see nonhuman animals killed but paradoxically consume the flesh and by-products of nonhuman animals, which is obtained through slaughter and suffering (Amiot & Bastian, 2014; Joy, 2020). Within the recent years, there has been emerging research

on psychological aspects and processes of meat consumption (Amiot & Bastian, 2014; Loughan et al., 2014; Rosenfeld, 2018). In examination of the psychological factors of meat consumption, Loughan and colleagues (2014) focused their examination of “the eaters” (p.104) (i.e., people), “the eaten” (p.104) (i.e., nonhuman animals), and “the eating” (i.e., the act of meat consumption). In their examination of people who eat meat, those who endorse and tolerate social dominance orientation and authoritarian attitudes as well as identify as masculine were more likely to consume meat. In examination of nonhuman animals, the perception of nonhuman animals as dissimilar and lacking mental capacities and states facilitated meat eating. Further, the act of eating meat triggered negative emotions that humans who eat meat attempt to navigate, which results in the diminished moral standing of nonhuman animals, especially those that humans commonly eat. Among 118 undergraduate students, Loughnan and colleagues (2010) found that meat consumption led to withdrawal of moral concern and denial of mental states of nonhuman animals. Specifically, participants assigned to the “beef” condition, where participants were told they would eat beef jerky (dried beef), generated smaller moral circles of concern for nonhuman animals and attributed less mental states to nonhuman animals compared to participants assigned to the “cashew” condition, where these participants were told they would eat cashews (dried nuts). One line of research suggested that anthropomorphism, the attribution to human characteristics to nonhuman objects and animals, may facilitate meat consumption (Niemyjska et al., 2018; Wang & Basso, 2019). In three studies, Bilewicz and colleagues (2011) investigated attribution of psychological characteristics to nonhuman animals among omnivorous and vegetarian participants. In their first study, Bilewicz and colleagues (2011) examined the attribution

of human traits to nonhuman animals among 43 vegans, 38 ovo-lacto vegetarian, and 42 omnivorous adults. Vegetarian participants ascribed greater secondary human traits (i.e., emotions) to nonhuman animals than omnivorous participants. In their second study, Bilewicz and colleagues (2011) investigated the differences in descriptions of human and animalistic characteristics between 38 omnivorous and 36 vegetarian participants. Omnivorous participants distinguished human characteristics from animalistic ones more sharply than vegetarian participants. Specifically, compared to vegetarian participants, omnivorous participants were more likely to deny nonhuman animals human characteristics. In their third study, Bilewicz and colleagues (2011) investigated the differences in ascription of human characteristics to traditionally edible nonhuman animals among 148 omnivorous and 177 vegetarian participants. Compared to vegetarian participants, omnivorous participants ascribed less secondary emotions to traditionally edible nonhuman animals than to non-edible nonhuman animals. Niemyjska and colleagues (2018) investigated the role that anthropomorphism of nonhuman animals in meat consumption in two studies. In their first study, Niemyjska and colleagues (2018) examined the association between anthropomorphism, tendency to attribute emotions to nonhuman objects and animals, and meat consumption among 306 Polish undergraduate students. Niemyjska and colleagues (2018) found that anthropomorphism was significantly associated with reduced meat consumption such that participants who reported greater tendency to attribute emotions to nonhuman animals also reported reduced meat consumption. Their second study sought to validate their Animal Sensitivity Scale among 307 Polish undergraduate students and examine the association between endorsement of the scale, anthropomorphism, and meat consumption among 282

Polish undergraduate students. Niemyjska and colleagues (2018) found that higher levels of anthropomorphism positively predicted greater empathic concerns for nonhuman animals. Further, greater empathic concerns for nonhuman animals significantly predicted a reduced role for harm for nonhuman animal and meat consumption. Similarly, Ang and colleagues (2019) found that participants who were meat eaters were less likely to attribute mental state to nonhuman animals that humans eat. Further, the researchers observed that lower perceived mental capacities of nonhuman animals humans consume were considered to be more edible and killing these nonhuman animals were less likely to be wrong among meat eaters than non-meat eaters. The aforementioned studies suggest that humans who consume meat suppress moral concern, withdraw moral rights, and attribute diminished mental state and capacity to nonhuman animals that humans eat.

Psychological research has suggested that omnivores adopt cognitive strategies to manage their dissonance with meat consumption (Ang et al., 2019; Loughnan et al., 2012; Piazza et al., 2015; Rothgerber, 2014; Rothgerber, 2020). Using studies' findings, Loughnan and colleagues (2012) proposed two routes humans utilize to resolve the "meat paradox". In one route, humans stop and avoid meat consumption in that they become vegetarians. In review of comparative studies of vegetarians and omnivores, Loughnan and colleagues (2012) suggested vegetarians were more likely to attribute mental and emotional states to nonhuman animals than omnivores. In the second route, humans diminished moral rights of nonhuman animals through negative emotional states and cognitive processes. Specifically, omnivores experience cognitive dissonance and, consequently, negative emotional states. This experience motivates omnivores to change their beliefs such that they report a restricted range of nonhuman animals for food and



diminishing the moral rights and capacities of those nonhuman animals. Loughnan and colleagues (2012) suggested that frame of reference plays a role in the avoidance of the meat paradox such that omnivores have a certain frame of reference when they think about nonhuman animals. For example, a cat is seen as a pet whereas a cow is seen as a meal. The placement of nonhuman animals in these categories has consequences on their treatment (Loughnan et al., 2012). Some psychological research suggested that the presence of vegetarians or reminders of vegetarianism induce dissonance with meat consumption and strategies associated with this dissonance (Leite et al., 2019; Rothgerber, 2014). Rothgerber (2014) proposed that omnivores adopt cognitive strategies to reduce dissonance. These strategies included avoidance, dissociation, perceived behavioral change, denial (i.e., of animal pain and mind), pro-meat justification, reducing perceived choice, and actual behavioral change. Additionally, in an experiment, participants who were omnivores reported greater endorsement of these strategies when their dissonance was induced by vignette of vegetarians. In a longitudinal study with 219 U.S. American adults, Leite and colleagues (2019) examined the association between beliefs in human supremacy, beliefs of vegetarianism as a threat, and moral inclusion and exclusion of nonhuman animals. Beliefs in human supremacy had longitudinal effects on moral exclusion of nonhuman farm animals whereas vegetarianism threats predicted moral exclusion of nonhuman farm animals and appealing wild nonhuman animals.

### **Carnism**

Very broadly, carnism refers to the belief system that conditions humans to eat certain nonhuman animals (Joy, 2020). Within carnism, humans create classifications of nonhuman animals suitable for consumption and other human purposes. Joy (2020)

reported that carnism is an “invisible” (p.19) ideology in that it is entrenched within human culture and existed throughout human history. Joy (2020) also described carnism as a “violent” ideology (p. 22) centered around extensive violence within meat history. For example, Joy (2020) highlighted the raising and slaughtering process of nonhuman farm animals (e.g., cow, chickens, fish, and pigs) as well as workplace hazards and injuries within meat packing facilities. Within her book, Joy (2020) proposed three broad justifications for carnist ideology (i.e., *Three Ns of Justification*) that hinder humans from reviewing the discrepancies between their beliefs and actions towards nonhuman animals. These justifications include that eating meat is *normal*, *natural*, and *necessary*. Joy (2010; 2020) posited that institutions and cultural norms reinforce the justifications. In review of the justification that eating meat is *normal*, Joy (2020) outlined the ways in which it is easier to consume meat than to avoid meat. For example, meat is readily available compared to veg\*n alternatives as well as the stereotyping of vegetarians. For the justification that eating meat is *natural*, Joy (2020) suggested the naturalization of the ideology operates in the idea that the tenets are aligned with that of nature. Taken as such, within carnism, eating meat is in line with the natural order. The justification that eating meat is *necessary* is built on preceding justification that eating meat is *natural* in that killing of nonhuman animals for meat is necessary for human survival and health. Further, Joy (2020) suggested that humans engage in cognitive processes (i.e., numbing) to reduce uncomfortable feelings about the violence faced by nonhuman animals. Overall, carnism is an ideological belief system where use of nonhuman animals for vital and non-vital purposes are normalized and reinforced through institutions and cultural norms and maintained through cognitive processes humans engage in.

Since the conception of carnism, growing research has examined the psychology of carnism (Piazza et al., 2015). Using Joy's (2010) Three Ns of Justification, Piazza and colleagues (2015) examined the role rationalization plays in meat consumption in a series of studies. It is important to note that Piazza and colleagues (2015) added a fourth *N* (niceness) to the justification. In their explanation to include niceness, Piazza and colleagues (2015) argued that it constitutes a weaker moral defense compared to the other justifications in that people derive pleasure from meat consumption. In their first study, Piazza and colleagues (2015) qualitatively coded free response answers to justification for meat consumption among 176 participants. Piazza and colleagues (2015) found that the 4Ns were primary justifications for meat consumption among omnivorous participants. For example, response categories included "Necessary, Nice, Natural, and Normal" (p. 117).

In their second study, Piazza and colleagues (2015) examined the association between morally relevant attitudes towards nonhuman animals and meat, endorsement of the 4Ns and hierarchical systems of social inequality, and dietary consumption among 171 Australian undergraduate students. Omnivorous participants endorsed the 4Ns to a greater extent than other participants (i.e., restrictive omnivores, vegetarians, and vegans). Additionally, the 4Ns predicted moral concerns for fewer nonhuman animals, less mentalizing, and greater endorsement for hierarchical based ideologies (i.e., social dominance orientation (SDO)).

Their third study examined the association between the 4Ns, other meat justification strategies, gendered beliefs, and motivation for food choices among 195 participants. The 4Ns were positively correlated with other meat justification (i.e., pro-

meat, fate, religion, health, and hierarchy) except for dissociation and avoidance. Participants that endorsed the 4Ns were more likely to be motivated to make food choices on the basis of familiarity with food. Of note, participants who did not endorse the 4Ns reported motivation to make food choices based on concern for nonhuman animal welfare. Male participants were more likely than female participants to endorse the 4Ns. While male participants were more likely to endorse normal and nice than female participants, there was no observed difference in endorsement of natural (Piazza et al., 2015).

The fourth study examined the association between the 4N endorsement in dietary and lifestyle practices that include nonhuman animal products, speciesist attitudes, nonhuman animal welfare, and self-directed emotions (i.e., guilt, pride) among 215 participants. Omnivorous participants had the highest 4N scores, followed by semi-vegetarians. The 4N scores were associated with tolerance of human social inequalities, reduced involvement for nonhuman animal advocacy and welfare, less restriction of nonhuman animal-based products, and speciesist beliefs among omnivorous participants. Additionally, within the same study, for omnivorous participants, endorsement of 4N was negatively correlated to guilt experienced in relation to one's diet. Specifically, omnivorous participants who endorsed the 4Ns at a greater rate were more likely to report less guilt associated with their diet compared to those who endorsed the 4Ns at a lower rate (Piazza et al., 2015).

In study 5, Piazza and colleagues (2015) sought to validate their 4N Scale and examined the association between endorsement of 4N with frequency of meat and by-product (e.g., dairy and egg products) consumption among 236 participants. Within the

study, endorsement of 4N were correlated with consumption of meat products (e.g., chicken, beef, pork, etc.) and egg and dairy products. The results of this study suggest that the 4Ns serve as a singular common rationalization method for people who consume meat. The 4Ns were also associated with tolerance of social inequality and species beliefs. Overall, the findings of the aforementioned study suggest rationalizations are used to justify meat consumption and use of nonhuman animal-based products. Further, these findings suggest that the association between hierarchical based beliefs and these rationalizations with carnistic components predicted meat consumption and justification for slaughter of nonhuman animals (Monteiro et al., 2017). Specifically, carnistic defense and carnistic domination predicted meat consumption and slaughter of nonhuman animals for food, respectively. Within the same study, Monteiro and colleagues (2017) found that these components were associated with ideological beliefs (i.e., right wing authoritarianism and social dominance orientation) and that carnistic domination was associated with symbolic racism and sexism. The aforementioned studies suggested that carnism is a belief system that is associated with ideologies that tolerate and endorse human social inequalities.

### **Speciesism**

Generally, speciesism refers to the moral prejudice towards members of a species based upon their species membership (Ryder, 1970; Singer, 2009). For the purpose of this project, the present study will adopt Horta's (2010) definition of speciesism. Specifically, speciesism, in this project, refers to the "unjustified disadvantageous consideration or treatment of those who are not classified as belonging to a certain species" (p. 244). Speciesism emerged from philosophical literature (Ryder, 1970; Singer, 2009; LaFollette

& Shanks, 1996). Scholars argued that meat consumption maintains speciesism (Engel, 2000; Pilgrim, 2013). Additionally, meat consumption has been subjected to ethical and moral critique (Engel, 2000). Within his article, Engel (2000) asserted the value of humans over nonhuman animals commits to the immorality of meat consumption among people in circumstances where there is wealth of nutritionally adequate alternatives to nonhuman animal flesh. Operating within a vegetarian ecofeminist framework, Pilgrim (2013) critiqued major points of three nonfiction books that provide narrative of meat consumption (*Pollan's (2006) The Omnivore's Dilemma, Bourette's (2009) Meat, A Love Story, and Gold's (2008) A Shameless Carnivore*). While recognizing the available options to engage in ethical meat consumption, Pilgrim (2013) argued that meat consumption for the sake of shared cultural identity and connection to ancestors are not necessary and engagement in this consumption and raising of nonhuman animals for consumption uphold speciesism.

Psychological research has documented psychological processes and factors that underlie speciesism (Amiot & Bastian, 2014; Caviola et al., 2019). In a series of studies, Caviola and colleagues (2019) introduced speciesism as a psychological construct and found that humans value members of certain species less than others based upon beliefs about intelligence and sentience. Some psychological research suggested that speciesism has psychological factors that commonly underlie prejudicial human-human relationships (Amiot & Bastian, 2015). In a review of research on human-nonhuman animal relations, Amiot and Bastian (2015) suggested that the same factors that underlie speciesism include similar factors that underlie prejudice towards humans, which include “power, privilege, dominance, control, entitlement, and the need to reduce moral conflict” (p.26).

For example, Amiot and Bastian (2015) cited findings where humans placed priority over nonhuman animals and allocated greater time and resources to humans than nonhuman animals. Notably, some research suggested that speciesism has ideological roots in ideologies that legitimize dominance (e.g., SDO and Right Wing Authoritarianism (RWA)) (Caviola et al., 2019; Dhont et al., 2016; Dhont et al., 2014). In three studies, Dhont and colleagues (2016) found that speciesism has common ideological roots in ideological beliefs that legitimize dominance (i.e., SDO and RWA).

### **Concerns with Meat Consumption**

With an increase of meat production and consumption within the past two decades, copious amounts of research documented the deleterious impact of meat consumption and production on the environment (de Vries & de Boer, 2010; Steinfeld et al., 2006; Ilea, 2009). For example, Steinberg and colleagues (2006) found that meat production was a major contributor to greenhouse gas emission to the atmosphere. Specifically, meat production contributed between 15% to 24% of greenhouse gas emissions to the atmosphere. Some researchers estimated that meat production will continue to contribute to greenhouse gas emissions if the increase in meat production continues (Fiala, 2006). For a report for the Food and Agricultural Organization, Steinfeld and colleagues (2006) reported intensive livestock as a key component in climate change, land degradation, water depletion and pollution, and air pollution. Similarly reported, in a review of empirical studies and reports (i.e., from the UN and PEW), Ilea (2009) outlined environmental and health consequences of intensive livestock production. Extant epidemiological research and public health research documents the negative association between meat consumption and individual human health (i.e.,

physical and psychological) (Anomaly, 2015; Bullers, 2005; Ilea, 2009; Nicole, 2013; Ramos et al., 2016; Von Essen & Auvermann, 2005). For instance, some research documented positive association between consumption of processed and red meats with certain cancers and cardiovascular diseases (CVD) (IARC, 2015; Alexander et al., 2011; Cross et al., 2010), obesity (Pan et al., 2013; Rouhani et al., 2014), and all-cause mortality (Larsson & Orsini, 2014). Ilea (2009) reported studies that examined the impact of intensive livestock production on humans, citing that those who work in and live near concentrated animal feeding operation (CAFOs) experience respiratory and eye health problems. In a comprehensive report, Trusts and Hopkins (2008) noted workers in CAFOs are exposed to chemicals (i.e., ammonia, hydrogen sulfide, and methane) and toxic dust released from nonhuman animal decomposition (i.e., feces and urine) that create short- and long-term respiratory problems. Some respiratory problems included acute and chronic bronchitis, non-allergic asthma-like syndrome, mucous membrane irritation, and noninfectious sinusitis. Communities near these operations were exposed to air pollution, increasing the risk of development of respiratory health problems and neurobehavioral symptoms and impaired functions (i.e., impaired balance, intellectual function, and memory and alterations in mood (Trusts & Hopkins, 2008). Bullers (2005) compared physical health symptoms, psychological distress, and perceived control between residents who lived near industrial hog operations and those who did not in eastern North Carolina. In addition to reporting greater health symptoms (i.e., respiratory, sinus, and nausea problems), residents that lived near industrial hog operations reported greater psychological distress and decreased perceptions of control compared to residents not exposed to industrial hog operations.



Additionally, researchers noted concerns about the proximity of CAFOs to communities of color and low-income communities (Nicole, 2013; Wilson et al., 2002). An examination of geographic locations of 67 pork industrial operations within Mississippi, Wilson and colleagues (2002) found that hog operations were disproportionately located near Black communities and low-income communities. Specifically, hog operations were three and two times as likely to be in proximity to Black low poverty communities and predominantly Black and high poverty communities. There is also concern with nonhuman animal welfare within meat consumption (Grandin & Shivley, 2015; Joy, 2020; Petherick, 2005; Trusts & Hopkins, 2008). Joy (2020) outlined negative psychological reactions among livestock nonhuman animals (i.e., cattle, pigs, chicken, ducks, and fish) within their raising and slaughter. For example, Joy (2020) reported pigs engage in self-harm and stereotypies under stress in their raising and slaughter. She also reported findings where, despite being stunned, pigs remained conscious during their slaughter. In a review of research findings on stress reactions of nonhuman animals, Dantzer and Mormède (1983) reported that the psychological stress experienced and abnormal behavior engaged in by livestock nonhuman animals are facilitated by adverse environmental conditions. Grandin and Shivley (2015) argued poor handling of nonhuman animals facilitated stress and aversive reactions among nonhuman animals and that acclimating nonhuman animals would reduce these reactions.

### **Plant-Based Consumption**

Given the considerable impact on humans, nonhumans, and the environment, researchers suggested reductions in meat consumption and production (de Bakker &

Dagevos, 2012; Henning, 2011; Steinberg et al., 2006) through the adoption of plant-based diets and lifestyles. Within the last decade, emerging research examined the impact of plant-based diets and lifestyles on humans, environment, and nonhuman animal welfare. Nutritional science research examined the nutritional consequences of plant-based diets (Campbell, 2017; Harland & Garton, 2016; Sanders, 1999; Tusso et al., 2013). Tusso and colleagues (2013) reviewed literature that examined the benefits of plant-based diets (i.e., vegan, vegetarian, and Mediterranean diets). Within this review, plant-based diets were associated with lower weight and body mass index (BMI) and lower risk of diabetes, heart disease, high blood pressure, and mortality associated with heart disease. Within the same study, Tusso and colleagues (2016) reported a case study of a 63 year-old male participant who reported a history of hypertension and complaints (i.e., fatigue, nausea, and muscle cramps) and diagnosis with type 2 diabetes (T2D). His physician prescribed a low sodium, plant-based diet that excluded all animal products and refined sugars and limited bread, rice, potatoes, and tortillas to a single daily serving. Additionally, his physician advised the participant to exercise 15 minutes twice a day. Tusso and colleagues (2013) documented significant improvement in biometric outcome measures. Additionally, the participant was weaned off several of his medications and his blood pressure improved. In a meta-analysis, Harland and Garton (2016) investigated the impact plant-based dietary regimes and incidence or risk factors associated with CVDs, T2D, and obesity in randomized controlled trials (RCTs). Plant-based dietary regimes were negatively associated with CVD and T2D development, incidence of obesity, and BMI. In a systematic review, Campbell (2017) examined the impact of a plant-based diet on stroke incidence and mortality. In this review, an increase in vegetables, fruits, and

whole grains were associated with lower risk of stroke incidence and mortality. Notably, in a joint position statement, the American Dietetic Association and Dietitians of Canada (2003) stated that an adequately planned vegetarian diet is "healthful, nutritionally adequate" and provides "health benefits in the prevention and treatment of certain diseases" (p. 748). A well-balanced plant-based diet provides adequate growth and development (Sanders, 1999). Overall, the aforementioned studies suggested that adoption of plant-based diets are associated with positive physical health outcomes.

Emerging research has examined the association with consumption of plants, plant-based diets, and mental health outcomes (Blanchflower et al., 2013; Toumpanakis et al., 2018). Using data sets from national English surveys, Blanchflower and colleagues (2013) examined the associations between fruit and vegetable consumption and psychological well-being. Consumption of fruit and vegetables positively associated with psychological well-being such that greater consumption of fruits and vegetables were associated with higher levels of psychological well-being. In a systematic review of 11 experimental studies, Toumpanakis and colleagues (2018) examined the association between plant-based diet interventions in people with T2D and mental health outcomes. In studies that reported mental health outcomes, Toumpanakis and colleagues (2018) found that depression levels decreased and quality of life increased in groups that received plant-based interventions. Within the same study, participants that received plant-based interventions reported increase in self-esteem and nutritional and general efficacy as well as changes in perceived pain and decrease in pain.

Researchers documented the environmental impact of plant-based diets and lifestyles (Baroni et al., 2006; Pimentel & Pimentel, 2003). In an analysis of land and

energy use, Pimentel and Pimentel (2003) compared meat-based and plant-based (i.e., lacto-ovo-vegetarianism) diets. While the researchers noted concern about the sustainability of both diets in long term, the researchers found that lacto-ovo-vegetarian diet required about half the amount of feed, energy, land, and water to produce animal products compared to a meat-based diet. Philosophers suggested the adoption of plant-based diets and lifestyles as means to address moral and ethical concerns of meat consumption (Bruers, 2015). Within the past decade, there has been a substantial transition to plant-based products (Choudhury et al., 2020; Good Food Institute, 2020; Tziva et al., 2020). Choudhury and colleagues (2020) reported that plant-based chicken, beef, and pork alternative products are becoming increasingly common. According to the Good Food Institute report (2020), sales for plant-based products increased 29% over the last two years with plant-based foods driving retail growth. Sales of plant-based products reached five billion dollars. Within the same report, plant-based milk was the fastest developing product followed by plant-based dairy products and plant-based meat.

### **Foods, Diets, and Psychology**

While extant literature within various disciplines explored the relationship between humans and food, there is documented exploration of this relationship within psychological science (Rozin, 1996). While much of the previous psychological literature about the relationship between humans and food concerned psychological variation (e.g., mood concerns, perceived stress, affect) associated with eating and diets (see Bell, 1958; Richardson et al., 2015; Selling, 1946; Rapp, 1978; White et al., 2013), food research within psychological sciences has focused on psychopathology within the past two

decades (Rozin, 1996). For example, substantial research has documented the positive association between emotional eating, depressive symptoms (Antoniou et al., 2017; Goossens et al., 2009; Paxton & Diggins, 1998; van Strien et al., 2016), and anxiety symptoms (Levinson et al., 2012; Swinbourne et al., 2012). Some research focused on eating (Culbert et al., 2015; Murray et al., 2017; Rance et al., 2017; Wiederman, 1996) and sleeping disorders (Allison et al., 2010; Allison et al., 2016; Yahia et al., 2017).

While much of the food research within psychological science focused on psychopathology, there was little interest in the role that food played in human life (Rozin, 1996). While noting the ways in which food is central in cultural, biological, and moral domains of human life, Rozin (1996) suggested the dynamic relationship between humans and food were ignored by contemporary psychologists. Since this article, there has been a great increase in interest in food research within psychological science (Connor & Armitage, 2002; Lyman, 2012), specifically about attitudes towards foods and dietary habits (Hollis et al., 1986; Rozin et al., 1999). Rozin and colleagues (1999) examined attitudes to food and its functional role in the daily lives of U.S. American, Japanese, Belgian, and French undergraduate students and adults. Specifically, Rozin and colleagues (1999) surveyed participants on beliefs about the association between diet and health, concern about food, degree of consumption of modified foods, importance of food as a positive force, diet satisfaction, and tendency to associate foods with nutritional and culinary contexts. Rozin and colleagues (1999) reported cross cultural differences in the functional role of food where U.S. American participants reported greater association of food with health and lower association of food with pleasure compared to French, Japanese, and Belgian participants. French participants reported greater association of

food with pleasure and lower association food with health compared to Japanese, Belgian, and U.S. American participants.

Humans develop attitudes towards dietary patterns (Povey et al., 2001; Nezlek et al., 2020). Research suggested that humans may hold more positive beliefs about their dietary patterns and negative beliefs about dietary patterns that differ from their own. Further, humans may display more positive attitudes towards people who share their dietary patterns compared to people with differing dietary patterns (Povey et al., 2001). Applying Reiss's (2007) similarity-attraction effect, Nezlek and colleagues (2020) investigated the role of diet similarity within interpersonal relationships among omnivorous and vegetarian adults. Vegetarian participants were more likely to have vegetarian friends and romantic partners than omnivorous participants. Notably, humans with dietary patterns may develop certain attitudes and behaviors (Asvatourian et al., 2018). Among 422 adults residing in Scotland, while attitudes did not differ between groups (i.e., health conscious, traditional, and mainstream dietary clusters), it was found that participants with a health-conscious dietary cluster were more likely to report pro-environmental behaviors compared to participants with traditional and mainstream dietary clusters (Asvatourian et al., 2018). In summary, the results of the aforementioned studies suggested humans may hold and develop certain beliefs about dietary patterns and behaviors. Notably, the results also suggested that humans may display negative beliefs towards dietary patterns and beliefs that differ from their own.

## About Vegans and Vegetarians

Very broadly, vegetarianism refers to abstention from meat consumption. In vegetarianism, consumption of nonhuman animal by-product (i.e., dairy products, honey, and eggs) may be practiced. Specifically, a vegetarian is someone who abstains from consumption of flesh of nonhumans animals and may consume nonhuman animal by-products (i.e., dairy products, honey, and eggs). According to the United Kingdom (UK) Vegetarian Society (n.d.), a vegetarian is someone whose diet does not include meat, poultry, seafood, insects, gelatin or nonhuman animal rennet, or stock or fat from nonhuman animals (The Vegetarian Society UK, n.d.). The diet also may include eggs, dairy products, and honey as well as vegetables, fruits, nuts, and seeds. According to the North American Vegetarian Society (NAVS) (n.d.), vegetarians are people who abstain from eating all animal flesh including meat, poultry, fish, and other sea animals.

Veganism, very broadly, refers to the abstention of meat consumption and nonhuman animal by-product (i.e., dairy products, honey, and eggs). According to the UK Vegan Society (n.d.), veganism is "a way of living which seeks to exclude, as far as possible and practicable, all forms of exploitation of, and cruelty to, animals for food, clothing, or any other purpose". In a position paper, the European Vegetarian Union (EVU) (2018) proposed definitions for foods suitable for vegans and vegetarians. Foods suitable for vegans are foods that are not products of animal origin and, at no stage of production, has been made of ingredients, processing aids, or substances of animal origin. Foods suitable for vegetarians were foods that are similar for vegans, but with the difference in production and processing of milk and dairy products, colostrum, eggs, honey, beeswax, propolis, or wool grease. The defining differences between veganism and vegetarianism

reflected on the extent to which individuals abstain from nonhuman animal consumption. Although there are differences in abstention between veganism and vegetarianism, it is important to recognize that veganism is a form of vegetarianism (Rosenfeld & Burrow, 2017). Veganism is not a separate practice from vegetarianism.

While these definitions are common, there is noted inconsistency of the self-identification with vegetarianism within academic scholarship (Ruby, 2012). In a review on increasing interest in vegetarianism within academic scholarship, Ruby (2012) noted inconsistencies between the broad definition of vegetarianism and participants' self-identification with vegetarianism. Specifically, while participants of studies included in Ruby's (2012) review identified as vegetarian, they reported consumption of flesh of nonhuman animals. Previous research has suggested that vegetarianism can be conceptualized as dimensions (Beardsworth & Kiel, 1992). In a qualitative study with 76 self-identified vegetarians, Beardsworth and Kiel (1992) explored dietary beliefs and practices of consumption of vegetable-based products and abstention from flesh and by-products nonhuman animals. Within their findings, Beardsworth and Kiel (1992) proposed a typology vegetarianism that identifies a degree of consumption of nonhuman animal flesh and by-products. Type I vegetarianism included self-identification of vegetarianism and the occasional consumption of nonhuman animal flesh (i.e., pork, poultry, and beef) due to temporary unavailability or avoidance of embarrassment in social settings. Type II vegetarianism included the avoidance of consumption of pork, poultry, and beef and consumption of fish. Type III vegetarianism included avoidance of consumption of nonhuman animal flesh and consumption of eggs. Type IV vegetarianism included avoidance of nonhuman animal flesh and consumption of dairy products. Type



V vegetarianism included avoidance of nonhuman animal flesh and by products that do not contain ingredients from slaughtered nonhuman animals. Type VI vegetarianism included consumption of vegetable-derived foods and complete avoidance of all nonhuman animal flesh and by-products. The findings of the aforementioned studies suggested vegetarianism and veganism may be defined in a variety of ways and may be conceptualized as dimensions.

### **Demographic among Vegans and Vegetarians**

Very few U.S. Americans identify as veg\*n. In an examination of demographic information of former and current veg\*ns, Asher and colleagues (2014) identified that out of 11, 399 U.S. American adults, approximately 2% identified as current veg\*ns and 10% identified as former veg\*ns. Participants who identified as current veg\*ns were more likely to be White, between the ages of 30 to 49 years of age, women, highly educated, liberal, and nonreligious in practice than non-veg\*ns and former veg\*ns. Among 1,033 U.S. American adults in a 2018 report for a Gallup poll, 5% and 3% identified as vegetarian and vegan, respectively. Within this study, veg\*n participants were more likely to report earning \$30,000 or less and self-identify as liberal and young compared to non-veg\*ns (Reinhart, 2018). In a 2016 national poll of 2,015 U.S. American adults, results suggested that veg\*ns were more likely to be women (3.5%) compared to men (3.4%) (Vegetarian Resource Group, 2016). Of note in an updated national poll of 2,027 U.S. American adults, veg\*ns were more than likely to be men (4%) than women (3%) (Vegetarian Resource Group, 2019). Veg\*ns were more than likely to report to live in the West geographic region, earn \$50,000 to \$74,999, have children in their household, and be highly educated. Veg\*ns are more likely to be nonreligious (Wrenn, 2019). In a study

to capture the political identity profile among 287 U.S. American vegans, Wrenn (2019) examined the association between diet and political orientation. Within this study, U.S. American vegans were more likely to be women, heterosexual, nonreligious (i.e., atheist or agnostic), White, able-bodied, left leaning, and concerned about social justice and movements other than veganism. Vegan participants were also concerned with taking an intersectional approach that addresses human inequalities, but not at the expense of the Nonhuman Animal rights movement. In a sample of 299 participants, vegetarian participants reported greater concern for nonhuman animal welfare, donated more to nonhuman animal charities, and emphasized moral concerns on foundations of harm and care more strongly than omnivorous and flexitarian participants (De Backer & Hudders, 2015). Of note, within the same study, there were no differences between the three groups in donations to human-oriented charities. These findings suggested that vegetarians exhibit broader prosocial behaviors and beliefs than omnivores and flexitarians.

Though vegans and vegetarians are typically grouped together in research, vegans and vegetarians viewed themselves as distinctive groups (Back & Glasgow, 1981; Forestell & Nezelek, 2018; Rosenfeld, 2019a) and viewed their identity as central (Romo & Donovan-Kicken, 2012). In a comparative study of vegetarians and gourmets, Back and Glasgow (1981) found that vegetarians may define themselves through emphasis on behaviors they avoid and seek to associate themselves with like-minded people despite being forced to accept the reality that other vegetarians are scarce. Compared to omnivores, vegetarians differed in personality characteristics (Forestell & Nezelek, 2018). Using the Five Factor Model of Personality, Forestell and Nezelek (2018) found that

vegetarian ( $n = 276$ ) and semi-vegetarian ( $n = 1,191$ ) participants reported greater openness to experience characteristics than omnivorous ( $n = 4,955$ ) participants. This finding suggested that this sample of vegetarian and semi-vegetarians were more likely to be open to new experiences compared to omnivores. Notably, vegetarian and semi-vegetarian participants reported greater neuroticism and depressive symptoms than omnivorous participants. This finding suggested that this sample of vegetarian and semi-vegetarians were more likely to have lower emotional well-being than omnivores within this study. Some studies suggested that vegans report greater empathy and concern for nonhuman animal welfare and less neuroticism than vegetarians (Rosenfeld, 2018). Using the Dietarian Identity Questionnaire (DIQ), Rosenfeld (2019a) compared the dietary identity profiles (i.e., centrality, private regard, public regard, and prosocial, personal, and moral motivations) between vegans ( $n = 65$ ) and vegetarians ( $n = 102$ ). Compared to vegetarian participants, vegan participants reported higher identity centrality. Specifically, vegan participants viewed their dietary pattern as greatly intertwined with their identity compared to vegetarian participants. Vegan participants reported greater private regard and lower personal regard compared to vegetarian participants such that they had greater positive feelings about their dietary in-group members compared to vegetarian participants. Additionally, vegan participants reported that others judge them negatively for following their dietary patterns. Vegan participants also reported lower out-group regard than vegetarian participants such that they perceived out-group dieters negatively compared to vegetarians. Vegan participants reported higher motivations to follow their dietary patterns compared to vegetarian participants.

## Health of Vegans and Vegetarians

Extensive research has examined the physical health of vegans and vegetarians (Appleby & Key, 2016; Craig, 2009; Dwyer, 1988; Gili et al., 2019; Key et al., 2006; Leitzmann, 2014). In a summary of findings of cross-sectional and prospective studies on physical health of vegans and vegetarians in Western countries, Appleby and Key (2016) found that veg\*ns reported lower BMI and risks of self-reported chronic diseases (i.e., cancers, diabetes, CVD and ischemic heart disease (IHD)) and greater risk for bone fractures and low bone mineral density than non-veg\*ns. With respect to mortality rates, some studies suggested that the mortality rates of veg\*ns are comparable (Appleby & Key, 2016; Dwyer, 1988) and lower than non-veg\*ns (Dwyer, 1988). In an older review of empirical data, Dwyer (1988) reported that risks for obesity, atonic constipation, and chronic diseases and conditions (i.e., lung cancer, hypertension, alcoholism, T2D, heart diseases, colonic diseases, osteoporosis, dental erosion and gallstones) were lower for veg\*ns diets than non-veg\*n diets. It should be noted that there were increased risks of dietary deficiency diseases among vegans, but not among vegetarians. Among 1,454 Argentinean adults, Gili and colleagues (2019) investigated the adherence to healthy vegan lifestyle habits among Argentinean veg\*ns (i.e., semi-vegetarian ( $n = 393$ ), pesco-vegetarian ( $n = 52$ ), and lacto-ovo vegetarian ( $n = 434$ )), vegans ( $n = 146$ ), and non-vegetarians ( $n = 429$ ). Veg\*n participants reported healthier lifestyle habits and lower risk factors for non-communicable diseases (NCDs) than non-veg\*ns. Notably, Gili and colleagues (2019) found that there was a low consumption of whole grains, legumes, vegetables, nuts, and seeds among this sample, especially amongst veg\*n participants. The findings of the aforementioned studies suggested that veg\*ns are at a lower risk for

the development of chronic diseases, but higher risks for dietary deficiencies, especially amongst vegans.

While there has been research that examined the psychological and physical health benefits of veg\*n diets, there has been growing research on the mental health of those who self-identify as veg\*n (Rosenfeld, 2018; Ruby, 2012). Of the existing research on mental health of veg\*n, substantial research has documented positive associations between veg\*n identification and adverse mental health outcomes (Baines et al., 2007; Michalak et al., 2012). Using the 2000 Australian Longitudinal Study on Women's Health, Baines and colleagues (2007) found that vegetarian and semi-vegetarian women reported greater depressive symptoms, greater medication for depressive symptoms, and tendency to deliberate self-harm compared to non-vegetarian women. Michalak and colleagues (2012) compared the prevalence rates of psychological disorders between vegetarian ( $n = 244$ ) and nonvegetarian ( $n = 3,782$ ) adults. Compared to nonvegetarian adults, prevalence rates of depressive disorders, anxiety disorders, and somatoform disorders and syndromes were higher among vegetarian adults. Specifically, vegetarian adults reported greater symptoms associated with depressive disorders, anxiety disorders, and somatoform disorders than non-vegetarian adults. One study found that vegetarian men were at greater risks of depression compared to non-vegetarian men (Hibbeln et al., 2018). In an epidemiological study that examined postnatal depressive symptoms among English men, Hibbeln and colleagues (2018) found vegetarian participants reported greater depressive symptoms than non-vegetarian participants. In a cross-sectional study, Matta and colleagues (2018) examined the association between depressive symptoms and various dietary identifications (i.e., omnivorous, pesco-vegetarian, lacto-ovo-vegetarian,

and vegan). Pesco-vegetarian and lacto-ovo-vegetarian diets were associated with depressive symptoms where pesco-vegetarian and lacto-ovo-vegetarian participants reported elevated depressive symptoms. Notably, this association was not significant among those with vegan diets. Some studies found that veg\*ns may be less happy than omnivores (Forestell & Nezelek, 2018; Lindeman, 2010). In a comparative study of vegetarian, semi-vegetarian, and omnivorous women, Forestell and Nezelek (2018) found that vegetarian and semi-vegetarian participants reported lower self-esteem and greater depressive and eating disorder symptoms than omnivorous participants. Vegetarian participants also reported a more negative worldview than semi-vegetarian and omnivorous participants. Lindeman (2010) compared psychological well-being of vegetarians, semi-vegetarians, and omnivorous women in Helsinki within two studies. In the first study, semi-vegetarian women reported greater satisfaction with their appearance than vegetarian and omnivores. Notably, semi-vegetarian and vegetarian participants reported lower levels of self-esteem and greater depressive and eating disorder symptoms. In the second study, Lindeman (2010) found that vegetarian participants perceived the world as less controllable and reported more negative assumptions about the benevolence of the world, people, justice, and self-worth than semi-vegetarian and omnivorous participants. The results of the aforementioned studies suggested that veg\*n identification was associated with negative mental health outcomes such that vegans and vegetarians report lower self-esteem and happiness and greater depressive and anxiety symptoms and negative worldviews compared to non-veg\*ns. In summary, veg\*ns may not be well-adjusted compared to non-veg\*ns.

While substantial research documented negative associations between vegetarian and vegan identification and mental health outcomes, some research suggested positive associations between veg\*n identification and positive mental health outcomes (Antonovici & Turluc, 2020; Beardsworth & Kiel, 1991b; Beezhold et al., 2010; Beezhold et al., 2014). Beezhold and colleagues (2010) compared mood states of 60 vegetarians who excluded fish and 78 non-vegetarian Seventh Day Adventist adults. Vegetarian participants reported less negative affective states and more favorable mood states than non-vegetarian participants. Among 620 adults, Beezhold and colleagues (2014) examined mood and lifestyle factors that potentially impact vegans ( $n = 283$ ), vegetarians ( $n = 109$ ), and omnivores ( $n = 228$ ). Beezhold and colleagues (2014) found that a vegan diet was inversely associated with anxiety and stress symptoms. Specifically, vegans reported less stress and anxiety than omnivores. Additionally, vegan and vegetarian men, and vegan women, reported less anxiety than omnivorous men. Veg\*ns report less eating disorder symptoms and obsessive-compulsive symptoms (Çiçekoğlu & Tunçay, 2018). In a comparative cross sectional study, Çiçekoğlu and Tunçay (2018) examined and compared frequency of orthorexia, characterized by an excessive preoccupation with healthy eating, obsessive-compulsive symptoms, and eating habits of vegan ( $n = 15$ ), vegetarian ( $n = 16$ ), and non-veg\*n ( $n = 31$ ) adults in Turkey. Among this sample, non-veg\*n participants reported greater obsessive-compulsive and orthorexic symptoms than vegans and vegetarians, suggesting vegans and vegetarians do not evidence disordered eating, including obsession with healthy eating, at similar or higher rates to/than non-veg\*ns. In a meta-analytic study, Iguacel and colleagues (2020) found no significant associations between diets and stress, well-being, and cognitive impairment

among veg\*n participants within included studies. Notably, Iguacel and colleagues (2020) found that veg\*n participants reported higher depression scores, but lower anxiety scores. These findings suggested that while veg\*ns may be at a higher risk for depression, they are at lower risk for anxiety. Following adoption of veg\*n diet, veg\*n may experience increased mental health outcomes (Antonovici & Turliuc, 2020; Beardsworth & Kiel, 1991b). In a qualitative study, Antonovici and Turliuc (2020) explored health-related beliefs and practices among 20 vegetarians. Most participants reported better moods and mental health status.

### **Motivations for Vegetarianism**

Recent literature focused on motivation for the practice of vegetarianism (Rosenfeld, 2018). Ethical and health motivations are common types of motivations for the practice (Bruers, 2015; Cramer et al., 2017; Fox & Ward, 2008; Janssen et al., 2016). Janssen and colleagues (2016) identified several types of motivations for following a vegan diet among 329 German adults and found that the majority of these adults (81.9%) reported more than one motive. In their open-ended question survey, Janssen and colleagues (2016) found that 89.7% of participants reported animal-related motives (i.e., motives related to animal welfare, animal agriculture, and/or animal rights), 69.3% of participants reported self-related motives (i.e., motives related to personal well-being and health), and 46.8% of participants reported environmental-related motives (i.e., motives related to environmental protection, climate change, and/or ecological sustainability). Notably, participants also reported motives related to social justice, aversion to capitalism, and spirituality and familial reasons. Specifically, 10% participants reported motives related to social justice (i.e., concerns with world hunger, human rights, and



exploitation), 5% of participants reported aversion to capitalism and/or the food industry, and less than 3% of participants reported motives related to spirituality and vegan diet of a family member. In the same study, Janssen and colleagues (2016) found that attitudes towards animal agriculture varied among this sample of vegans such that both positive and negative attitudes towards animal agriculture were reported. Bruers (2015) presented an ethical argument for veganism. In discussing the minimal basic right to autonomy and moral irrelevance of nonhuman species, Bruers (2015) concluded that all sentient beings (especially vertebrates those with a functional nervous system) had the right to not be used for bodily means for non-vital ends (i.e., clothing and food). Further, Bruers (2015) suggested that veganism was a "moral duty" (p.288).

Scant research explored how veg\*ns navigate their ethics in an animal-based society. In a qualitative study, Greenebaum (2012) explored the experiences of 16 ethical vegans, people who adopt a vegan diet for moral, ethical, and political reasons. Specifically, this study examined how these ethical vegans navigated through their difficulties in living in an animal-based society and their feelings about themselves and health vegans, those who adopt a plant-based diet to lose weight or improve physical health. In the study, participants reported that they wanted veganism to be recognized as an "ethic encompassing an entire lifestyle" (p.134) and suggested that health vegans were motivated by self-interest rather than concern for nonhuman animal welfare. The participants in this study described their experience as "difficult" to be vegan in an animal-based society where they have to "make concessions" at times and reported some sense of guilt as a result of deviation from their ethics. The participants reported some difficulties with authenticity when it came to the "gray area" of veganism such that there

were some foods (i.e., honey and sugar) and structural problems (i.e., legal requirement of animal testing) that were ethically debated in the vegan community. Overall, these participants reported placing pressure on themselves in their attempts to pursue an ethical vegan lifestyle and described frustration with their inability to be completely ethical.

Some research focused differences in motivations for veg\*n practices across cultural contexts and documented cultural differences between Western and Eastern veg\*ns (Ruby et al., 2013). In two studies, Ruby and colleagues (2013) investigated the psychological underpinnings for vegetarianism among Western (i.e., European Americans and European-Canadians) and Eastern (i.e., Indian) vegetarians. In their first study with European American and Indian omnivorous and vegetarian participants, vegetarians reported greater concerns about the impact of their food choices on the environment and nonhuman animal welfare and universalist attitudes and less RWA attitudes than omnivores. Notably, concern for nonhuman animal welfare was significant among European American vegetarian, but not for Indian vegetarians. Additionally, Indians participants endorsed more items associated with RWA attitudes than European American participants. In their second study that included European American, European Canadians, and Indian omnivorous and vegetarian participants, Ruby and colleagues (2013) found that vegetarian participants endorsed greater beliefs that meat consumption polluted personality and spirit. This endorsement was more pronounced in Indian vegetarians than European-American and European Canadian vegetarians. Indian vegetarians were more likely to be religious and endorsed greater belief in the ethics associated with purity, authority, ingroup, harm, and fairness than European-American and European-Canadian omnivores and vegetarians. Notably, European-American

vegetarian participants endorsed the ethic of authority less than Indian vegetarians. Additionally, in all of the cultural groups, vegetarian participants endorsed ethics associated with harm and fairness than omnivorous participants. Specifically, vegetarian participants reported a greater belief in the extent that actions can harm or help another and whether these actions are in a fair manner that respects the rights of others. Overall, these findings suggested that there are cultural differences in psychological underpinnings for vegetarianism among this sample of vegetarians. Western vegetarians may be motivated to practice vegetarianism for nonreligious reasons compared to Indian vegetarians. Notably, there were some similarities in Western and Indian vegetarians such that these participants endorsed similar ethics associated with harm and fairness.

### **Anti-Veg\*n Bias and Stigmatization**

Researchers documented negative attitudes and perceptions of vegetarianism and its practitioners (i.e., vegans and vegetarians) (Chin et al., 2002; Cole & Morgan, 2011; George, 1994). Cole and Morgan (2011) critically examined mainstream media messages about language around veganism and vegans among 397 United Kingdom (UK) articles. Majority of the articles analyzed were negative (74.3%) whereas only 5.5% were positive and 20.2% were neutral. While positive articles provided favorable discourse towards vegans, these articles rarely mentioned the ethics of non-violence, compassion or anti-speciesism and included experiences of vegans. While neutral articles attempted to weaken negative discourses for vegans, these articles reinforced the conception of veganism as a difficult practice to non-veg\*n readers. Further, in these same articles, interest, concerns, and experiences of vegans were rarely discussed or addressed. Negative articles provided unfavorable discourse about vegans and veganism.

Specifically, these articles ridiculed veganism and characterized it as fad, ascetic, or difficult to practice. In articles that characterized veganism as ascetic, veganism was associated with acts of self-denial and characterized as difficult and impossible to maintain, and ultimately ending in failure. In articles that characterized veganism as a fad, veganism was dismissed as oversensitive. Specifically, these articles portrayed vegans as sentimental animal lovers with an inability to cope with animal husbandry. Additionally, these articles portrayed vegans as hostile. George (1994) critiqued the vegan ideal, defined as the ideal "that people ought to abstain from eating not only meat but all animal by-products" (p. 20), and called it "discriminatory" (p. 22). Of note, scholars highlighted systemic barriers veg\*ns face (Kahn, 2011; Horta, 2018). For example, veg\*ns face microinequities within public places (e.g., businesses, hospitals, prisons, schools) (i.e., lack of veg\*n options), workplace (i.e., lack of accommodations for veg\*ns), health care settings (i.e., vaccines that include nonhuman animal products, medicines produced from nonhuman animal testing), and education (i.e., approaches that utilize nonhuman animals and vivisection). Further, veg\*ns face challenges with legal practices that subsidize nonhuman animal (ab)use (i.e., states passing legislation that force citizens to engage in nonhuman animal (ab)use), consequently supporting industries that rely on nonhuman animal use and consumption (Horta, 2018).

Substantial research documented negative attitudes and bias towards veg\*ns (Judge & Wilson, 2019; MacInnis & Hodson, 2017; Markwoski & Roxburgh, 2019; Timeo & Suitner, 2017). In three separate studies, MacInnis and Hodson (2017) investigated bias towards veg\*ns among non-veg\*ns. MacInnis and Hodson (2017) found that non-veg\*n participants evaluated veg\*ns more negatively than other target groups

(i.e., Blacks). Additionally, participants who endorsed greater levels of right-wing ideologies reported a greater level of negative evaluation than those who endorsed lower levels of right-wing ideologies. Lastly, veg\*n participants reported negative experiences as a result of veg\*nism. Notably, veg\*n men reported greater negative experiences than veg\*n women. Overall, these findings evidenced bias towards veg\*ns and veg\*ns faced less severe forms of discrimination. While the aforementioned findings evidence negative attitudes towards veg\*ns, other studies highlight specific bias towards vegans. While their study focused on anticipated stigma as a vegan as a barrier to plant-based diets, Markowski and Roxburgh (2019) found that vegetarian and omnivorous participants reported negative perceptions of vegans. Participants described vegans as “attention seeking,” “condescending,” “vocally intolerant of and desiring of others’ behavioral change” “opinionated” (p.5). Within the same study, Markowski and Roxburgh (2019) found that participants reported use of social distance from vegans and anticipation of being stigmatized as a vegan.

Ideological beliefs may also be associated with negative bias towards veg\*ns (Judge & Wilson, 2019). Among 1,326 New Zealand non-veg\*n participants, Judge and Wilson (2019) examined ideological and motivational bases for attitudes towards veg\*ns. In their study, RWA ideologies and SDO attitudes were associated with negative attitudes towards veg\*ns such that those who endorsed greater RWA and SDO attitudes reported greater negative attitudes towards veg\*ns. Notably, men were more likely than women to report greater negative attitudes towards veg\*ns. Hegemonic gendered beliefs may also be associated with negative bias towards veg\*ns (Adams, 2015; Timeo & Suitner, 2017). In three studies with Italian adults, Timeo and Suitner (2017) examined the association

between gendered beliefs about vegetarianism and dietary choices. In the first study among 50 Italian women, Timeo and Suitner (2017) investigated the association between eating habits and attractiveness ratings of vegetarian men and found that these participants showed a greater preference for omnivorous men than vegetarian men. Notably, this preference was stronger among women who reported greater negative attitudes towards vegetarian men. In the second study with 80 Italian women, Timeo and Suitner (2017) replicated the first study and removed all references to vegetarian eating habits. In this second study, a similar observation was noted such that female participants reported a greater preference for omnivorous men than vegetarian men and that vegetarian men were rated as less attractive in that they were perceived as less masculine. In their third study with 81 Italian men, male participants chose a greater amount of meat-based dishes and menus and more alcoholic beverages for themselves than for their female partners. Additionally, male participants endorsed beliefs that vegetarianism was feminine. Notably, male participants that reported beliefs that vegetarianism was feminine also showed a stronger preference for meat dishes. Timeo and Suitner (2018) theorized that meat consumption among men appears to be associated with self-presentation strategies. Timeo and Suitner's (2018) findings highlight perceived unattractiveness and femininity of veg\*ns, specifically veg\*n men. In addition to being viewed as feminine, vegetarian men may be viewed as more virtuous compared to omnivorous men (Ruby & Heine, 2011). In two studies, Ruby and Heine (2011) investigated the association between morality, masculinity, and meat consumption. In the first study among 247 adults, omnivorous participants rated vegetarian profile targets (i.e., a vegetarian man and woman) as more virtuous and less masculine than omnivorous

profile targets (i.e., an omnivorous man and woman) while controlling for levels of healthiness and unhealthiness. In the second study among 88 adults who identified as omnivores, male vegetarian targets were perceived as more virtuous and less masculine than the male omnivorous target. Overall, these findings suggested that while vegetarians are perceived as more virtuous and less masculine than non-veg\*ns, this was more pronounced for vegetarian men in comparison to omnivorous men. Within their examination of attitudes towards beef, Ruby and colleagues (2016) examined attitudes towards vegetarians. Though female participants were more than likely to admire and less likely to be bothered by vegetarians, they were more likely to be aversive to date vegetarians compared to male participants. These findings suggested that vegetarians, specifically vegetarian men, face discrimination by women such that women preferred an omnivorous man over a vegetarian man and perceived vegetarian men as feminine. With aforementioned findings highlighting negative attitudes towards veg\*ns, hegemonic worldviews and gendered beliefs shape these attitudes. Additionally, recent findings suggest that veg\*ns may be perceived as symbolic threats to beliefs and ideologies that legitimize hierarchies of human dominance over nonhuman animals and meat consumption (MacInnis & Hodson, 2017; Stanley, 2021). In an aforementioned study, MacInnis and Hodson (2017) found that participants who endorsed RWA ideologies were more likely to perceive veg\*nism as a threat and greater negative attitudes towards veg\*ns. In a series of two studies with Australian and U.S. participants, Stanley (2021) found that participants who endorsed greater SDO and RWA attitudes also reported perceptions that vegetarianism as a cultural and realistic threat and greater negative attitudes towards veg\*ns, especially towards vegans. Namely, attitudes towards

vegetarians were associated with belief that vegetarianism as a cultural threat compared to attitudes towards vegans, which were associated with both threats. As a whole, veg\*ns, especially vegans, challenge cultural norms and economics around meat consumption, and non-veg\*ns perceive veg\*ns negatively through the perceived threat of veg\*nism. Overall, these findings highlight how hegemonic ideological beliefs shape negative attitudes towards veg\*ns, especially towards vegans.

Scholars point to and challenge anecdotal evidence of the concept of “vegan privilege” (Harper, 2010a; Greenebaum, 2016). Using the theory of intersectionality, Greenebaum (2016) explored the notion of “vegan privilege,” highlighting the term as underdeveloped. Highlighting vegan diet as economic, Greenebaum (2016) challenged that vegan products (i.e., mock meats) that are convenient and expensive, though used by those transitioning to veganism, are not necessary to be vegan. Within the same paper, Greenebaum (2016) asserts meat and dairy consumption, in tandem with carnist and speciest ideologies, further corporate greed and, consequently, ignore oppression of marginalized communities, and ethics of nonhuman animal uses (i.e., meat consumption). Integrating findings of bias towards vegans, Greenbaum (2016) elucidates upon the stigma vegans receive for their beliefs and practices.

While substantial findings highlight stigmatization and discrimination towards veg\*ns, this stigma may manifest differently for veg\*ns with intersecting and marginalized identities (e.g., marginalized racial identities, age, size, etc.). For example, veg\*ns of color may experience invisible stigma (Harper, 2010b; Gorski et al., 2019; Greenebaum, 2018). In a qualitative study of 27 vegans of color, Greenebaum (2018) explored the ways in which the participants navigated tensions and conflicts of veganism.



Participants discussed the role race played in veganism, noting the frequent affiliation with whiteness and accusation from members with shared ethnic identities of “acting white” (p. 693). Participants also discussed their navigation of destigmatizing veganism to people of color and deconstructing whiteness within veganism (Greenebaum, 2018). In a qualitative study of how vegan activists navigate burnout, all vegans of color cited racist experiences as a primary contribution to their burnout within the veganism movement (Gorski et al., 2019). Altogether, the aforementioned findings evidence anti-veg\*n bias throughout all levels of society and highlight discriminatory and isolating behaviors towards veg\*ns. Further, this bias has been shaped by hegemonic worldviews and beliefs about veg\*nism and human dominance over nonhuman animals. This bias may also be unique among veg\*ns with other intersecting and marginalized identities.

Research documented veg\*ns’ concerns about anti-veg\*n stigma (LeRette, 2014; MacInnis & Hodson, 2017; Romo & Donovan-Kicken, 2012; Wrenn & Lizardi, 2021). Within their study, vegetarian participants reported negative experiences due to their vegetarian identity (MacInnis & Hodson, 2017). In a semi-structured interview, older adult women who identified as vegan reported stress within social situations, underrepresentation within the Vegan Movement, and lack of support by their medical doctors (Wrenn & Lizardi, 2021). Among a sample of vegetarian participants, Romo and Donovan-Kicken (2012) found that participants felt that they had to manage tensions in social interactions with omnivores and engage in communication strategies to minimize others’ discomfort with vegetarianism (i.e., making vegetarianism a personal choice, tailoring disclosure, downplaying, stretching the truth, or excuse for meat consumption). In a qualitative study, vegan participants discussed having to engage in impression

management (i.e., saving face) with non-veg\*ns (Greenebaum, 2012a). In a recent study, veg\*ns advised of meat consumption as a concealment strategy to avoid discomfort of non-veg\*ns where 54% advised of difficult feelings (guilt, sick, angry) of doing so (Rosenfeld & Tomiyama, 2019). Vegetarians' beliefs and diets may also strain their personal and professional relationships (Hirschler, 2011) and was cited as a source of conflict within familial relationships (Rosenfeld, 2018). Vegetarian participants reported anxiety about disclosure and questioning of their lifestyle and beliefs (Rosenfeld, 2018). When vegetarianism is conceptualized as a social identity, Nezelek and Forestell (2020) suggested veg\*ns are social minorities within the Western industrialized nations such that they are a demographic minority and experience social rejection and alienation. Notably, there is some research to suggest that differences in stigmatization exist between different types of veg\*ns where vegans feel greater stigmatization than vegetarians (Rosenfeld, 2019a). Vegans also noted anticipated stigma associated with veg\*n identification (Markowski & Roxburgh, 2019). Further, there is scant research that examines potential differences in stigmatization of veg\*ns with various marginalized identities through an intersectional framework.

### **Concealable Stigmatized Identity**

Concealable Stigma Identity (CSI) refers to an identity associated with a marginalized group that is kept hidden and carries social devaluation (Quinn & Chaudoir, 2009; Quinn & Earnshaw, 2011). Researchers have included very broad examples such as minority sexual orientation, history of mental illness, human immunodeficiency virus/acquired immune deficient syndrome (HIV/AIDS) status, sexual assault, chronic illness, and current or previous history of substance use (Quinn & Chaudoir, 2009; Quinn

et al., 2015). In recent years, other identities have been included within CSI literature (i.e., atheism; see Abbott & Mollen, 2018; Abbott et al., 2019; people who unhomed; see Weisz & Quinn, 2018). Quinn and Chaudoir (2009) proposed a theoretical framework on how concealable stigmatized identities impact the mental health of individuals that hold them. The framework posited four stigma-related factors (i.e., anticipated stigma, centrality, salience, and cultural stigma) facilitated distress and health outcomes. Anticipated stigma refers to the “degree to which individuals expect that others will stigmatize them if they know about the concealable stigmatized identities” (p. 636). Individuals with concealable stigmatized identities may not know reactions if their identity is revealed. Additionally, individuals with these identities could recognize negative stereotypes and experiences associated with that identity. Centrality, or how much the identity is central to the self, has been shown to vary across identities. Salience, or the frequency a person thinks about their identity, is considered. Specifically, the salience of a concealable stigmatized identity would vary based upon how frequent the identity is thought about. Stigmatized identities also vary to the extent to which they are salient to the holder of those identities. Cultural stigma, or the degree to which a stigmatized identity is socially devalued, is based upon cultural construction. Within their studies, Quinn and Chaudoir (2009) found that the aforementioned stigma related factors predicted psychological distress and physical illness symptoms among a predominantly White sample of participants with a variety of concealable stigmatized identities such as history of rape, minority sexual orientation, and history of psychological disorders. The findings of this study suggested that internal and external stigma processes negatively impact the mental health of individuals with concealable stigmatized identities.

Quinn and Earnshaw (2011) explained that CSI consists of two components: valenced content and magnitude. Valenced content of a CSI includes positive or negative beliefs, experiences, and cognitions associated with the identity. Stigma-related factors (i.e., internalized stigma, experienced stigma, and anticipated stigma), disclosure reactions, learned counterstereotypic or specialized positive information comprise valenced content. Internalized stigma, or endorsement of negative stereotypes associated with the identity that is attached to the self, can be deleterious to self-concept and predicts psychological distress (Quinn & Earnshaw, 2011). Notably, with this internalized stigma, there is no level of disclosure of the CSI. Unlike internalized stigma, experienced stigma requires some level of disclosure. Once a CSI is known, people with CSIs experience overt discrimination. Those whose CSIs are concealed report fewer instances of overt discrimination (Quinn & Earnshaw, 2011). Anticipated stigma, or the negative treatment expected to receive by people with CSIs, predicted psychological distress and physical health illness (Quinn & Chadour, 2009). Disclosure reactions to CSIs range from positive to negative and can predict psychological well-being, distress, and self-esteem (Quinn & Earnshaw, 2011). With counterstereotypic or specialized positive information, people who obtain CSIs search for ways to establish positive meaning for their identity. Magnitude of a CSI is determined by centrality, or the degree to which a person feels that a certain identity defines who they are as a person, and salience, or the frequency with which a person thinks about their identity.

Extant literature documented the deleterious impact of stigma on (in)conspicuous identities on mental health (Camacho et al., 2020; Quinn & Earnshaw, 2011; Quinn et al., 2015; Reinka et al., 2020; Weisz & Quinn, 2018). In their review of

research, Quinn and Earnshaw (2011) reported how the CSI framework associated with adverse psychological health outcomes. Emerging research highlights negative health outcomes associated with multiple CSIs. For example, the possession of multiple CSIs is associated with greater anticipated stigma and rumination of stigma, and lower quality of life among 288 adults with multiple CSIs (Reinka et al., 2020). Similarly, among 265 Black American and Latinx American participants with a CSI, Quinn and colleagues (2020) found that increased racial discrimination and anticipated stigma predicted greater depressive symptomology. Further, anticipated stigma partially mediated the association between racial discrimination and depressive symptomology. Specifically, participants who reported greater stigma were more likely to report greater racial discrimination and depressive symptomology. These findings suggest that people with visible and concealable stigmatized identities experience greater anticipated stigma based upon prior experiences with discrimination. While specific components of CSI (i.e., internalized stigma, anticipated stigma, and experienced stigma) were associated with decreased psychological health and increased psychological distress (e.g., depression and anxiety) (Quinn & Earnshaw, 2011; Quinn et al., 2013), anticipated stigma was posited to be the strongest predictor of psychological distress among people with different CSIs (Quinn & Earnshaw, 2011). Quinn and colleagues (2014) found that components of CSI predicted psychological distress among participants with CSIs (i.e., psychological disorders, substance use, experience of intimate partner violence, experience of sexual assault, and experience of childhood abuse). Specifically, participants who reported greater anticipated stigma, identity salience, and internalized stigma and lower outness also reported greater rates of depression and anxiety. Taken together, the results of the

aforementioned study suggested that concealable stigmatized identities are associated with adverse mental health outcomes.

Though scant, available research on disclosure reactions highlight health outcomes. For example, among a sample of 108 lesbian, gay, and bisexual (LGB) individuals, Ryan and colleagues (2015) found that negative reactions to disclosure were associated with greater rates of depression and lower self-esteem in the case of fathers and best friends. Chaudoir and Quinn (2010) examined motivations for first time disclosure among participants with CSI and its impact on self-esteem. In their study, Chaudoir and Quinn (2010) found that participants who reported greater ecosystem motivation (i.e., motivation focused on disclosure involved the self and confidant) to disclose reported greater self-esteem. While there is little research examined the association between disclosure reactions and health outcomes, some research has documented that disclosure for individuals who are “out” may hold benefits and drawbacks (Abbott et al., 2019; Chaudoir & Quinn, 2010; Quinn & Earnshaw, 2011; Rüscher et al., 2014; Ryan et al., 2015; Weisz et al., 2015). Quinn and Earnshaw (2011) suggested that disclosure for individuals who are “out” may experience beneficial (e.g., less feelings of social isolation, potential for more social support, and feelings of authenticity) and negative (e.g., greater rates of discrimination) outcomes. Further, they suggested that people with CSIs may seek out ways to make positive meaning out of negative experiences or labels associated with their CSIs (Quinn & Earnshaw, 2011). Among 394 individuals living with CSIs, Weisz and colleagues (2015) found that outness predicted social support and physical health. Specifically, participants who reported higher levels of outness and social support reported better health outcomes compared to

those who reported lower levels of outness. Notably, among participants who reported lower levels of outness, social support was less predictive of physical health outcomes. In an experiment to test the efficacy of peer led group intervention (Coming Out Proud), Rüsçh and colleagues (2014) found that COP had positive effects on stigma stress, disclosure related stress, secrecy, and perceived benefits of disclosure among participants with psychological disorders. The results of the aforementioned studies suggested that disclosure of CSIs were associated with positive or negative health outcomes and that the quality of disclosure and motivation may impact these outcomes. While the aforementioned research has suggested that disclosure predicts negative and positive health outcomes, other research has documented that the active concealment of CSI may be a reliable predictor of psychological health. Specifically, concealment of CSI has consequences on psychological health (Quinn & Earnshaw, 2013). Further, such concealment has implications for social interactions such as decreased feeling of belonging (Newheiser & Barreto, 2014) and expectations to be classified as non-stigmatized (Bosson et al., 2011)). In addition to reduced feeling of belonging, one study found that concealment of a stigmatized identity in the workplace was associated with reduced collective self-esteem, job satisfaction, and workplace related commitment (Newhieser et al., 2017). In summary, the results of preceding studies suggested that, though some CSI components have predicted adverse mental health outcomes, concealment of CSIs may lead to inimical consequences on mental health.

### **Universal Diverse Orientation**

Universal Diverse Orientation (UDO) refers to an "attitude toward all other persons that is inclusive yet differentiating in that similarities and differences are both

recognized and accepted; the shared experience of being human results in a sense of connectedness with people and is associated with a plurality or diversity of interactions with others" (Miville et al., 1999, p.292). Miville and colleagues (1999) proposed three factors (i.e., Relativistic Appreciation, Comfort with Differences, and Diversity of Contact) that comprise UDO. Relativistic Appreciation refers to the extent to which one values the impact of diversity on self-understanding and personal growth. Specifically, it reflected the degree to which one appreciates the similarities and differences among people. This factor reflected the cognitive component of UDO. Comfort with Differences refers to the degree of comfort with diverse individuals. This factor reflected the affective component of UDO. Diversity of Contact refers to interest in participating in diversity-focused activities that are socio-cultural in nature. This factor reflected the behavioral component of UDO (Miville et al., 1999). Research has examined gender and racial/ethnic differences in UDO (Singley & Sedlacek, 2009). Among 2,228 first year undergraduate students and using UDO, Singley and Sedlacek (2009) found racial/ethnic and gender differences in orientation toward diversity such that White (i.e., Anglo Saxon) Americans and men reported lower orientation towards diversity compared to racial/ethnic groups (i.e., Asian American, African American, and Latinx American) and women. Notably, there were similarities in orientation toward diversity among racial/ethnic groups. In all while the awareness of differences was more likely to be present among marginalized groups, this may not be present for privileged groups such as men and White Americans.



### **UDO Among Professionals**

Researchers utilized UDO to assess multicultural awareness among emerging helping professionals (Kohli et al., 2016; Wendler & Nilsson, 2009). In an interdisciplinary study, Kohli and colleagues (2016) assessed and compared the levels of multicultural awareness, sensitivity to and understanding of differences, and intercultural competence in diverse environments among 211 undergraduate and graduate students in Business, Education and Human Development, and Social Work. Kohli and colleagues (2016) found that students in Social Work reported the highest UDO, followed by students in Education and Human Development, and, lastly, by students in Business. Additionally, students in Social Work and Education and Human Development reported greater openness and appreciation of differences than students in Business. Notably, students who took diversity courses reported greater Relativistic Appreciation than students who did not take diversity courses. Specifically, students that took diversity courses reported greater value on the impact of diversity on self-understanding and personal growth than those who did not. Other research highlighted the association between UDO and certain dispositions of a multicultural personality. Thompson and colleagues (2002) explored the association between UDO attitudes and Openness to Experience, a personality dimension of the Five Factor model, and its six facet scales (Aesthetics, Values, Feelings, Actions, Ideas, and Fantasy) among 106 counselor trainees. Openness to Experience served as the primary predictor of UDO such that participants that reported greater openness to experience were more likely to report higher UDO attitudes than those that reported lower openness to experience. Additionally, Thompson and colleagues (2002) found that the Openness to Experience facet scales (i.e.,

Aesthetics, Values, Fantasy, and Feelings) were significantly associated with UDO attitudes such that participants that reported greater scores on the facet scales also reported greater UDO attitudes than those with lower scores of the facet scales. Thompson and colleagues (2002) also found that Aesthetics and Values strongly predicted UDO attitudes with Aesthetics being the primary predictor. Specifically, participants that reported greater scores on Aesthetics and Values were more likely to report greater UDO attitudes than those with lower scores on Aesthetics and Values. Overall, these findings suggested that personality traits such as Openness and certain dimensions of personality traits such openness to aesthetics and openness to values predict UDO attitudes among counselor trainees. The researchers theorized the personality trait and these two facets tap into UDO dimensions for counselor trainees. For example, those exposed to or interested in broader expressions of humanity and examined their own values provide an open stance towards relationships with those who are different from themselves and hold fewer barriers for empathy towards clients.

### **UDO, Personality, and Emotions**

Research suggested that UDO may be associated with wellness and healthy personality traits (Brummett et al., 2007; Miville et al., 2004; Thompson et al., 2002). Miville and colleagues (2004) explored the association between UDO and certain aspects of wellness (i.e., generalized self-efficacy, optimism, positive thinking, positive coping skills, self-esteem, and collective self-esteem) and social connectedness among 290 undergraduate students. Certain dimensions of UDO significantly predicted certain aspects of wellness. For instance, Diversity of Contact significantly predicted social self-efficacy, general self-efficacy, problem focused coping, and gender whereas Relativistic

Appreciation significantly predicted problem focused coping, collective self-esteem, and gender. Additionally, Comfort with Differences significantly predicted social self-efficacy, general self-efficacy, and gender. In review of these findings, female participants were more likely to endorse higher UDO dimensions than male participants.

Miville and colleagues (2004) found that self-efficacy was the strongest predictor of UDO. Specifically, participants that reported greater self-efficacy were more likely to report higher UDO dimensions. The researchers suggest that the dimensions represent complex social attitudes associated with attraction to and repulsion from others based upon similarities and differences. For example, Diversity of Contact reflected openness to interaction with those who are different. Comfort with Diversity reflected an emotional dimension (i.e., ambivalence or rejection) associated with those who are different, and Relativistic Appreciation reflected attitudes associated with experiential learning as well as learning and processing one's experience with those who are different. Using UDO, Brummett and colleagues (2007) examined the relationship between psychosocial well-being and multicultural personality dispositions among 124 undergraduate students. Brummett and colleagues (2007) found that participants with higher UDO scores also reported higher levels of hardiness, psychosocial interpersonal functioning, and self-efficacy than those with lower UDO scores. Overall, these findings suggested that UDO is positively associated with hardiness, psychosocial interpersonal functioning and self-efficacy.

Research suggested UDO is also associated with emotions (Miville et al., 2006). Miville and colleagues (2006) examined how UDO, emotional intelligence, or the ability to appraise, express, and regulate emotions, and utilize emotions in problem solving, and

training experience variables explain variance among 211 counseling graduate students. Gender positively associated and predicted empathic concern (conceptualized as feelings about others such as sympathy and concern) and personal distress (conceptualized as feelings of anxiety or tension arising from interpersonal situations), affective components of empathy. Specifically, women reported greater empathic concern and personal distress than men. UDO and emotional intelligence positively predicted perspective-taking (conceptualized as spontaneous ability to adopt the viewpoint of others) and empathic concern. Specifically, participants with more UDO attitudes were more likely to report greater ability to take others' perspective and experience compassion towards others than those with less UDO attitudes. The researchers theorized that awareness of similarities and differences aid counseling graduate students in their discomfort about differences of and assist empathizing with clients. Similarly, participants with greater emotional intelligence were more likely to report greater ability to take others' perspective and experience compassion towards others than those with less emotional intelligence. Notably, gender positively predicted personal distress such that women reported greater personal distress than men. Additionally, emotional intelligence negatively predicted personal distress such that those with greater emotional intelligence reported lower personal distress. The researchers theorized that counseling graduate students learn to differentiate their emotions from the clients during their training and are less likely to over-identify with their clients' emotions. Taken together, these findings suggested that UDO attitudes and emotional intelligence account for some variance for empathy among counseling graduate students.

## The Present Study

While anti-veg\*n stigma is well-documented, much of this assessment is conducted through ideological beliefs (Rosenfeld, 2018; Ruby, 2012). With scant examinations of anti-veg\*n stigmatization with a multicultural approach, this results in minimal examinations of how speciesism and carnism shape such stigma. With acknowledgement of how power structures centralize speciesism and carnism throughout all levels of society that impact veg\*ns and non-veg\*ns, the present study, underpinned by critical feminist theory, examined attitudes towards veg\*ns among non-veg\*ns and experiences of veg\*ns in the context of stigma. Thus, the purpose of this study is twofold. First, the study will examine the association between multicultural awareness and anti-veg\*n bias among non-veg\*ns. Quantitative examinations would elucidate upon the relationship, if any, between variables of interest (i.e., multicultural awareness, anti-veg\*n attitudes) among non-veg\*ns. Multicultural awareness within this study will be conceptualized through Miville and colleagues' (1999) UDO framework. Specifically, within this study, multicultural awareness refers to attitudes towards a person that is inclusive and aware of similarities and differences that are both recognized and accepted. The present study will conceptualize anti-veg\*n bias through outgroup regard for veg\*ns, utilizing Rosenfeld and Burrow's (2018) conception of outgroup regard. Specifically, within this study, outgroup regard refers to the evaluation of people (i.e., veg\*ns) who follow a dietary pattern different from their own. To the author's knowledge, this is the first study that examines the attitudes towards veg\*ns with a multicultural approach (i.e., UDO). Secondly, the study will explore how veg\*ns navigate their experience in a

society that places high values on meat consumption and production through qualitative inquiry. With focus on majority perspectives of anti-veg\*n stigma, this often results in exclusion of veg\*ns and their stories about the phenomenon. As CSI scholarship outlines devaluation of hidden identities and importance of these identities having an impact on those who hold them, the evaluation of this impact on veg\*ns are scarce. Thus, qualitative exploration was implemented to further understanding of anti-veg\*n stigma. While qualitative explorations have examined the experiences of veg\*ns, the exploration of stigmatization was not the primary focus where aspects of stigmatizing experiences of veg\*ns were explored (e.g., Cherry, 2015; Romo & Donovan-Kicken, 2012; Yeh, 2014). The present study will contribute to veg\*n literature in psychology through stories of veg\*ns related to veg\*n identification, anti-veg\*n stigmatization, and consequences for well-being.

The research questions guiding this research project were as follows:

1. How does multicultural awareness relate to anti-veg\*n attitudes among non-veg\*ns?
2. How does anti-veg\*n stigmatization, if at all, influence the experiences of veg\*ns?
3. How, if at all, do veg\*ns perceive and navigate anti-veg\*n stigmatization?

Driven by these broad questions, the PI employed a parallel, convergent mixed methods approach, where qualitative and quantitative data are collected concurrently, analyzed independently, and then integrated, to provide a complete picture about anti-veg\*n stigmatization. Namely, qualitative data could help provide depth and highlight nuances of anti-veg\*n stigma, and, thereby enhance accuracy of quantitative findings.

The integration of critical feminist theory and mixed methodology is a cogent approach given the emerging scholarship on anti-veg\*n stigmatization with minimal focus on experiences of stigma amongst veg\*ns and opportunity to gather and analyze multiple sources of data (Creswell & Plano Clark, 2017).

### **Hypotheses**

1. In non-veg\*ns, it is predicted that outgroup regard, measured as negative feelings towards who follow a different dietary pattern, will negatively associate with universal diverse orientation, measured as the social attitude of appreciation and acceptance for the similarities and differences that exist among people, such that greater outgroup regard would be associated with lower universal diverse orientation.
2. In non-veg\*ns, it is predicted that outgroup regard, measured as negative feelings towards those who follow a different dietary pattern, will be associated with attitudes towards veg\*ns such that greater outgroup regard would be associated with higher attitudes towards veg\*ns.
3. It is predicted that universal diverse orientation, measured as a social attitude of appreciation and acceptance for the similarities and differences that exist among people, will be associated with attitudes towards veg\*ns such that greater universal diverse orientation would associate with lower attitudes towards veg\*ns.
4. It is predicted that universal diverse orientation, measured as social attitude of appreciation and acceptance for the similarities and differences

that exist among people, would mediate the relationship between outgroup regard, measured as negative feelings towards who follow a different dietary pattern, and attitude towards veg\*ns such that greater levels of universal diverse orientation will attenuate the relationship between outgroup regard and attitudes towards veg\*ns.



## **CHAPTER 2**

### **METHDODOLOGY**

Undergirded by critical feminist theory, the current study conducted a concurrent, parallel mixed method research design where quantitative and qualitative data were concurrently collected, analyzed interpedently and later merged (Creswell & Plano Clark, 2017). Mixed methodology, with collection, analysis, and integration of quantitative and qualitative data in a single study or series of studies, deepens understanding about phenomenon experienced by and needs of stigmatized groups (Creswell & Plano Clark, 2017; Greene & Caracelli, 1997; Hanson et al., 2005; Small, 2011). As the quantitative data served as primary, the qualitative data served to provide more context into quantitative findings. As quantitative data served as the primary focus, non-veg\*ns' perspectives have been predominantly centered, qualitative inquiry of veg\*ns was used to provide a holistic examination of anti-veg\*n stigmatization. The design was informed by an acknowledgement of the complex nature of structural and cultural power that creates and maintains stigma (Quinn & Earshaw, 2011) towards marginalized groups, especially veg\*ns. Further, with little scholarship about veg\*ns' experience with stigma, qualitative and quantitative data alone are insufficient in understanding bias towards veg\*ns, especially with little scholarship about veg\*ns. Thus, the convergence of qualitative and

quantitative data sought to provide holistic and complex picture anti-veg\*n stigma as well as how veg\*ns navigate such experience (Creswell & Plano Clark, 2017; Hesse-Biber, 2010). The research design allowed for the gathering multiple forms of data from veg\*ns and non-veg\*ns in order to enhance the knowledge of anti-veg\*n bias from perspectives of marginalized and dominant groups, respectively. With non-veg\*ns' attitudes often centered in research studies, qualitative inquiry was employed to challenge the dominant perspectives of veg\*ns and anti-veg\*n bias through veg\*ns' stories and perspectives.

## **Quantitative Research Design**

### **Participants**

A total of 284 participants were recruited from snowball sampling via social media platforms (i.e., Facebook and Reddit), organizational listservs (i.e., the American Psychological Association (APA)'s Society of Counseling Psychology listserv, Food Policy Network (FPN)) and a Southeastern U.S.- based university. Participants who discontinued participation during or after completing the demographics questionnaire were excluded from the study resulting in a final sample of 165 ( $M_{\text{age}} = 28.09$ ,  $SD = 12.15$ ). Majority of participants (82.4%) identified as omnivores whereas 17.6% identified as flexitarian. Majority of participants reported being raised in an omnivorous dietary pattern whereas others indicated ovo-lacto vegetarian (1.2% %) and less commonly with veg\*n and other dietary patterns (.08%). On average, participants reported their practice of dietary patterns as 23.04 years ( $SD = 12.51$ ). The majority of this sample reported single racial and ethnic identification with White (75.5%), followed by Black (16.3%), Latinx (4.24%), multiracial/biracial (1.8%), Asian American/Pacific Islander (1.2%), and Indigenous or other specified (1.2%). Majority of participants

(76.3%) identified as women whereas other participants identified as men (21%) and less commonly as trans women and gender-nonbinary (2.4%). Majority of participants identified as heterosexual/straight (83%) whereas the remaining identified as gay/lesbian (7.9%), pansexual (4.2%), bisexual (3.9%), and, less commonly, asexual and other sexual orientations (1.8%). Some college, some graduate training, undergraduate and graduate degrees were commonly reported (88.6%) whereas some (11.5 %) reported a completed high school diploma or GED equivalent. Christianity or Christian variants (i.e., Christian, Catholicism, and Protestantism; 62.3%) was the most commonly reported faith, followed by agnosticism (13.9%), no reported faith (12.7%), other identified religion (4.24%), Judaism (1.21%), and atheism (.6%). The Southern and Northeastern part of the U.S. (83.3%) were commonly reported geographical locations, followed by Western part (9.6%) and Midwestern part (7.2%) of the U.S. A small portion (13.3%) of our participants endorsed living with a sensory, physical, hearing, vision, or psychological-related impairment whereas 2.4% declined to disclose. Majority of the participants reported financial dependence and income less than \$23,00 (62%) whereas others reported greater income than \$24, 000 (37.9%). The participants in the quantitative portion of this study will include omnivores. A more detailed review of the sample's sociodemographic profile is available in Table 1. The demographic survey will include questions about their dietary habits and familial history of dietary patterns (See APPENDIX I).

## **Procedures**

Adults that identified as omnivore and flexitarian and resided in the U.S. were invited to complete the study. Participants accessed a hyperlink that directed them to an online survey platform (e.g., Qualtrics). Participants were shown a consent form that outlines information about the study, potential risks and benefits, and ways to reach the researcher and her advisor with questions and concerns. After participants provided their electronic consent and completed the demographic questionnaire, participants completed randomized questions about their dietarian identity, attitudes towards vegetarians and vegans and appreciation and awareness of similarities and difficulties: original version of Attitudes Toward Vegetarians Scale (ATVS; Chin et al., 2002), modified version of Attitudes Toward Vegetarians Scale (ATVS; Chin et al., 2002), Dietary Identity Questionnaire, (DIQ; Rosenfeld & Burrow, 2018), and Miville-Guzman Universality-Diversity Scale, Short Form (MGUDS-S; Fuentes et al., 2000).

## **Power Analysis**

An a priori power analysis was conducted to determine the minimum sample size necessary to produce the maximum amount of power while reducing the risk of Type I and Type II error. The analysis was conducted using G\*Power software (Faul et al., 2009), and based upon mediation analysis. Power was set to .80 to maximize the chances of finding a significant effect if one exists in the sample (Cohen, 1977). Based on the power analysis, a total of 107 participants will be needed to attain a finding that is robust against both Type I and Type II errors.

## Instruments

*Attitudes Toward Vegetarians.* Attitudes towards vegetarians was assessed through the Attitudes Toward Vegetarians Scale (ATVS; Chin et al., 2002). The ATVS a 33-item scale on a 7-point Likert response type in agreement to the statements. Items were generated through interviews with vegetarians and non-vegetarians, field observation, review of literature on vegetarianism, and brainstorming and critique of the research team. The questions were grouped into four categories. The first category relates to the behavior of vegetarians. Specifically, this category relates to the “irritable behaviors of vegetarians” (p. 335). The second category relates to the beliefs of vegetarians. Specifically, this category relates to the “disagreement with beliefs of vegetarians” (p. 335). The third category relates to the health and mental characteristics of vegetarians. The fourth category relates to the treatment of vegetarians. Specifically, this category relates to the “appropriate treatment of vegetarians” (p. 335). Items include “Vegetarians are unconcerned about animal rights”, “Vegetarians are too idealistic”, and “One of the best things that could happen to me is if I could no longer eat meat or meat products”. Higher scores indicate negative attitudes towards vegetarians whereas lower scores indicate positive attitudes towards vegetarians. The ATVS demonstrates sound psychometric properties (Chin et al., 2002). In their study of a sample with predominantly White, female, and liberal participants, Chin and colleagues (2002) reported that the ATVS demonstrated sound construct validity. Specifically, Chin and colleagues (2002) reported that the ATVS demonstrated sufficient convergent and discriminant validity through significant and insignificant associations with Authoritarianism and social desirability, respectively. Chin and colleagues (2002) reported that the 21 item ATVS

demonstrated sufficient internal reliability ( $\alpha = .87$ ). Of note, Chin and colleagues (2002) did not report the reliability information on the 33 items ATVS. Use of this measure within research studies is scant. In one study, Judge and Wilson (2019) utilized and modified (i.e., omission of original items and addition of new items). Further, Judge and Wilson (2019) did not report internal reliability coefficients or validity information for their study. Overall, while this measure was modified in Judge and Wilson's study, there is scant research that examines the measure's psychometric properties and the study that provides validity and reliability evidence is within the Chin and colleagues' (2002) study. To the author's knowledge, this is the only available scale that thoroughly focused on negative attitudes towards vegetarians. For my sample, the internal reliability was .72

*Attitudes Towards Vegans.* Attitudes towards vegans was assessed using a modified version of the Attitudes Towards Vegetarians Scale (ATVS; Chin et al., 2002). Specifically, the researcher modified the statements with "vegetarians" will be changed to "vegans". Attitudes Towards Vegans Scale include 33-item scale on a 7-point Likert response type in agreement to the statements. Sample items include "Vegans are unconcerned about animal rights", "One of the best things that could happen to me is if I could no longer eat meat or meat products" and "Vegans are too idealistic". Higher scores indicate negative attitudes towards vegans whereas lower scores indicate positive attitudes towards vegans. For my sample, the internal reliability was .70.

*Dietarian Identity.* Dietary identity was assessed using the Dietary Identity Questionnaire (DIQ; Rosenfeld & Burrow, 2018). The DIQ is a 33-item scale with a 7-point Likert response type. The DIQ assesses centrality, regard (i.e., private, public, and out-group regard), motivations (i.e., personal, moral, and prosocial), and strictness.

Centrality refers to the extent to which one views their dietary patterns as a predominant feature of one's self-concept. Private regard refers to personal feelings toward one's dietary patterns and towards others who eat the same way. Public regard refers to how out-group members and the larger societies evaluate those who follow their dietary patterns. Out-group regard refers to one's feelings about those whose dietary patterns differ from their own. Personal motivation refers to a desire to benefit oneself is a reason to follow one's dietary pattern. Prosocial motivation refers to the extent to which a desire to benefit something beyond oneself is a reason to follow one's dietary pattern. Moral motivation refers to the extent to which beliefs about rightness and wrongness is a reason to follow one's dietary pattern. Strictness refers to the extent to which a person adheres to their dietary pattern. Sample items for out-group regard include "It bothers me when people eat foods that go against my dietary pattern" and "If I see someone eat foods that go against my dietary pattern, I like him or her less". Sample items for private regard include "Following my dietary pattern is a respectable way of living" and "People who follow my dietary pattern tend to be good people". Sample items for public regard include, "Following my dietary patterns is associated with negative stereotypes" and "People who follow my dietary pattern tend to receive criticism for their food choices." Sample items for centrality include "A big part of my lifestyle revolves around my dietary pattern" and "My dietary pattern is an important part of how I would describe myself". Sample items for personal motivations include "I follow my dietary pattern because I am concerned about the effects of my own food choices on my own well-being" and "I follow my dietary pattern because eating this way improves my life". Sample items for moral motivation include "I feel that I have a moral obligation to follow

my dietary pattern” and “I follow my dietary pattern because eating this way is the morally right thing to do”. Sample items for prosocial motivation include “I follow my dietary pattern because I want to benefit society” and “I am motivated to follow my dietary pattern because I want to help others”. Internal reliability coefficients for subscales of the DIQ ranged from .85 to .97. The DIQ demonstrated sound construct validity (Rosenfeld & Burrow, 2018; Rosenfeld, 2019b). For my sample, the internal reliability was .97.

***Multicultural Attitudes.*** Multicultural attitudes was assessed through UDO, the social attitude of appreciation and acceptance for the similarities and differences that exist among people. UDO was assessed the Miville-Guzman Universality-Diversity Scale, Short Form (MGUDS-S; Fuertes et al., 2000). The MGUDS-S is a 15-item scale with 6-point Likert type response type in agreement to statements from 1 (Strongly Disagree) to 6 (Strongly Agree). The MGUDS-S is comprised of three subscales: diversity of contact, relativistic appreciation, and comfort with differences. Diversity of contact refers to the interest in participating in diverse focused activities that are socio-cultural in nature. Sample item for diversity of contact is “I would like to join an organization that emphasizes getting to know people from different countries”. Relativistic appreciation refers to the extent to which one values the impact of diversity on self-understanding and personal growth. Sample item for relativistic appreciation is “I can best understand someone after I get to know how he/she is both similar and different from me”. Comfort with Differences refers to the degree of comfort with diverse individuals. Sample item for comfort with differences is “Getting to know someone of another race is generally an uncomfortable experience for me”. Higher scores indicate



higher levels of UDO whereas lower scores indicate lower levels of UDO. The M-GUDS demonstrated sound construct validity through associations with theoretically relevant variables (i.e., feminism, dogmatism, racial identity, healthy narcissism, and homophobia) (Miville et al., 1999). Among a racially diverse and educated sample, Fuertes and colleagues (2000) found that the MGUDS-S demonstrated similarities to the conceptual and psychometric properties of the MGUDS (Miville et al., 1999). Specifically, Fuertes and colleagues (2000) reported that the MGUDS-S demonstrated adequate reliability and sound construct validity. Of note, Fuertes (2000) did not report reliability coefficients and that there were higher factor loadings for the measure compared to the MGUD-S. Among a racially diverse and predominantly female sample of 246 participants, Kottke (2011) reported the MGUDS-S demonstrated adequate reliability. Specifically, the internal reliability coefficients for Diversity of Contact, Relativistic Appreciation, and Comfort with Differences were .85, .88, and .85, respectively. Of note, Kottke (2011) did not examine the construct validity of the measure. Within other studies, the MGUDS-S demonstrated sound construct validity (Han & Pistole, 2007; Poteat & Spanierman, 2010; Sawyerr et al., 2005). For my sample, the internal reliability was .66.

### **Quantitative Data Analysis**

The quantitative data was screened for univariate and multivariate outliers and missing cases. Assumptions of linearity, multicollinearity, heterogeneity of variance, and normality were conducted. Hypotheses were tested via path analysis using the statistical platform R (R Core Team, 2020). Initial scale and data evaluation incorporated the MVN (Korkmaz et al., 2014), psych (Revelle, 2020), pastecs (Grosjean & Ibanez, 2018), and

boot (Canty & Ripley, 2020) packages. Data estimation and model analyses was conducted using the lavaan package (Rosseel, 2012).

### **Qualitative Research Design**

Critical feminist theory underpinned the current study's qualitative research design (i.e., approach, collection, analysis, and data interpretation). While critical theory assumes knowledge is constructed, it posits this knowledge is mediated by power structures and relations within sociopolitical and historical context. Consequently, within this theory, oppression and power characterize reality (Kincheleo & McLauren, 2011; Morrow, 2007; Ponterotto, 2005; Ponterotto, 2010). Critical theory emphasizes a dialectical interaction that leads to emancipation from oppression and equitable society through informed consciousness (Ponterotto, 2007). Similarly to critical theory, feminist theory assumes the centrality of power structures that shape knowledge that is constructed. As such, critical feminist theory provides insight to the lived experiences through identifying and challenging these experiences with a gendered, raced, and sexed lens (Fisher, 2000; Shabot, 2018). Phenomenology seeks to understand the perceptions and understandings of specific lived experiences. Consistent with a critical feminist lens, the principal investigator (PI) implemented phenomenological design to analyze and interpret the data to allow the PI to better understand the lived experiences of veg\*ns through the participants' subjective experiences (Davis, 2019). A critical phenomenological design was used to identify common meanings in the shared experiences with stigma amongst veg\*ns and, simultaneously, honor how structural

power shapes their worldview as well as the voices of participants (Guenther, 2019; Ponterotto, 2005).

The PI was a doctoral candidate in counseling psychology and cis-identified Black female vegan with low middle class and first-generation background and transitioning to upper middle-class lifestyle. The PI was raised in an omnivorous Black two-parent household and lived in a low middle class to working class and predominantly Black community whose main access to veg\*n items and produce were structurally limited. As a vegan of four years, the PI's primary motivation emerged as a rejection of exploitation of (non)humans and the environment and these continue to be her motivation for practice. The PI endorses desire for (non)human liberation and intersectional veganism as challenges to the interconnected axes of power that simultaneously structure and maintain (non)human oppression. The PI acknowledges and appreciates the privileged identities that provide access to practice veganism in the way she wishes. Previously, the PI participated in qualitative studies using a critical phenomenological framework to center experiences of marginalized groups (i.e., Black and indigenous people of color (BIPOC)) and quantitative research concerned with minority stress of BIPOC and Black American women. Given her diverse set of identities, the PI is aware that the participants will have a unique experience in that they will value their veg\*n identity along with their other sets of marginalized identities. The PI has received negative messages and non-verbal reactions about her personal and collective vegan identity from family, peers, and those relevant for disclosure (i.e., restaurants, doctors) upon her disclosure. With combination of privilege and marginalization, interactions with research participants are shaped by power. As such, with PI's power and marginalized

identities influence interactions with participants to where they may not have authentically represented themselves (i.e., censor or refrain certain thoughts) and fully share their experiences as veg\*ns with intersecting identities. Aware of potential for research bias and the diverse set of identities with multiple marginalized identities, the PI remained vigilant and reflective of this bias and experience through continual journaling and reflective discussions with her advisors and peer debriefer not associated with the project in order to remain open to the study's strengths, challenges, and experiences (Berger, 2015; Morrow, 2005). The peer debriefer, a Black cis-woman doctoral candidate and non-veg\*n familiar with stigma-related research and reviewing themes qualitative study that centered marginalized groups (i.e., Black U.S. Americans), reviewed project methodology and authors' themes in codebook (Morrow, 2005) and agreed with authors' methodology and interpretation of the data with no feedback about either of these.

### **Participants**

Participants were recruited through social media outlets and snowball sampling. Specifically, groups of social media outlets (i.e., Facebook and Reddit) and listservs specifically designed for participation by veg\*n adults were targeted. The PI interviewed enough participants until saturation, or redundancy where no new themes or information emerged, was reached under the consultation with her advisor. Collected information about participants included gender, socioeconomic status (SES), educational attainment, age, racial/ethnic identity, sexual orientation, (non)faith identity, and ability status (see Table 3). Additional information included questions about dietary and lifestyle habits and familial history of dietary patterns.

Initially, 97 respondents reported demographic information and veg\*n identification and expressed interest in participation. All interested respondents were contacted and those who responded were scheduled. The researcher continued to invite participants until saturation was reached. Namely, 16 were scheduled with 3 unable to attend their interview, resulting in a total of 13 individual interviews. Age ranged from 23 to 75 ( $M_{\text{age}} = 36.62$ ,  $SD = 14.16$ ). Among this sample, veg\*n practice ranged from 2 to 28 years. Participants identified as vegan ( $n = 5$ ), ovo-lacto vegetarian ( $n = 5$ ), and pescatarian ( $n = 3$ ). Majority of participants (69.2%) reported an omnivorous dietary pattern they were raised in whereas others reported other (15.9%), vegan (7.7%) and multiple (7.7%). Majority of participants identified as White (69.2%) with others that identified as Asian/Asian American/Pacific Islander (15.4%), Black/African American (7.7%), and biracial/multiracial (7.7%). Those who specified other or multiple dietary patterns raised in advised of religious practice and/or transition to veg\*n dietary patterns. Most participants identified as women (69.2%) whereas other participants identified as men (15.5%), trans men (7.7%) and gender non-binary (7.7%). Majority of participants identified as heterosexual/straight (53.8%) whereas others identified as bisexual (30.8%) and pansexual (15.4%). Our sample was highly educated such that educational experience included a graduate degree or some graduate training (53.9%), undergraduate degree (38.5%), or some college (7.7%). All of the participants identified as financially independent and most earned \$33,000 or more annually (69.3%). Christianity or Christian variants (i.e., Christian, Catholicism, and Protestantism; 46.2%) was the most reported faith whereas atheism was the most commonly reported nonfaith, followed by Judaism (7.7%), no reported faith (7.7%), and agnosticism (7.7%). A small portion (30.8%) of our

participants endorsed living with a sensory, physical, hearing, vision, or psychological-related impairment.

### **Procedures**

Adults that identified as a U.S. adult or veg\*n were recruited through social media and listservs. Participants responded to a “yes/no” question inquiring if they reside in the U.S., were 18 years of age or older and identified as a vegan or vegetarian. Those who selected “yes” continued to a demographic survey where they specified their identities, provided details about their veg\*n identities, and indicated their interest in participating in an interview about their veg\*n identity. The researcher contacted, scheduled, and interviewed interested respondents for individual interviews. Respondents were asked to provide a pseudonym, email address and phone number for scheduling. As participant anonymity is researcher’s ethical responsibility (APA Code of Ethics, 2010), pseudonyms were utilized to preserve anonymity at all stages of research (e.g., recruitment, data collection and analysis, reporting and publishing findings) (Creswell, 2013). The researcher continued to contact and interview as many respondents in the order they responded as were necessary to achieve sufficient depth and meaningfulness in the data and until no new information was obtained (Morrow, 2005).

### **Sources of Data**

The PI conducted 45-to-60-minute individual interviews. Guided by critical feminist theory with a phenomenological approach and driven by the research questions (i.e., “How do veg\*ns understand their experience with anti-veg\*n stigmatization? How

do veg\*ns navigate this experience?’’), the semi-structured interviews consisted of 10 open-ended questions (see Appendix F) that inquired about the lived experiences of participants via Zoom. The questions were developed based upon relevant literature (veg\*n, UDO, and CSI scholarship). these questions were global and few in quantity, so that in-depth data was provided. Field notes were taken during and immediately after the interviews to explore reflective and descriptive data. Specifically, these notes assisted the PI through exploration of the context of participants’ lived experiences and examine similarities and differences in these lived experiences. All interviews were conducted via Zoom and recorded with Zoom’s recording feature. Six interviews were transcribed by the PI whereas the remaining seven interviews were transcribed by Rev.com, an online language analysis software. The recordings and interviews were stored on an encrypted jumpdrive.

### **Qualitative Data Analysis**

All interviews were transcribed and uploaded to NVivo V. 12 for analysis. In the first stage, the PI immersed herself in the data by engaging in active reading of the transcriptions and review audio and video recordings and field notes. Consistent with phenomenology, the PI engaged in bracketing, the suspension of researcher expectations to understand the participants’ story for the purpose of organizing the meaning as a whole (Hycner, 1985). The PI kept an analytic journal that contains theoretical and analytic memos. The PI also processed the experience of and reactions to collecting data with her dissertation chair not associated with qualitative interpretation. In the second stage, the PI reviewed the units of meaning and narrowed codes in similarity of meaning through integration and avoiding redundancies. The codes were organized into common themes

and relevance to the research questions. The PI re-read all the transcriptions to ensure that they fit the data. The codes not relevant to the research questions were eliminated (Hycner, 1985). In the third stage, the PI and her dissertation chair developed the final codebook with the clusters of meanings organized under the themes. The themes were guided by the total number of times that the code was used and the number of interviews a certain code appeared. If applicable, remaining themes and subthemes were named. The PI reviewed the themes and subthemes with the dissertation chair not associated with the qualitative interpretation and analysis to identify discrepant findings. The PI and dissertation chair reviewed and reached consensus about themes and subthemes. In noted disagreements about themes, the PI and dissertation chair engaged in reflective conversations about the nature of the theme wherein the PI facilitated this conversation with her knowledge from relevant scholarship (i.e., veg\*n literature) and lived experiences. The peer debriefer and PI reviewed, engaged in reflective conversations about, and agreed upon the codebook. (Morrow, 2005).

### **Integration Phase**

Following independent analyses, the PI sought to integrate, or merge the quantitative and qualitative data in the interest to address the drawbacks of both data (Creswell and Clark, 2017). With integration, the fit of data interpretation, or the degree of convergence of quantitative and qualitative findings, can result in three outcomes: (1) confirmation, or how the findings confirm one another that results in similar conclusions, increasing credibility; (2) expansion, or how the two sources of findings diverge from one another and expand upon the phenomenon studied through examinations of different aspects of the phenomenon; (3) discordance, or how the findings are incongruent or



disagree with one another. The PI engaged in a phase of integration (i.e, merging) in the interest of expanding upon interpretation of the strength and nature of the associations examined (Fetters et al., 2013). The PI compared the two results to obtain a complete understanding of and validate data on stigmatization towards veg\*ns. Specifically, the PI compared and examined the degree to which the results converged and diverged. The PI identified common concepts across both sets of data. Once the PI identified these concepts, the PI created a joint display table comprised of two results together. The results of the tables were compared in which the ways they confirmed, disconfirmed, or expanded each other. If the results disconfirmed each other, the PI engaged in additional strategies (i.e., literature search) to understand this evidence. Of note, the PI actively sought to balance the integration of qualitative and quantitative findings, so that one set of findings will not be privileged over the other (Hesse-Biber, 2010).

## CHAPTER 3

### RESULTS

#### Quantitative Results

Participants missing 20% or more of data were excluded from the study, resulting in 165 participants. Prior to primary analysis, the data was evaluated for multivariate and univariate normality. Mardia skewness (206.20,  $p < .001$ ) and Mardia kurtosis (17.22,  $p < .001$ ) suggested that the data were non-normal in distribution. Shapiro-Wilk tests evaluated univariate normality of each and evidenced that attitudes towards vegetarians ( $W = .97, p < .001$ ), attitudes towards vegans ( $W = .97, p < .001$ ), multicultural attitudes ( $W = .96, p < .001$ ), and outgroup regard ( $W = .96, p < .001$ ) were non-normal in distribution. Data was screened for univariate outliers through boxplots and influential cases. At least two cases were identified as univariate outliers. Data was screened for multivariate outliers via Mahalanobis distance calculations (Tabachnick & Fidell, 2013); five were identified. However, due to negligible deviation, all outliers remained in the final analysis (Bakker & Wicherts, 2014; Leys et al., 2019). A series of tests examined the data for potential issues with multicollinearity, and there were no issues observed among variables in the quantitative portion of the study. Bivariate correlations were generated for all variables using pairwise deletion to provide additional exploration of multicollinearity (see Table 2). Variables were also evaluated for linearity, and it was

found that linearity was not met for the association between attitudes towards vegetarians and multicultural attitudes ( $F = .325, n.s.$ ).

Little's test of missing completely at random revealed 6 patterns of missingness with percentages of missingness ranging from 3.0% to 4.2%. Little's test indicated that patterns of missingness were consistent with MCAR data ( $\chi^2(13) = 11.71, n.s.$ ). The primary analysis is a path analysis wherein multiple models were generating beginning with a saturated model. A saturated model was created to simultaneously explore hypothesized relationships between outgroup regard, attitudes towards veg\*ns, and multicultural attitudes. To account for missing data, full-information maximum likelihood (FIML) was used for case-wise estimation (Schlomer et al., 2010). Further, to address for any impact of the observed non-normality, robust maximum likelihood estimation was implemented (Curran et al., 1996). Further, as the association between attitudes towards vegetarians and multicultural attitudes evidenced non-linearity, this was not included in the initial model.

As bivariate correlations evidenced strong correlations between attitudes towards vegetarians and vegans, covariance among attitudes towards vegetarians and vegans were modeled. As the initial model was just-identified, fit statistics were not interpreted. With regard to the model for vegetarians, the predictive relationship that was modeled included the association relationship between outgroup regard and multicultural attitudes with the second predictive relationship between outgroup regard and attitudes towards vegetarians. With regard to vegans, the predictive relationships that were modeled included the relationship between outgroup regard, multicultural attitudes and attitudes towards vegans. Additionally, the relationship between multicultural attitudes and

attitudes towards vegans were modeled in the relationship between outgroup regard and attitudes towards vegans. Contrary to hypothesis one, multicultural attitudes ( $\beta = -.101$ , *n.s.*) was not significantly associated with outgroup regard. Partially supporting hypothesis two, evaluation of outgroup regard indicated a significant, and unexpectedly, negative association with attitudes towards vegetarians ( $\beta = -.766$ ,  $p < .01$ ) and attitudes towards vegans ( $\beta = -.521$ ,  $p < .01$ ). Fully supporting hypothesis three, evaluation of multicultural attitudes indicated a significant and negative association with attitudes towards vegans ( $\beta = -.434$ ,  $p < .01$ ). The estimated covariance between attitudes towards vegetarians and vegans were .754 and significant ( $p < .01$ ).

A more parsimonious model ( $df = 2$ ) was then created (see Figure 1) where statistically significant associations from the initial model were retained. Robust estimates for indices of comparative fit (CFI) and model parsimony (RMSEA), as well as an alternative index of absolute fit (SRMR), were calculated and reported in attempt to verify the findings of the Chi-square test, which can be biased by limited sample size. Good fit cut-off values for these fit metrics were CFI  $> .950$ , RMSEA  $< .06$ , and SRMR  $< .08$  (Hu & Bentler, 1999). The final model evidenced excellent fit ( $\chi^2(2) = 3.010$ ,  $p = .222$ , CFI = .994, RMSEA = .055(.000, .174), SRMR = .034).

Insert Figure 1 about here

Partially supporting hypotheses two, the final model displayed significant moderate negative association between attitudes towards vegans and UDO ( $\beta = -0.437$ ,  $p < .001$ ) such that lower levels of multicultural attitudes predicted with higher levels of negative attitudes towards vegans. Contrary to hypotheses two, the retained association between attitudes towards vegans and outgroup regard predicted a significant strong,

negative association ( $\beta = -0.521, p < .05$ ). Similarly, the association between attitudes towards vegetarians and outgroup regard predicted a significant strong, negative association ( $\beta = -.766, p < .001$ ). Notably, higher levels of negative feelings towards those who follow a different dietary pattern predicted lower levels of positive attitudes towards vegetarians and vegans. In order to test hypothesis four, the nonsignificant relationship between multicultural attitudes and outgroup regard was retained.

The mediation analysis evidenced non-significant indirect effect of multicultural attitudes on attitudes towards vegans through outgroup regard ( $\beta = .043, n.s.$ ) and direct effect of outgroup regard on attitudes towards vegans ( $\beta = .072, n.s.$ ). Further, the total effect of the model was non-significant ( $\beta = .115, n.s.$ ). In all, hypothesis four was not supported.

### **Qualitative Results**

Among 13 participants, several broad themes emerged from the data and are explored in the following order: 1) The Veg\*n Experience, 2) Contextual Concealment and Outness, 3) Anti-Veg\*n Messages and Discrimination, 4) Navigation Strategies, and 5) Centrality of Nonhuman Consumption and Related-Inequalities.

#### ***The Veg\*n Experience***

Participants described their experience as veg\*ns within society. Broadly, this experience encapsulated their progression into their veg\*n identity and the intersection of this identity with other identities. Additionally, how meat and ethics facilitated participants' experience as veg\*ns.

*Veg\*n Identity Development.* All participants described progression into their veg\*n identity (see Figure 2). Participants in the present study began life oriented towards meat consumption and nonhuman animal use and described some contact with veg\*nism in varied timeframes of their lives (e.g., childhood, adolescence, or adulthood). Participants discussed multiple sources of veg\*nism. Commonly, close interpersonal interactions with veg\*ns who were family (i.e., “parents”, “aunts”), “friends,” or known acquaintances (i.e., “field instructor” or “roommate”) (n = 8) served as a source of contact. Participants indirectly learned of the impact of “factory farming” through efforts to discredit veg\*nism as “silly”. Close interactions and experiential contact with nonhuman animals (n = 7) oriented participants towards veg\*nism. Arlene shared that she had a “parakeet” and a “cat” whereas Eli described their witness of a “religious ritual” that required the slaughter of a “goat” or “cow”. Less commonly, veg\*ns had “exposure” to the treatment of nonhuman animals through media sources (i.e., “videos from PETA”) (n = 2). Eating habits that resulted in “flirtations” with various eating styles (i.e., “flexitarianism”) or “dabbling” in veg\*nism (i.e., “veganism” or “pescatarianism”) (n = 4) familiarized participants to the practice. Work where veg\*nism was common within the organization (“PETA”) or business (e.g., “soup kitchen” or “vegan café”) also served as sources of contact with veg\*nism (n = 3). Contact with health through problems (“arthritis”, “congestive heart failure,” “fibromyalgia”, or “family history of heart problems”), vicarious witness of death from health problems (“heart attack”), working in “fitness” or “weight loss,” or recommendations from health professionals (n = 4) oriented towards veg\*nism. Less common were financial advantages where veg\*n food was “cheap” (n = 1) or educational content (i.e., “courses”) (n = 1) that discussed “animal

agriculture” and “harming the environment” served as a source of contact. Despite contact with various sources, some participants did not engage in veg\*n practice. Emelie described her thoughts about her prior contact with veg\*nism, stating, “...I'd...heard about it but... I was the kind of person to be like, ‘Oh, I... You know, I love cows but I love to eat them too’”.

Critical moments “solidified” motivation for veg\*n practice amongst these veg\*ns. Specifically, participants actively questioned their consumption of nonhuman animals through interactions with nonhuman animals ( $n = 3$ ) and peers and community ( $n = 4$ ), experiences with health-related conditions ( $n = 2$ ), educational content about the impact of meat consumption ( $n = 2$ ), and ethical questioning ( $n = 1$ ). Somewhat common, participants received validation either through community events (e.g., “festivals” or “potlucks”) that “celebrated” veg\*ns and shared resources about veg\*nism or amongst family. For example, Ellis shared, “There was a lot of trial and error...but it helped being cohesive as a family. I think that was really kinda the big thing. We were all in this together”. Family, for these participants, provided positive messages, especially if raised as vegan. For instance, Megan shared her experience:

I felt weird about the fact that I couldn't eat anymore of the food that the other kids were eating...I just remember that it felt weird and different and my mom when I told her about it but I think it's really good thing she....pack[ed] neat treats in my lunchbox, so...I was eating something better like a vegan treat. I never felt deprived, and she sort of set the standard that being vegan wasn't being deprived of things but that we were different and it's ok.

Contact with or love for nonhuman animals facilitated decisions for veg\*n practice where it “suddenly clicked” for participants with Arlene stating, “but when he [pet cat] died, I realized and I just thought to myself, I love animals, so why am I eating them? (laughs)”. In another instance, Mina described feeling “shocked” at her conclusion:

I had like this dream that I had to... kill a cat and I have several cats, so I was thinking like ‘That's horrible. I don't think I can do that’. But then the person in my dream so just imagine it was a chicken, because you eat chicken. I said, ‘Okay. I'll think of it as a chicken, but as I got up to the moment where I had to kill the cat like you know what I don't think I can do this to chicken either, and then I woke up and I realized like oh....I can't kill animals.

Coverage of factory farms and treatment of nonhuman animals facilitated a “loss of innocence” for Ruth, who stated, “This idea of just ... this is how the world is and I think this is how animals are treated and then suddenly you realize there's this whole system and you know what it's the feeling that nobody knows”. Health, for some participants, facilitated their critical moment. In reflection on their “psychological” health, Eli described how they were not wanting to consume “trauma and pain” and saw meat consumption as an “impediment” to their healing. In another instance, Michelle described it as “weird” where veg\*n food provided “energy” to engage in physical activity and “loved” how her body “rejected” nonhuman animal products (e.g., “chicken nugget”). Veg\*ns who described the impact of meat consumption focused on topics like “factory farming” and “deforestation” related to beef consumption with John being “shock[ed]” by this. For instance, Jeff shared his thoughts about a presentation he



observed, stating, “that [the presentation] got across the degree of cruelty involved in factory farming, um, and it also got across the idea of like this wasn't like a super unusual thing. Like... the idea of ...rare instance of some kind of horrible sadistic people are torturing animals at some factory farm or something.”

In one instance, ethical questioning emerged regarding “personal and...communal responsibility”. In their understanding of their health, Lily described how their ethics are not “worth their health,” stating, “And it's helped me to read the works ... and watch videos from environmentalist talking about...how ... it becomes an issue of personal responsibility versus communal responsibility”.

The process of “experimentation” and “transition” into veg\*nism occurred for participants where they “limited” or “stopped” consuming meat or dairy products (i.e., “milk”). In some cases, veg\*ns consumed “free range” or “wild game” meats or “wild caught fish” to avoid “factory farmed” products. Eli described their “flexitarianism” as means to eat within their budget while they transitioned to veganism. Learning about nutrition (“herbal teas,” and “alkaline diet”) or key figures in nutrition (i.e., “Dr. Sebi”) were less common. Following the transitions to veg\*n practice, participants either actively identified as veg\*n ( $n = 8$ ) or passively engaged in veg\*n practice ( $n = 4$ ).

Active veg\*nism was characterized by rejection of meat consumption and identification with veg\*n “lifestyle” such as specifying their identities such as “pescatarian”, “ovo-lacto vegetarian,” “plant based,” or “vegan”. Veg\*ns noted their experience in this transition as a “huge dynamic” or “protest”. Some veg\*ns noted “revulsions” to meat consumption where they were “behaviorally conditioned” or “turned off” by the act. In cases with no meat consumption (i.e., flu shot “made of egg”), veg\*ns

may feel “ill”. While some veg\*ns consumed seafood (“fish”) or by-products (“eggs”), this consumption was limited “a couple times a week”, especially among vegans, who described a sense of flexibility. Active veg\*nism included “multiple” motivations (i.e., “environment,” “health,” “ethical or moral,” “worker’s rights” or “animal rights”) that initiate and maintain veg\*n practice ( $n = 7$ ) with Megan stating, “I think for most people, it’s very complicated very multi-dimensional decision that they made it’s for any number of reasons”. Active veg\*nism was characterized as a culmination of life experiences, experimentations and transitions into veg\*n practice and motivations, and awareness of other veg\*n identifications (e.g., “whole food plant based,” “junk food,” or “oil free”). Additionally, active veg\*ns noted perceptions of “radicalized” and “aggressive” veg\*ns and observed “infighting”, “moraliz[ing]”, “judgement” of choices (e.g., “rid[ing] a horse”) and interpersonal relationships (e.g., “kiss a carnivore on the mouth”) within the veg\*n community with Jasmine stating, “We’re not doing it to fight to see who’s the better veg[\*]n”. In reference to the vegan community, at least one participant noted how this moralizations impacted her perceptions of herself as a “relaxed vegan”.

While all participants described active engagement and identification with their veg\*n identity, some participants described a passive engagement with veg\*n practice where the “label” or “concept” of veg\*nism was not apparent. Specifically, these participants were eating “vegetarian” or similar without intention due to the foods being “cheap”. In other cases, veg\*n practice was used as means to “restrict” eating. For instance, health concerns emerged amongst participants actively and passively practicing veg\*nism that resulted in inclusion of meat in their diet. There may have been physical health concerns about “nutrients”, hair and weight loss, “bags under eyes” and mental

health concerns such as “eating disorders,” “disordered eating,” or “restrictive behavior” that resulted in some meat consumption like “fish” or “chicken”. However, through contact and critical moments, participants became engaged in their veg\*n identity. In summary, veg\*n identity development involves complex interactions and the culmination of life experiences, motivations, and contact amongst our participants.

***Veg\*n at the Intersection.*** All of the veg\*ns in the present study described intersections with their veg\*n identity and other identities (e.g., race/ethnicity/documentation status, gender, sexuality, size, (non)faith, and socioeconomic status (SES)). More than half of the participants (n = 7) described how their (non)faith identities shaped their veg\*n identities, especially how they “think about things” related to veg\*nism. For veg\*ns of faith, religious practice “introduce[s]” veg\*ns into moral implications in meat consumption and shape their current practice and motivations as veg\*ns. For instance, Emelie described this impact of her Christian faith on veg\*n practice in that, “...we are called to not cause the suffering of others to the best extent that we can” with, similarly, Lily described how their faith “affirmed” desires for environmental protection and “do no harm”. Ellis detailed that her motivations to “do no harm to the environment” stemmed from Buddhist study and philosophy. In another case, veg\*ns of faith connected their practice to societal expectations of meat.

Like veg\*ns with faith, veg\*ns with nonfaith described how these identities facilitated their ethical questioning of meat consumption. For instance, Eli described their avoidance of nonhuman animal slaughter as a sign that they were “losing their faith,” stating, “I had the knife in my hand and I was supposed to do a sacrifice and I couldn't do it... I didn't feel like God was making me do it, it just didn't feel right anymore”. With an

“outsize[d]” number of veg\*ns in nonreligious communities, especially amongst atheists, veg\*ns with nonfaith noted “safety” and “comfort” in talking and to disagree[ing] about things” related to veg\*nism as it is “familiar”. Veg\*nism and morality, amongst these participants, shaped each other. Eli proposed this may be due to “examining morality” without faith “telling...what’s good and bad” and being “more likely to...look at different ethical arguments”.

Race, ethnicity, and documentation status intersected with veg\*n identity among some participants ( $n = 7$ ), leading to general benefits and challenges to veg\*n practice. For example, Arlene described how her upbringing in “New York” and her father’s status as an “immigrant” and “Jewish” influenced her openness to her experience, specifically with veg\*nism. Michelle described how her veg\*n practice (and identity) created “time” for her as an “older, black, female woman, a mom, ...a working woman” where she and her kids were “doing good” and in “better” health. While the intersections of race and veg\*n identity, this resulted in challenges for veg\*ns of color with Mina stating this as “pretty difficult”. Veg\*ns of color face unique challenges where culture may impede upon their veg\*n experience. Mina described her challenges in the intersection of her veg\*n and Korean identity:

But, in general, the food is very, very seafood heavy and even if you don't see the seafood it's, in like the stock or the broth, so in that way it's difficult like I can't really go to Korean like an authentic Korean restaurant and order anything really know that I think about it.

Veg\*ns with White and other privileged identities described awareness of how “sociopolitical” issues (e.g., “race”, “privilege, and “SES”) shape their veg\*n practice

and advocacy. Participants also discussed an awareness of “White veganism” with Ruth stating, “...As a white person even just saying like, ‘Go vegan’... I immediately recognized that's a very interesting thing...I’m telling you what to do”. Veg\*ns with White and woman identities described reactions (“fear”) to and understandings of being characterized as veg\*ns with Ellis stating, “If you think of the stereotype [of vegans], I am the stereotype”. Veg\*ns noted their privilege in making the “choice” to be and “afford[ing]” to be veg\*n with Lily stating, “...[A]nother part of my journey is realizing how much privilege it is to be able to make this choice, because I have options that I can eat”. These veg\*ns expanded on how they did not live near “food desert[s]” and had access to get veg\*n products through “transportation...money...full time job”. Veg\*ns with privileged identities sought to address their privilege in varied and individual ways. This included “try[ing] not to insert” and avoid “center[ing]” oneself in marginalized racial spaces, “amplify” marginalized voices (i.e., veg\*ns with marginalized racial identities). In another case, veg\*ns considered the impact of harm on others with Lily stating, “I see personal harm being done to myself and those who share my identity, then now I am asking, okay, well, what could that do to other people?”. Specific to anti-Whiteness, Ruth described her a dilemma in addressing privilege:

I used to follow a ton of like woke groups and people and a lot of times it’s just painful [be]cause you’ll be hearing...verbiage and rhetoric that's ... anti...Whiteness ...anti-colonialism everything and. I'm anti Whiteness and colonialism too or, I aspire to be but at the same time it's not always easy when were cut off from groups that are dialoguing in those ways it's not easy just to

change everything by yourself you know and you're seeing all this stuff and feel like you're part of the problem.

Gender, though less common, ( $n = 3$ ) intersected with veg\*n identity. In one instance, there were designated safe spaces for veg\*ns with specific genders, mainly for women. For example, specific spaces were “nice” where it was “open,” “supportive”, and “safe” for connections and “encourage[ment]” for conversations that were relevant to women and, consequently, to “not feel embarrassed”. Maxine described designated spaces for women veg\*ns as “nice,” “open,” “supportive,” and “safe” for connections and “encourage[ment]” to and ask “questions that apply ...to women and not feel embarrassed”. In another case, veg\*n men highlighted their treatment from men and women with John noting minimal “pushback” from women compared to men, whom were “confrontational” about his vegetarianism. Additionally, for one participant, they noted how their veg\*n identity and gender identity moved them to accept their “masculine” side and resist “toxic masculinity”.

Size, though less common, ( $n = 3$ ) intersected with veg\*n identity. Based upon participants’ sizes, non-veg\*ns assumed their motivations and experiences as veg\*ns, often focusing on health. Namely, Jasmine noted how others assumed “pain” as a motivation for her vegan practice due to her “plus”. In another instance, for Jeff, non-veg\*ns assumed he was a “marathon runner” due to him being “skinny”. In other cases, non-veg\*ns were curious about participants’ health experiences in weight loss with Michelle stating, ““...a lot of people were like, ‘Wait, wait, how'd she lose weight all the sudden? During the pandemic, you lost weight?’”. Jasmine described her experience with plus size women, stating, “...the women who do ask that question... they’re plus-size

themselves, so I think they identify with me in that way”. Geography, though rarely discussed, facilitated participants’ experience as veg\*ns. Arlene discussed how growing up in “New York” allowed her to be “tolerant”. In another instance, geographical locations such as “Los Angeles” were used to describe the presence of veg\*ns.

Taken as a whole, the veg\*n experience encompassed participants’ understanding of their progression towards their veg\*n identity and its intersection with others that shaped their experience with anti-veg\*n stigmatization.

### ***Contextual Concealment and Outness***

All participants recounted disclosure and concealment of their veg\*n identity where contextual situations and reactions to disclosure undergirded these experiences. For most participants ( $n = 6$ ), disclosure and outness concerned “food” in social settings such as “lunch[es]” or “grocery store[s]” with John stating, “...if you never ate a meal with me, you’d probably never know that I was...vegetarian”. For participants, though they have not disclosed their veg\*n identities, (non)veg\*ns inquired about their veg\*n identities through their veg\*n item or meals where “there’s a lot of vegetables...and no meat”. Participants, in group settings, described having to disclose where they were “sharing food as a group,” “agree[ing]...what to eat in advance,” or “forced” to disclose to “get fed,” especially with smaller settings (e.g., “small college) where they “can’t conceal” their veg\*n identity. Food choices serve as a signifier of being out as a veg\*n without disclosure whereas disclosure of veg\*n identity occurs in group settings or settings with little to no veg\*n foods. In “close” relationships (e.g., “friends,” “family,” or “prospectives...like dating”), online groups (e.g., “veg[\*]n Facebook groups”), or occupational settings, disclosure was intentional ( $n = 4$ ). With disclosure in occupational

settings, participants either had the opportunity to disclose their identities based upon their time there with Jasmine stating, “Certain jobs I didn’t or, if I was there for a longer time, I did”. In other cases, disclosure occurred during duties in “conversation” with others, especially when “stuck” with them.

Participants disclosed in “relevant” situations ( $n = 4$ ) such as food orders for “work” and “restaurant” or in conversations when asked “directly” with Jasmine stating, “...if it’s relevant or comes in a conversation I bring it up otherwise I don’t”. In other instances, disclosure occurred in situations where “if it comes up, it comes up” and “it’s no secret” ( $n = 3$ ) within casual settings such as “go[ing] out for coffee” or “go[ing] out to eat”. Such disclosure may occur within occupational settings with Emelie stating, “I work as a personal trainer and nutrition coach, so people kind of know that I’m a vegan because I’ll bring it up if they have questions about veganism”.

In a few stories, there is no “need to conceal” their veg\*n identity ( $n = 3$ ). Though disclosure may not occur in casual conversation with a “stranger”, participants disclose their identity without feeling “shame” or “...hesitant to tell anybody”. Four veg\*ns in the study considered their safety for disclosure or concealment with Eli stating, “You don’t who you’re talking to always”. Megan discussed her experience:

But it’s not something I’m really all that open about just because from strangers from people I don’t know that...it tends to be kind of a fraught topic that it is not something that I want to argue with or I defend myself every single conversation with someone new I met, especially if we’re not gonna be...if it would be a passing acquaintance.



Safety also concerned personal life stories with Eli stating, “Like sometimes I don't want to, and especially because it's such a trauma links thing or healing from trauma link thing, I don't necessarily want to tell everyone my back story”. In another instance, previous adverse experience or statements (i.e., “jokes”) may dissuade disclosure with Maxine stating, “I was just like you're an asshole for saying that.... like I've heard that joke so many times, so now I don't just like come out”. Two participants exercised caution where they may wait to disclose “depend[ing] on the individual”. They also would test others. For instance, Maxine shared that she “see[s] where they are in that conversation and then provide my insight”.

Though less common, outing by a close relative (e.g., “dad”) or a peer ( $n = 2$ ) occurred. John described his outing, stating, “My dad really likes to just tell people I, I don't eat meat”. Lily also described a similar instance where “at college, when somebody would be like... ‘Oh, she doesn't eat that’”. Only one participant recalled an instance where they had an “opportunity to disclose” her veg\*n identity which she described as “nice”. Overall, participants described contextual factors (food, groups, safety, relevancy) that influences their disclosure or concealment of their veg\*n identity. Further, while some participants recalled experiences disclosing their identity, a few participants described instances where they were “outed” by others or given few opportunities to disclose on their own terms.

***Reactions to Disclosure.*** The majority of participants ( $n = 12$ ) recalled positive, skeptical, and/or complex messages and reactions from others (family, friends, co-workers, non-veg\*ns, and other veg\*ns) upon disclosure of their veg\*n identity. Positive

messages included “support,” “understanding,” “accommodation” or acceptance such as “live and let live”, especially from family members and romantic partners (n = 9). With positive messages and reactions, participants advised that veg\*nism is adopted or accommodated in family settings with Lily stating, “it's just kind of part of my family's culture”. Though for some this may be limited, family members may attempt to accommodate them. For example, John shared his experience, stating, “he [my father] doesn't know a lot of vegetarian, vegan meals. And so he's been trying though, he's been trying to make some”. These messages may be furthered by veg\*ns in the family with Eli stating, “...my family, like I said, there's plenty of vegetarians there, so they don't find it as weird as they might”. Skeptical reactions (n = 5) included instances where others “don't understand it”, thought it was “weird,” or questioned veg\*n practice specifically amongst family. Ellis stated, “My family in Texas...most of 'em think I'm nuts, 'cause it's Texas”. Michelle recalled when family members would question her veg\*n practice, stating, “We used to have a lot of conversations, and they go, ‘Why are you studying herbs? Why are you reading this book? Why are you looking at that?’”

On the other hand, participants described complex reactions to their disclosure (n = 7). “Curiosity” emerged as a reaction (n = 5) and participants shared stories where they received “questions” about their practice and veg\*n identity with Michelle describing her experience:

It was one of those things where I don't necessary always have to talk about it, I can kind of, they can kind of see it and then as they go, ‘Wait, how'd you do that?’ Or, ‘How'd you work on that?’

Defensive reactions ( $n = 4$ ) often occurred amongst others, especially amongst non-veg\*n, with Jeff stating, “Like, mentioning that, you know, vegetarian, vegan, whatever and someone got defensive even though they haven't been at all critical”. Instances with defensive reactions included “judge[ing]” or disclosure statements about meat consumption where non-veg\*ns may note they “don’t think about where [their] meat comes from” or “kill[ing] my own food...[they] couldn’t eat meat”. Guilt reactions ( $n = 3$ ) emerged where peers were “bothered” or “concerned” when “eating out” due to their concerns for participants when “eating out” with Megan describing “tension” where “other people felt bad for enjoying what they wanted”. On the other hand, guilt reactions emerged in the context of anti-veg\*n messages with Eli stating, “They're just saying it because they're feeling guilty or like weird about it. They think that your choices are an indictment on theirs, which maybe they are”.

For a few participants, “surprised” reactions among non-veg\*ns occurred in disclosure of veg\*n identity or learning about diversity and “good taste” of veg\*n foods. Alternatively, other reactions were neutral ( $n = 2$ ) where peers were “indifferent” or “apathetic” to disclosure. Alternatively, these reactions occurred in context of participants’ receiving anti-veg\*n messages with Eli stating, “People who know me and know the deeper reasons, like, they're like, ‘Well, you know, you don't look down on people who eat meat’”. Disgust ( $n = 1$ ) was a less common reaction that centered on rejection of veg\*n food and/or practice with Ellis stating, “My family is all like, ‘pfft, get out of here’”.

**Costs.** The majority of participants ( $n = 11$ ) shared drawbacks associated with veg\*n practice. A handful of participants ( $n = 4$ ) described “geographic locations”

where there are “little options” and “traveling” as impediments. While participants imagined “how hard” veg\*n practice was previously, they described contemporary challenges like “traveling” as “hard” and “small towns” in the “South,” a region described as the “worst” with Ellis stating, “I've basically said, ‘You know, if we'd stayed in Texas, I don't know how vegan or vegetarian I would be’”. For Emelie, in transition from a Midwestern city (“Chicago”) to a southern state (i.e., “Texas”), there was a “difference of availability” for vegan choices in restaurants and home. Altogether, geographic locations and traveling “constrain[ed]” veg\*n practice and identity.

Lack of access to veg\*n products, especially for vegan products, was discussed amongst a handful of participants ( $n = 4$ ) with John stating, “It’s hard to be...vegan whenever there’s...little options” and Eli stating, “...[W]hen you're vegetarian, it's really easy to just eat a lot of cheese and bread”. Finances also played a role in access to these products. With the lack of “fake meats” in the past and minimal demand for veg\*n foods in some areas, veg\*n foods (e.g., “Impossible meat”) “cost a little bit more”, resulting in many people unable to “afford” these products. Though veg\*n diets are alluded to as cheap, it may not be sustainable to live on veg\*n products such as “ramen noodles”. In locations with “vegetarian options,” or products with “cheese...dairy,” veg\*ns attempting to further limit or eschew consumption of nonhuman animal based products have a “hard” time, especially if they “attempt to be...vegan”.

Health concerns such as allergies to “nuts” or physical health conditions (e.g., “bone density”, “thyroid issues”, “Krohn’s Disease”) impeded upon veg\*n practice where participants either avoided nut or soy-based based products or received advice for the “best diet” that included non-veg\*n products (e.g., “bone broth”) ( $n = 9$ ). Additionally,

veg\*ns that struggle with disordered eating or “eating disorders” noted other health (e.g., “overconsumption”, “restrictive eating”) that shaped their struggles. Despite a preference for and a growing number of vegan doctors for specific medical procedures (e.g., “blood work”), these doctors are few compared to traditional doctors, who may advise non-veg\*n products to which Ruth described as “wild as a vegetarian”. Less common costs included social media ( $n = 3$ ), faith ( $n = 2$ ), cross contamination ( $n = 1$ ), and restaurants and social outings ( $n = 1$ ). With social media, participants express difficulty within “face to face” interactions where non-veg\*ns “plot” them as the “radical veg[\*]n” seen on “television” or within “online interactions”. Though veg\*nism may not be a “religious thing,” a couple of participants alluded to a perceived lack of safety to “disagree” in faith spaces. Additionally, “fear” of cross-contamination or products “accidentally” put in foods within businesses (i.e., “restaurants that aren’t 100% vegan”) and at family gatherings was cited as an impediment to veg\*n practice, resulting in “worry.” Drawbacks to veg\*n practice varied amongst veg\*ns. While health conditions, geographic locations, and lack of access to veg\*n resources limited veg\*ns ability to practice veg\*nism, other drawbacks such as social media, lack of perceived safety in faith spaces, and fear of cross contamination obstructed their engagement in social outings, especially in the context of food.

Similarly with drawbacks associated with veg\*n practice, a majority of participants ( $n = 12$ ) described negative consequences associated with outness as veg\*ns with John stating, “It’s tough.” Namely, participants described isolation in being “the only” veg\*n or having “no one [veg\*n]” in social contexts (e.g., “group events”, “college”, or “work”) and relationships (i.e., “family” or “friends”), resulting in feeling

like “the odd one out.” For instance, conversations of veg\*n concepts (e.g., nonhuman animal cruelty) may be desired, but may not be feasible with Ruth stating, “I want to have a deep emotional dive into being like showing them pictures of all these terrible things but it's never appropriate obviously”. Megan described feeling “isolated” in growing up as a veg\*n:

Because I was vegan so young like... it has made some things difficult because it was always something that isolated me just a little bit. I definitely would not compare that to like other ways a person can be marginalized. It would just like be like a thin slice of that.

With outness, veg\*ns, specifically amongst veg\*n women, may experience relational difficulties where it may be “limiting” to date. Maxine noted her observation, stating, “I am part of a lot of women groups and stuff like that where they are trying to find a vegan guys apparently really hard for them, because they're that's a deal breaker for them”. Ruth shared her thoughts in that she does not “want to date someone who eats animals”. In essence, with minimal presence of veg\*ns and veg\*n community, participants experienced a lack of connection and inability to relate to non-veg\*ns, especially within interpersonal contexts such as dating and friendships. Anticipated stigma and pushback related to veg\*n outness emerged for a few participants ( $n = 4$ ) with Ruth stating, “I just don't think people like hearing that you are vegetarian”. With anticipation of stigma in “choosing to be veg[\*]n,” participants were mindful of “language” and their veg\*n identity, specifically within Southern regions described to be “less accepting of that [veg\*nism]”. Anticipated stigma also occurred in encounters with other veg\*ns, especially those who were “environmental” and noted nonhuman animal

consumption as “detrimental,” with Eli stating, “I understand that, but I don't wanna necessarily argue about it (laughs)”.

For a few participants, feelings of inauthenticity was accompanied by concealment ( $n = 3$ ) which was described as “negating” and “less affirming”. Though not on the same level “socially,” Eli alluded the concealment of their pescatarian identity to concealment of their sexual minority identity where they “avoid conversations” but it does not “feel affirming...or being fully welcomed for you are”. In one way, concealment may facilitate regret for non-disclosure of veg\*n identity where participants may miss opportunities to “bond” with others, especially other veg\*ns “sooner”.

Veg\*ns attempting to further limit or fully eschew nonhuman animal consumption may feel “shameful” and “weak” in consuming dairy products (e.g., cheese), especially when eating out with family. This may be especially difficult for vegans. Though aware that “nobody’s perfect,” Maxine recalled feeling “guilty” and “sham” in her vegan identity in consuming by-products. In essence, feelings of inauthenticity, guilt, and shame emerged from consumption of nonhuman animal products among veg\*ns, especially those who actively try to eschew these products and/or conceal their veg\*n identity.

Unwanted messages from non-veg\*ns (e.g., “opinions”) accompanied veg\*n outness ( $n = 2$ ) where veg\*ns may be a soundboard for non-veg\*ns with Eli stating, “You can...never said a word to an Omni [non-veg\*n] and they have said all kinds of ridiculous things to you.” These messages may emerge for participants not perceived as “annoying” or “forceful” veg\*ns where they receive “opinions skewed...to [their] face”. For participants raised as veg\*ns, pseudo-rejections accompanied their outness where non-veg\*ns may reject their veg\*n identity through actions (“sneak non-veg\*n food”) or

discredit of veg\*ns (“making wrong decision”) ( $n = 2$ ). Less commonly, veg\*ns may be held with little to no accountability ( $n = 1$ ) for consumption of nonhuman animal product where “nobody’s gonna say anything” as it is “normal way of life.” Veg\*ns described varied negative consequences and complex emotions associated with outness of their veg\*n identities. While it was common for veg\*ns to experience isolation and anticipated stigma associated with and inauthenticity via concealment of their veg\*n identities and consumption of non-veg\*n products, veg\*ns also experienced unwanted messages and discrediting from non-veg\*ns.

**Benefits.** The majority of participants ( $n = 12$ ) described varied benefits of veg\*n practice on the environment, personal health and skills, and nonhuman animal welfare. Specifically, more than half of the participants ( $n = 7$ ) described benefits from veg\*n practice associated with “less harm” to themselves and the “environment,” less “contribution to animal welfare issues,” and “feel[ing] more at peace...a general good feeling” and “healthier” with their eating habits.

Veg\*n practice benefited participants through “improved” physical health where health conditions “went away” and less pain. Additionally, participants noted that veg\*nism “helped” their mental health and “happiness” ( $n = 2$ ) where their “mind is clear” and feel “good” and no longer “guilty” about their dietary habits. Further, participants described being “cognizant” and “more aware” of their lifestyle and feelings – of themselves and others ( $n = 5$ ). This included reflection of thoughts of previous non-veg\*n practice with Jasmine stating, “I used to think like [that] before I was a vegetarian”. With awareness of how “hard” or “not... very important” veg\*n practice can be for others, participants were “nonjudgmental” in their interactions with others.



Additionally, awareness of sociopolitical issues (i.e., “food justice,” “class issues,” and “diet culture”) and structural inequalities (n = 5) that implicated humans shaped participants approach to veg\*n practice and advocacy as a “journey”. For instance, in acknowledging how “environmental harm” from “big corporations” and structural impediments (e.g., “food deserts”) shape access and resources to “fresh produce” as well as “[personal] responsibility” and “option[s]” to be veg\*n, participants noted their approach in to be “thoughtful” to not put “everybody under a microscope,” especially those who were “poor. This included awareness about needs for food with one participant stating, “If you're poor and you need, and you have \$5, you need calorie dense food. What are you gonna get? You're going to get a Big Mac meal for \$5”. In addition to respecting “cultural norms,” Ellis also noted learning “how colonized our language is... Everything gets filtered through this lens of... racism”. Identifying structural impediments, Michelle noted importance about learning farming practices, stating:

Because some cultures lack that information or they go to the school and they, you know, grow their farm, I was like yeah, we need to start teaching that in schools because having your own food not only sustains you and your family but it could definitely sustain a community.

Other less discussed benefits included “gaining time” for more activities (e.g., “exercise” or “side hustles”), “environment[al] pieces,” growth in skills such as being “adventurous...ambitious in the kitchen”, “eat well...be within budget” or “save[d] a buck or two”.

A majority of participants (n = 10) described benefits with veg\*n identification where Emelie stated, “It [veg\*nism] made me a better person”. Veg\*n identity

orchestrated connections with (non)veg\*ns and those with “restricted diets” especially where food served as a “point of connection” with Megan stating, “[It’s] really easy to make friends with other vegans for that reason.” Connections with other veg\*ns, especially through “Facebook”, provided unique benefits for veg\*ns where it facilitated further confidence where veg\*ns noted they could “stick to it [veg\*n practice],” “laugh,” share recipes,” and have an “ally in office potlucks.”

Veg\*n identities operated as access to a community (n = 5), especially through social media platforms (i.e., “Instagram” and “Facebook”) and organizational settings (i.e., “PETA). This access provided participants opportunities to make friends in the “vegan vegetarian spectrum” or those who don’t “eat very much meat,” with Ellis stating, “Two of my good friends online who are also plant-based are African American women...my age, and, a lot of the people I follow on Instagram for recipes are African American”. Specific spaces with “vegan central” provided vegan participants with access to culture with Megan, for instance, observed in where “pretty much everyone was vegan” in a former workplace. While this was beneficial for participants, there were some noted appreciations for other veg\*ns who were “happy to find,” especially within “face to face” settings. Because of their outness with their veg\*n identity, participants described a sense of safety with “no worry” about cross-contamination with non-veg\*n foods (n = 3) to which participants observed as “nice”. This included accommodations for participants and friends with dietary needs within family and interpersonal settings that are “quick to...not cross contaminate”. Positive influence on others due to veg\*n identification (n = 3) was described as a benefit. Namely, their veg\*n outness, complemented with their veg\*n practice, “encouraged” peers and family “reduced meat intake” or consider the

diversity of foods with Michelle stating, “I have had a lot of friends say, ‘Well you did that and now I'm thinking about how I can do this,’ and ...so I think I am influencing them”. Similarly, Lily shared instance of positive influence on their siblings, who eat new foods in watching them eat veg\*n foods.

John voiced the importance in influencing others about their consumption habits, stating, “I think it's important to display to people that you can, uh, can maintain a normal life and not eat meat, right?” Overall, participants discussed their insights to complex benefits associated the veg\*n practice and identification. It was common for veg\*ns to describe positive aspects of their outness with their veg\*n identity. Participants shared how their veg\*n identity facilitated their connections, resulting in “bonds” and “significant interactions” with veg\*ns and non-veg\*ns. Taken as a whole, majority of participants described a multitude of ways in veg\*n practice benefitted their personal health and interpersonal interactions and expanded their skillset and outness as veg\*ns deepened their social connections with others, especially other veg\*ns.

### ***Anti-Veg\*n Messages and Discrimination***

All participants described numerous overt and covert experiences of anti-veg\*n messages (e.g., jokes, microaggressions, and stereotypes) and discriminations in varied contexts (e.g., “in person”, “online,” or “mixed” (with in person and online)) and settings (“university”, “work”, or “restaurant”). Structural discrimination, though less common, occurred in businesses and university settings where there was a lack of accommodation for veg\*ns, often including minimal and less diverse options with Eli stating, “...[S]ometimes you end up having to eat very similar things no matter where you go... as long as there's an option with the little V on the menu...they [restaurants] think that

they are fine”. Accommodations, though few, were often appropriate for vegetarians and pescatarians, especially where “fish” is the “vegetarian option”, but not for vegans. Further, participants perceived lack of acceptance for vegan options to which Ruth described as “annoying when you want to be an activist”. Complemented with the lack of diversity, university dining provided minimal availability of veg\*n options due to concern with “food waste” with Lily noting an experience where the university “refused” to feed them. Despite being available, Lily observed that the options “would be eaten so fast” that they couldn’t get any. These stories described structural forms of discrimination towards veg\*ns within business and university settings where there is little accommodation to veg\*ns, specifically for vegans.

Interpersonal forms of discriminations included nonverbal communications (i.e., body language, facial expressions), harassment, invalidations, and microaggressions from (non)veg\*ns. Nonverbal communications included times where participants were looked at “a little funny” or “weirdly”. Jasmine reasoned that with the unconventionality of veg\*nism, non-veg\*ns perceive that they “shouldn’t listen” to veg\*ns. While harassment occurred, this varied upon degree of veg\*n practice with Lily noting “stark differences” in treatment of their veg\*nism and veg\*ns who “moralized food”, especially in “school” settings. Two veg\*ns faced invalidations from other veg\*ns, often by other vegans who invalidated their interpersonal relationships (“I could never kiss a carnivore on the mouth”) or practice (“...[W]e promote a vegan diet, not vegetarian. Animal byproducts are still harmful” or “being vegetarian was bullshit”). In all, participants shared experiences with structural and interpersonal forms of discrimination towards them that emerged within and outside their veg\*n community.

Anti-veg\*n jokes often occurred in interpersonal (“work call”, “family,” or “friends”) and online. Most often, these jokes were delivered by family members or peers either about using nonhuman animals (“PETA stands for People Eating Tasty Animals”, “fish bladder to make beer”), veg\*n practice (“I mowed the lawn, I have a salad ready for you”), social identity (“Soy Boy” or “All queer people are veg[\*]n”), or veg\*n identity where there was a “little bit of joking”. Though some veg\*ns perceived that these jokes were without “malice”, other veg\*ns noted annoyance with these jokes and described them as “dumb”. Participants shared instances of jokes specific to vegans (e.g., disclosure of vegan identity) such as “How do you know someone’s a vegan? Don’t worry. They’ll tell you”, “How do you know someone’s a vegan? Wait five minutes, and they’ll you,” or “...a vegan walks into a bar, but you already knew that they were vegan already [be]cause they already told you”. For Lily, less common jokes focused on lack of commitment to veg\*ns identities in transitioning from one veg\*n identity to another such as “Oh...couldn’t stick it out, huh? Had to come back to the other side” or “Couldn’t commit to full vegetarian?”, noting “more” jokes about their pescatarian identity.

Majority of participants described overt and covert forms of microaggressions that occurred in the workplace or interpersonal settings (n = 11). Underlying messages communicated difficulty with veg\*n practice such as “I could never do that”, “I could never...give up meat. I love meat. It’s delicious”, “I couldn’t give up cheese”, “I wish I could be vegan”, “I wish I could do that because it would healthier for me”, “I could never be vegan or vegetarian”, “I could never give up meat”, or “It makes me really sad that animals are killed, but I could never stop eating them 'cause they taste too good”. Other related messages communicated how specific difficulty with vegan practice where

it was “hard” to eat out with vegans or be vegan with Emelie recounting a family member noting they “could never go vegan...I like eating meat too much...I like cheese”. Eli noted their observation:

They'll give me all the reasons why they could never do it. And I'm like who asked you? (laughs)... I think it says it's like a positive thing I'm doing that they think would be too difficult or inaccessible for them. And so they need to give me a laundry list of reasons as to why they couldn't.

Other messages included admiration towards veg\*ns and veg\*n practice such as “kudos to you”, “That seems so hard. You must be committed”, “You're so strong for doing this, like I could never do it”, “That’s impressive”, or “That’s so disciplined”. Though appearing to be “true feedback” about veg\*n dishes (e.g., “bean stew”) as “impressive,” Ruth noted uncertainty if these are said to be “dismiss” her.

Microaggressions around health either communicated obsession with health (i.e., “You’re very healthy” “We thought you were some kind of health nut”), health benefits (“Oh well, do you feel better?”), health deficiencies related to protein (“Where do you get your protein?” “Well, if you don’t have meat, you don’t have protein”, “Well, you don’t have any protein. You’re gonna die”), or lack of strength (“...people who are vegan can’t be strong”). Microaggressive statements also communicated invalidations to veg\*n practice and veg\*ns through justifications of nonhuman animal consumption, especially towards vegan practice and vegans with Jasmine stating, “There's a list of the 10 ridiculous arguments for vegans”. These justifications included taste (e.g., “...meat is the only thing that makes things delicious”), nature (e.g., “people are designed to eat animals”, “...we gotta eat meat 'cause it's natural”), religion (“god gave us...these

animals to use-“, “god says we have dominion over these animals so we can eat them or whatever”), finances (e.g., “Why would you pay the same amount for a meal without the meat specials on?”) or harm to nonhuman animals or plants (“Well, you're just taking away the food from the cows”, “..plants have feelings, too”).

Microaggressions communicated negative judgement towards veg\*ns and veg\*n practice. Namely, statements characterized veg\*ns as self-righteous (“Who do you think you are, or do you think you're better than me?”), “You are self-righteous” “How dare they think certain animals deserve rights”), hippie (“...you’re a hippie”), or communist (“You’re a commie...a dirty communisy(t)”) whereas others judged veg\*n practice practice (“Oh, how can you live without this, how can you not eat this, how can you not eat that, you know?”, “How can you never eat like a hamburger or whatever”, “Wait, you're not gonna eat gumbo anymore with crab?”) or motivation to practice (“when people ask me, “Why...don’t you eat meat?”). Though less common, statements communicated assumptions that vegetarians were “comfortable” with nonhuman animal use (“making a pizza with meat on it”) compared to vegans, whom were to be “worr[ied] about”.

While participants recalled statements from non-veg\*ns, some recounted microaggressive statements from vegans (e.g., “You’re eating cheese, you’re sacrificing your values”, “Like you’re dietary habits are not enough you’re only like truly like in order to be vegan you had to be an activist as well,” and You need to like go to the gym and lift all these weights”), identification (“traitor”, “You must do it all the way or you shouldn’t bother at all”, “not a true vegan”, “a guy had posted that if you buy non-vegan items for your significant other or for a family member, you’re not true vegan,” or “If you

eat processed foods, you're not a true vegan"), and motivations ("I have talked to vegans online and they will, you know, motivate me to, you know, stop eating, uh, cheese").

***Stereotyping.*** Participants in this study described their thoughts on stereotypes of veg\*nism and veg\*ns (n = 13). Stereotypes included veg\*nism as "a very high, ethical thing" and veg\*ns as "better than", "superior", "smug or condescending", "outspoken...trying to shame people for the way they eat", or "need to moralize other people's food choices" (n = 6). Though these stereotypes were described to veg\*ns, many of these stereotypes were directed towards vegans. For instance, Jasmine mentioned the perception that non-veg\*ns' think that "vegans think we're better than us". Participants shared their thoughts on this stereotype about vegans through personal experience. Jeff recounted that he "ran into a highly judgmental vegan or two". Ruth mentioned stereotypes that characterize vegans as "close minded... self-righteous... preachy...assholes probably... holier than thou" or "judgmental". Other stereotypes included veg\*ns as "dogmatic" or "militant" (n = 6), and, much like the previous stereotype, directed towards vegans who were described as "all or nothing," "combative", and "aggressive" and engaged in "yell[ing]" and "protest[ing] a lot" if a person consumes nonhuman animal products. The stereotypes of militant often were complemented by motivations for veg\*ism. Lily shared their experience:

[P]eople who go vegan for their health to be more militant about the ingredients people use... people who go vegan for the environment or for the animals tend to be more militant about...whether or not people use animal products".

There was an instance where vegetarians were perceived as "less extreme" than vegans, who were perceived as "extreme ones that...attack you". Amongst vegan



celebrity figures such as “Freely within the fruitarian community,” dogmatic practices were often promoted such as restrictive eating behaviors that were “blatantly disordered” within online spaces.

Dichotomous stereotypes about health were discussed such that veg\*n practice was perceived both as “healthier” and “wasn’t healthy” and veg\*ns were perceived as “health nut[s]” or unhealthy, “irrational,” or “not chill people” (n =4). Stereotypes also characterized veg\*nsim and veg\*ns as a “one dimensional issue”, “monolithic”, or “generalized” where the common perception was the focus of “care about eating animals or not eating animals and they [veg\*ns] don't understand other things”.

Stereotypes included conflation with privileged identities (n = 4) such as “White”, “skinny White women”, “rich or privileged in some way”, “non-understanding of the privilege” and “cloistered”. Less commonly, racism emerged with conflation of whiteness namely amongst “White vegans who are...racist”. In discussing the history of veganism within the history of the Global Majority, Ellis described the disconnection between actual racial make-up of veg\*ns with portrayal of vegans, stating, “...[I]f you think about it, it makes total sense that there are a whole lot of African American vegetarians and vegans, but that's not the image in the media that we get”. Stereotypes less commonly referenced veg\*ns as bothersome (“annoying”, “irritating”), cultural representations (“PETA represents vegans”, “Vegan Teacher...who was just horrible”), emotional (“overly emotional, heart on our sleeve”), insistent (“very forceful”), gendered (“weak AKA feminine”, “it’s all women”), gross or disgusting (“Ew, vegan”), politically democrat (“more liberal or progressive”). Stereotypes less commonly referenced veg\*nism as difficult (“like its hard”, “painful or like a big sacrifice”),

consumerist/faddish (“consumerist approach”, “they probably thought it was a fad”), or unconventional (“provocation of some kind”, “not adhering to social norm”). In all the participants were acutely aware of the vast complex stereotypes that are associated with veg\*nism and vegans.

Few participants experienced impact of these stereotypes on lives (n =4). Notably, even fewer participants described little to no impact (n = 2). The remaining participants described an impact of these stereotypes on “social relationships” and medical professionals (e.g., doctors). John described his experience in that, “I’m aware that it is kind of an uphill battle like talking to people”. Ruth expressed some dislike of vegans based upon the perceptions of vegans, mentioning, “I don’t know if I like vegans either”. Ruth also explained her distrust of medical professionals, “I don’t really trust doctors as much because they’ll never prescribe someone a vegan diet if you tell them your vegetarian or vegan; they are typically more skeptical than they are encouraging”. As veg\*ns discussed their awareness of these stereotypes, it was less common for participants to feel an impact of these on their lives. When perceived as an impact, these participants discussed struggles in interactions in interpersonal and medical settings.

***Misunderstanding.*** The majority of participants (n = 12) perceived misunderstandings that shaped perceptions and treatment of veg\*nism and veg\*ns n by non-veg\*ns. Commonly referenced, misunderstanding about the “technicalities” of veg\*nism (n = 10) was characterized as perceptions about veg\*n practice as “strictly limit[ing]” or as a “sacrifice”. Additionally, this included perceptions about motivations as “monolithic” where they “latch” on to and “try to fit” veg\*ns into the “stereotypes” combined with

“demographic” information. Further, non-veg\*ns may not be aware of foods consumed by veg\*ns. Lack of awareness (n = 5) among non-veg\*ns shaped misunderstandings where “reaction[s]” to veg\*nism and veg\*ns were “defensiveness” or “[having] a lot of blinders up” with Eli stating, “People [non-veg\*ns] who make more mainstream choices seem to not have a self-awareness that they're intrinsically provoked or defensive about people making non-mainstream choices”. These reactions may emerge from “cognitive dissonance” where non-veg\*ns may “feel the same way” about nonhuman animals as veg\*ns, but “try to make [veg\*ns] feel bad and...eating animals feel better”. In another instance, non-veg\*ns may “forget” that veg\*ns “exist”. Cultural beliefs that centered hegemonic gender norms (n = 3) shaped these misunderstandings where there is a “negative connotation” about veg\*n practice and men with Ellis stating, “...[T]heir manhood is questioned by...not eating meat”. Similarly, Ruth shared her thought about masculine gender norms and vegetarianism, stating, “I think it's so hard for men to not eat [meat] because of those masculine stereotype”.

In one way, gender norms were intersected with other cultural beliefs (i.e., “Jamaican”) where non-veg\*ns encouraged meat consumption for “protein” at greater amounts or times (“once or twice a week”). Gaps in nutritional knowledge and biases (n = 4) included minimal understanding of “nutrition” or “deeply entrenched in...nutritional biases”, resulting in misunderstanding of veg\*ns and veg\*nism. Non-veg\*ns may not fully be educated about the impact of foods consumed such as “methane contributing to pollution”. Ruth reasoned possible understanding in learning “about Dr. Fuhrman and Dr. Greger and the standard American diet and the history of where the concept of pros and the cons of the protein” may be helpful in addressing nutritional biases. Focus on certain

food qualities (e.g., “gluten,” “protein,” or “carbs”) provides “frustrating” and “classist” complications to meat reduction, further shaping misunderstanding about veg\*nism.

Veg\*ns described their perceptions of the multiple ways veg\*ns and veg\*nism is misunderstood. Specifically, misunderstanding of veg\*ns and veg\*nism through minimal understanding of the practice and of intrapersonal reactions and biases related to and gaps in knowledge about nutrition shaped the perceptions of veg\*ns and veg\*nism among non-veg\*ns.

***Reactions to Societal Messaging.*** Many participants (n = 9) shared their reactions to societal messages and discrimination against veg\*ns. With “increasing” numbers of people engaging in “meatless Mondays” and “vegan diets,” as well as veg\*n items in restaurants and health recommendations of “plant-based diet[s]” by doctors within the U.S. and abroad, veg\*nsim was seen as “normal” and not a “foreign concept” (n = 4). Commonly, our participants described difficult reactions such as being “offended” or “annoyed” and “clash[ed]” with non-veg\*ns about anti-veg\*n societal messages with Emelie stating, “The vegan jokes get old” and Michelle stating, “I was like, ‘Well, be at my funeral and tell everyone that it's my fault I died 'cause I didn't have protein’”. Eli described their thoughts about non-veg\*ns’ defensive reactions and messages to veg\*ns:

There are times where like my reaction wants to be like, “Okay, I get it. You would, kill babies, if it bought brought you pleasure, you've never consider the ethical ramifications of your actions. Like, is this what you're saying? As long as something's delicious, long as it's pleasurable to you, you'll just do it really”.

Okay (laughs).

This group of participants may feel annoyed with non-veg\*ns' with attempts to bond with them about veg\*n food. For example, Ruth described her experience:

My direct report...always try to bond with me over it [veganism]... "I found this recipe" or "I found this thing that is vegan blah blah blah" which personally annoys me because ...it's like, "No, I'd like you to go vegan. I'd like you to just do it...don't send me a recipe. Go vegan".

Veg\*ns may also feel "uncomfortable" or "bad" (n = 2) about societal messages about veg\*ns, with Eli stating, "I find it uncomfortable to be praised about it sometimes, but like it's better than people getting defensive about it". In reflection of family messages about veganism, Megan shared, "They couldn't understand that my mom was making a different choice for us and I felt I think really bad about it. And so I kind of grew up feeling this tension about it not a little bit". Neutral reactions about negative veg\*n messages and discourse included little to no "bother" or "offen[se]" (n = 2). In reference to "dumb jokes," Jeff responded that, "Am I offended...? Not in the slightest bit. There's bigger problems in the world". Less common were "skeptical" reactions to societal messages where Ruth, shared that she joined "anti-vegan communities" to learn what "people who are anti-vegan say" on social media platforms (e.g., "Reddit"). Though veg\*ns perceived a normalcy about veg\*nism with growing interest in society, it was common for participants to experience uncomfortability and annoyance with negative messages. It was less common for participants to have neutral and skeptical reactions to societal messages, especially negative messages. Participants described complex reactions towards societal messaging about veg\*nism and veg\*ns.

### *Navigation Strategies*

Veg\*ns in this study described numerous strategies to navigate anti-veg\*n messages, perceptions, and reactions. Commonly used strategies included interpersonal navigation strategies ( $n = 10$ ) and advocacy ( $n = 9$ ) whereas less common strategies included avoidance of spaces ( $n = 5$ ), identity reconciliation ( $n = 5$ ), and intrapersonal navigation strategies ( $n = 2$ ).

***Interpersonal Strategies.*** A common interpersonal strategy included concealment of veg\*n identity ( $n = 9$ ) where participants “stay away” from or “don’t elaborate” on identification to avoid “uncomfortable” situations for them within “work” or “restaurant” settings with “ambiguous” statements such as “I don’t eat meat,” “I don’t care for meat besides seafood or something,” or “I’m plant-based” to conceal their veg\*n identity. Concealment occurred commonly to avoid “conversations” or “arguments” about veg\*n identity in interactions where participants refrained from revealing their identity, especially in eating out at restaurants “not having...options”. Concealment may be unique with specific variants (i.e., pescatarian) where they avoid certain treatment from non-veg\*ns. Lily described their experience:

I still tell them I’m a vegetarian...when I was a pescatarian at the very beginning... Because I have found that when you tell people you’re pescatarian, they only wanna feed you fish. So I don’t want to be constantly fed fish or seafood, especially when I can’t source it myself.

Though concealment is advantageous to avoid “loaded” labels and “negative” connotations (e.g., “judgement” or “attitudes”) associated with certain veg\*n identities (i.e., vegan), it is perceived as “ridiculous” and “shameful,” resulting in greater energy to

conceal the veg\*n identity with Eli stating, “[I]t ends up being bigger pain in the ass”. Further, because participants conceal their veg\*n identity, anti-veg\*n bias or topics about nonhuman animal cruelty are discussed without knowledge of participant’s identity with Ruth stating, “And we’re all laughing about “Oh hahaha...fish bladders are used in beer. What? Isn’t that weird” but like I said, in my heart of hearts, yeah fishing is awful”

Other interpersonal strategies included seeking and providing social support (n = 6) where participants “whine to someone I know about it [anti-veg\*n bias]” and “surround myself with really kind open, loving” or “pragmatic” people, including non-veg\*ns who “don't expect...to restrict and only eat certain things”. Through seeking social support, participants described how it “helped” to “weed out” those who see veg\*nism as “their personality.” Online support through social media platforms (e.g., “Facebook”), especially groups such as “Friendly and Pragmatic Vegetarians and Vegans” and “Vegan Soul Food” provide support. Groups specific to participants needs and identities (e.g., “women”, “Costco”, or “location”) also provided social support. Some participants advised of providing social support to other veg\*ns through “mentoring” or “clients” within work contexts. Michelle described her experience:

I'll have one of my doula clients say, "Hey, um, I can't get the baby to take the milk, I'm feeling stressed, I'm feeling this," okay, well, let me give you this, herbal things I've done... or why don't you try this kind of simple salad, or why don't we spend this week and Zoom for an hour where we're just chopping up veggies.

Altogether, veg\*ns sought and provided support for veg\*ns and non-veg\*ns that accepted veg\*n practice. Interpersonal strategies also included a “lead by example” (n =

4) strategy that “expose” and “give tips and tricks” on veg\*n practice characterized through cooking veg\*n dishes such as “vegan twists” on “traditional” dishes, ultimately displaying the “versatility” with veg\*n meals with Michelle stating, “The husbands [non-veg\*ns] have been like, “Wait, what'd you do with those lentils? You can do that with lentils?” You know? I'm like, ‘Yeah, there's a lot of things you can do with lentils’”. This display of skills challenges perceptions through which non-veg\*ns observe the “seriousness” of the practice and learn diversity of veg\*n meals.

The participants described explaining themselves and their identities (n = 3) “to get fed” or “to not give...false hope” when asked about food or their practice, where it may be “uncomfortable” and felt they “had to be clear” with others. Humor (n =2), though a less common interpersonal strategy, navigated anti-veg\*n messages through “laugh[ing]”. For example, Emelie described experience with humor, stating, “I get used to the people asking me, like, “What do you tell people first? You do vegan or you do the cross fit lifts?” And I'm just like, “I, you know, I.. Yeah [laughs].” Other less common interpersonal strategies included “refer[ing]” (n = 2) peers to “vegan documentaries” (e.g., “Dominion”) or health professional (i.e., “nutritionist”) to avoid being “the midwife of knowledge” and no confrontation about stigma towards veg\*n identity (n = 1).

**Advocacy.** Advocacy (n = 9) included public demonstrations (e.g., “leafletting”, “Cube of Truth”, “put on Dominion”, “aggressive about... writing things about how people should be vegan”), community work (“community garden” or “donate to the homeless”), or self-advocacy where participants “own it [veg\*n identity]” in response or anticipation of anti-veg\*n bias with Michelle stating “You know, ‘We're used to meat in here’ and I'm like, ‘Okay, but that doesn't mean you need it every day or if you do need it



every day, then eat it every day, but I'm not”’. Lily shared their strategy in response to jokes about transitions from vegan to pescatarian identity, stating, “I'm like, "Well, no, I didn't have to come back to the other side.” Within interpersonal settings, a more combative form of self-advocacy may be used to protect oneself from pressure, especially within familial and cultural contexts (e.g., holidays). For instance, Eli shared their thoughts on self-advocacy:

...families were pushing them [veg\*ns] at Thanksgiving.... And they'll say some things like, you know, ‘Would you eat human blood if it was already in the food?’ You know? And like that's different. I think that's like.... you're frustrated. And you're just trying to get your point across. You're just trying to get people to leave you alone.

While commonly used in interpersonal interactions, self-advocacy, in one instance, was employed against structural discrimination in a university setting with Lily describing their experience, “[W]hen I went to the school and said, "I need more options, I need to be actually fed because I am paying you a considerable amount of money to feed me.” Education, as a form of advocacy, ( $n = 9$ ) centered on health, veg\*n practice, and impact of meat consumption. When focused on health, education centered “mentor[ing]...people trying to become vegan or vegetarian transitioning” or “go[ing]deeper” into dietary and veg\*n practices, resulting in participants “help[ing]” veg\*ns and non-veg\*ns to “eat more healthy.” This encompassed guiding others towards veg\*ns products (e.g., “veggie chik’n patties”) in sharing health information to address or “warn” health conditions (“cholesterol”, “hypertension,” “congestive heart failure). Alternatively, education served to provide clarification in nutritional biases with Emelie recalling instance to challenge

encouragement supplement use (“Vitamin K”) to a co-worker, a bodybuilder, among those with heart problems, stating, “Vitamin K.... counteracts blood thinners...that would kill my dad”. Focusing on veg\*nism, education highlighted practice and history of veg\*nism in “cultures” to non-veg\*ns, noting thoughts about “labels” and “diet culture”. In a conversation with a friend about her veg\*n daughter eating chicken, Eli provided education on how “shame” related to food choices should be “avoided” in “diet culture and all of its pitfalls,” but being “conscientious” of the “label [veg\*n identification]”. In other ways, education included remind[ing]” others of exclusion of non-veg\*n products and foods (e.g., “dairy” or “S’Mores” due to “bones in it”).

Less common, education also included clarification about economic variability in being veg\*n, specifically vegan, in “online spaces or intercommunity spaces” that contend it is “not expensive to be vegan...vegetarian” where Lily noted “If you wanna eat rice and beans, it’s not”. When focused on impact of meat consumption (i.e., “environmental”), there was complexity in encouragement to “stop eating beef” to non-veg\*ns. Eli observed their experience, stating, “[I]t’s very hard to explain to people that that’s, what’s going on...especially if there’s somebody who’s never examined their learned beliefs and their cultural context”. John Smith shared differing sentiments with environmentalists, specifically those with less understanding of meat consumption, having “a lot more success”. Though self-advocacy and education were as separate forms of advocacy to navigate anti-veg\*n bias, education served to clarify veg\*n practice and promote health whereas self-advocacy protects oneself from pressure.

Nonabrasive activism ( $n = 9$ ) included a “loving” and “positive” form of advocacy where they do not “preach” or “evangelize” to others with Lily stating, “I’m not

someone who's going to try and push things into people's face". This strategy also included "experiment[s]" with recipes and share these recipes with family and peers. Despite wishes for greater "vegetarian" or "vegan" practice or attention to "animals", participants refrain from being "preachy toward anyone" and do not want others to feel "bad". Nonabrasive activism also involved being "respectful" of "access" and aware that "not everyone" desires veg\*n practice as well as the possibility of enduring "emotional draining" when working to change "cultural norms" of meat consumption. With such awareness, participants promoted "incremental steps," such as "more vegetables," "less meat," "not eating something [meat]" in the house, "meatless Monday," or "not going to Popeyes". John described his thoughts:

I guess, you know, whenever I talk about me being vegetarian, I do, you know, try to talk about it in very like non-combative terms, very like, you know, an openness to things. And then I try to, you know, uh- uh, I don't agree with, uh, you know... there is a lot of diversity on like viewpoints... I tend to encourage... just eat meat, like, you know, maybe one less meal a day or something." I think that is an improvement. And I think you will find a lot more acceptance there.

Participants felt this approach "work[ed] really well" and resulted in "easier" conversations where participants "enjoy it" and remain "optimistic", especially amongst non-veg\*ns who consume less nonhuman animal products. Maxine shared her perspective of her approach:

...if I'm not pushing, people like will hear about something vegan or vegetarian, and ...like come to me with like 'Oh my God! I'm so excited to share this with

you'...because I'm not...abrasive about it, so that's kind of my method at trying to know spread the good word but not, you know forcefully converting anybody.

Some participants described “back[ing] off” from veg\*ns and non-veg\*n ( $n = 5$ ) because they may not “want to see dead meat everywhere” or for their “mental sanity”.

***Avoidance of Spaces.*** While participants noted that non-veg\*n spaces in certain settings (i.e., “grocery stores”) as “unavoidable,” Jasmine noted avoiding “events” or “certain places...[with] a lot of meat”. This may also include restaurants such as “Burger King”. Commonly, avoidance of veg\*n spaces occurred via “online” contexts (“vegan groups”) where there was promotion of “blatantly disordered” activities that are “extremely detrimental” to mental health or specific vegan practices. With spaces that communicated vegan practice, underlying messages promoted strict practice (“can’t use honey...use agave”) or vegan identity.

***Identity Reconciliation.*** Some participants reconciled their veg\*n identities by taking “one day...one step at a time” with actual veg\*n practice ( $n = 5$ ). This often included “minimal” consumption non-veg\*n foods, vitamins, and different veg\*n meals. In some instances, there were financial implications where non-veg\*n products were “accidentally” bought, but kept because they were expensive. While reconciliation allowed these participants to “do what was best” for themselves in terms of health (avoiding a “sacrifice” for their health), some noted feeling “isolated” in their relationships. Though reconciliation may be adaptive, it may also be difficult for some veg\*ns where with “struggle” to label oneself, especially if they are a vegan. Namely, in one instance, this may be reflection and wondering about “labor practices” with buying non-veg\*n products on a “regular basis”. Further, it was noted in “compromis[ing]” for

special occasions where veg\*ns have non-veg\*n foods (i.e., “Turkey for Thanksgiving”), resulting in discrepancy in values where it appeared to be “hypocritical”. For example, Maxine described her experience with her wedding:

We've had many conversations where we've...argued over like our wedding dinner. For example, where he wanted to have the charcuterie board with meat and cheese and stuff like that, so we were able to find a compromise, but that was difficult for me just because I envisioned my wedding not having those things...like half his experience as well, so I tried to be a team in that way and see where we can find a solution that works for both of us.

***Immersion.*** Participants, less commonly, engaged in immersion (n = 4) where they embraced their veg\*n practice (i.e., vegan practice) in celebratory contexts (e.g., “vegan wedding reception” or “potlucks ...that celebrated the vegan) or restaurants (“put[ting] BOOF...bring our own food”). In other instances, immersion included seeking or making access for veg\*n practice through veg\*n resources (“frozen Amy’s dinners) at grocery stores or “cook” and “keep food” in kitchen access when “traveling”. Though not describing themselves, participants noted other veg\*ns engaging in this strategy at home in “grow[ing] mushrooms in the basement “brew[ing]...kombucha” and in the community by “grow[ing]...microgreens...corn”.

***Intrapersonal Strategies.*** While it was common to utilize interpersonal strategies, a few veg\*ns noted intrapersonal strategies to which they had to “work harder” and having to care of themselves. These may include “therapy” and working with a “dietician” for the ethics of their veg\*n practice to be congruent with their health, especially amongst those in recovery of mental health challenges (i.e., eating disorders).

Veg\*ns employed a diverse range of strategies to navigate their experience. As veg\*ns anticipated stigma around their veg\*n identity, they employed interpersonal strategies (i.e., concealment, avoidance of spaces, humor, explaining self, no confrontation) to avoid negative judgement, messages, and treatment from non-veg\*ns and veg\*ns. While veg\*ns employed strategies that avoided negative judgement, treatment, or messages about veg\*n identity, other interpersonal strategies were used to challenge non-veg\*ns perceptions of veg\*nism. Leading by example and immersion passively challenged perceptions of veg\*nism whereas activism actively challenged these perceptions. Activism, either through public demonstrations, community gardens, or education, directly addressed issues related to veg\*nism and (non)human welfare. Self-advocacy was often employed in response to stigmatizing messages and treatment of veg\*n identity. Non-abrasive activism was often employed to indirectly challenge perceptions of veg\*nism through encouragement of incremental progression towards veg\*nism. Less commonly, veg\*ns engaged in strategies that facilitated their practice with their veg\*n identity. Namely, veg\*ns engaged in identity reconciliation where they compromised on their practice with their veg\*n identity. Less common intrapersonal strategies included working on oneself in the context of veg\*nism and health. Commonly, interpersonal strategies were employed to navigate interactions with (non)veg\*ns.

### ***Centrality of Nonhuman Consumption and Related Inequities***

Veg\*ns in the present study described an awareness of structural inequalities that centered and reinforced nonhuman animal use and meat within their experience, which consequently prompted ethical questioning of consumption practices within their experience ( $n = 10$ ).

*Centrality and Impact of Meat in Dominant Culture.* Veg\*ns in the present study described an awareness of their experience in a culture that centers and values meat, noting its economic and sociopolitical impact. Namely, with “animals” as the sole food source, meat was “dominant” in the culture (n = 9), internationally (e.g., “Korean culture” and “Russian culture”) and especially within the U.S. and specific regions (“South” such as “Texas”) with Ellis stating, “There’s meat everywhere”. With centrality of meat as a food source, some participants shared their concerns on the “horrendous” impact of meat consumption and processing (n = 6) on nonhuman animals (e.g., “not living happy lives” and mistreatment), humans (i.e., “negative stuff” in living near “beef” or “pork” facilities, “worker’s rights”), and “bad” aspects on the environment with Eli stating, “[T]here’s a lot of trauma and pain that goes into producing meat”. As she noted awareness about mistreatment included cows (being “separated from calves) and fish (“weight in tonnage” and not seen as “individuals”) through her veg\*n identification where “nobody knows” about this “system”. Less commonly discussed was the conflict of between which concerns were “more important” with the impact of meat consumption on humans or nonhuman animals. Despite awareness of impact of meat consumption, John noted the complexity in reducing and transition from meat consumption, stating, “I think everybody in this environmentalist group like understands, you know, meat consumption is bad and I guess the question is like how much should we discourage it, how much should like people be willing to transition?”.

Meat permeated culture-specific domains (e.g., faith and holidays) for participants. Veg\*ns with nonreligious identities described meat as a central in faiths with Jeff stating, “Meat is part of a lot of...rituals”. Namely, nonhuman animals (e.g., “lamb”)

and meat are the center of rituals and sacrifices in specific faiths (i.e., Islam and orthodox Judaism), especially for holidays (e.g., “Passover”). With specific faiths (i.e., Islam), meat may be called to be avoided where religious standards may not be necessarily met. For instance, Eli noted their observations, stating, “People will say, in this age of factory farming, the only Islamic choice is to avoid meat because even Halaal...meat that supposedly done according to Sharia standards, it is very automated”. Thanksgiving (n = 2) was “weird” where meat was central to the holiday. Namely, these participants highlighted the central presentation of a “bird that is now dead” and other meats (“pig”) as well as unique cooking methods (“pork barbecue”).

As the centrality of meat permeated throughout the dominant culture in geographic regions, veg\*ns noted how this centrality emerged in family and work culture. Michelle described her family’s Southern cultural origins, stating, “...we’re very meat, old school, soul food heavy origin”. Similarly, Megan noted the centrality of meat in “Italian culture...at least my family’s culture”. In her observation of her family, Ellis stated, “My extended family, my brother and my dad both are like, meat, meat, and meat, every meal”. This centrality also emerged within occupational settings for one of our participants. Namely, Emelie described a former co-worker and bodybuilder as “entrenched” in a mindset where “meat is the best”.

Meat, as dominant in culture, was associated with gender (n =5), specifically with male identity. Described as “masculine,” meat consumption was “phenomenon” where “real men eat meat” and significant to men with John stating, “I guess like killing an animal like to feed, uh, your family or something, I guess there's like this kinda of like



primitive idea about that”. Arlene recounted the significance of meat to her father, especially with financial challenges:

My father was an immigrant and so he was poor before he came to the United States. And so, you know, they didn't get much meat. So for him it was funny. We were kind of lower middle class I guess, growing up, but it was very, and we didn't have enough, we didn't live in a big enough apartment, but it was very important for him to have meat or chicken, you know, beef or chicken or something every night.

Per the participants, men were less likely to be veg\*n with John stating, “Men tend to be more, uh... I mean, I don't know if they eat more meat”. Maxine shared she had no recollection of men she knew “who didn't eat meat”. Compared to men, meat avoidance was common among women, who were perceived as “sympathetic and accepting”. Ellis compared her brother and mother, whom she described as “meat, meat, meat” and “open to things [veg\*n food],” respectively. Altogether, meat consumption related to traditional notions of masculinity among men whereas this is less the case for women. Two participants described the taste of meat. Though she did not miss the taste of meat, Arlene advised that she misses foods like “chicken salad”. Eli described taste aversion within their family such that “, my grandma doesn't really like eating meat on my mom's side. Like I had cousins who don't really like meat”. Taste, per these participants, included aversion to meat or missing non-veg\*n products that did not resemble traditional meat products (e.g., chicken salad). Altogether, participants were aware of the pervasiveness of and centrality of meat within dominant culture and its manifestations in their lives.

*Ethics.* Some veg\*ns in the study discussed the role of ethics in consumption practices, especially related to meat consumption (n = 6) with Ruth stating, "...[H]ere's what you're doing you're buying all these things and...the other side of it and they don't much match and who cares to connect the dots. Nobody." Namely, participants described ethical dilemmas with meat consumption such as "whether meat can be ethical or not". Ethical justification for meat consumption of "livestock" nonhuman animals emerged from purpose of being a "food source" where humans "have them be born and... raise them to eat them". Veg\*ns in the study expressed questioning such justification with concerns of nonhuman animal welfare. Arlene recounted seeing cows that were "chained," and her subsequent contemplation about contacting a company, "We probably should have written to Ben & Jerry's and, 'Hey, do you approve of this?'". Eli referenced faith in exploration of this ethical justification:

Islam teaches that you're not supposed to like torture animals before you kill them. You know, you're supposed to slaughter them in a, I guess, as humane as you can, given that you're killing it. But, um, you know, you're supposed to offer, keep them well, fed, offer them water, um, not slaughter them in front of each other. So they don't panic, like things like that.

Workers' rights, though less commonly discussed, prompted ethical questioning of meat consumption and production. These veg\*ns explored alternatives to consumption practices (e.g., reduce these practices) with an awareness of ethical implications of such practices (e.g., "impossible to do no harm...under capitalism" and "ethical choice to feed yourself"), especially for people who were "low SES" or "unhoused". Conversely, Ruth, in reference to veg\*n practice, described how her "salads" are not "cruelty free". Another

alternative included identification of an “ethical food source”. Lily describing their experience:

I still do want to try and find, um, a more ethical source, um, of that fish because I do know how, uh, industrial fishing is done. And I would rather not be a part of, um, crushing the coral reefs and ruining, uh, causing dead zones in the ocean if I don't have to be.

As non-food alternatives (e.g., “plastic purse”) were discussed, participants questioned the utility and efficacy of such attempts, possibly justifying nonhuman animal use in some cases. For example, Ellis noted concerns for “environmental damage” with plastic that hurts “more animals” compared to nonhuman animal products (e.g., leather purse). As veg\*ns in the study shared their awareness of the ethical implications of current consumption (e.g., meat consumption and agricultural business), they navigated ethics of their practice. In this navigation, they were aware of the complexity of ethics within a society that values nonhuman animal and human use.

Qualitative results show that veg\*ns experience disclosure reactions, anti-veg\*n experience (i.e., messages and discriminations) and costs associated with their veg\*n identification and practice. The centrality of meat prompted ethical questioning of meat consumption amongst veg\*ns. Veg\*n identity development, though varied amongst participants, moved from consumptions of nonhuman animal products and moving through stages of contact with veg\*nism, questioning, experimentation, and passive or active stages of veg\*nism where contextual outness and concealment and navigation strategies to anti-veg\*n stigma and discrimination are common. Further, the intersections of other identities and veg\*n identity created unique lived experiences for participants as

veg\*ns. Veg\*ns storied their concerns outside of the veg\*n experience, self-perceived misunderstandings, stereotypes of veg\*ns, and reactions to societal messages about veg\*nism, and benefits associated with veg\*nism and veg\*n identification.

### **Integration Stage**

Quantitative results show, and unexpectedly, that there is a significant negative relationship between outgroup regard and attitudes towards vegetarians, but a non-significant relationship with multicultural attitudes in the analyses. Qualitatively, vegetarian and pescatarian participants described biases associated with their veg\*n identities. For instance, vegetarians and pescatarians in the study outlined structural and interpersonal discriminations as well as anti-vegetarian messages (i.e., jokes, microaggressions) towards their vegetarian and pescatarian identities amongst non-veg\*ns. Further, majority of these participants discussed concealment to avoid negative treatment from non-veg\*ns and vegans. Given the non-significant relationship with multicultural attitudes and negative relationship with feelings towards those of a different dietary group, vegetarians may not be perceived as a distinct multicultural group among non-veg\*ns. With this, non-veg\*ns lack an awareness of how veg\*n identities, specifically vegetarian and pescatarian identities, constitutes as a multicultural identity.

Although the majority of participants described anti-veg\*n experiences, messages, and stereotypes, these were overwhelmingly negative for vegans. Veg\*ns in the study engaged in concealment, a common navigation strategy within interpersonal interactions with non-veg\*ns, to avoid negative judgement associated with vegans and veganism. Relatedly, quantitative analyses revealed a significant negative relationship between multicultural attitudes, attitudes towards those in different dietary groups, and attitudes

towards vegans. Namely, non-veg\*n participants who reported higher levels of negative attitudes towards different dietary groups reported lower negative attitudes towards vegans. Conversely, non-veg\*n participants who reported lower levels of multicultural awareness also reported greater negative attitudes towards vegans. Though non-veg\*ns who reported positive attitudes towards dietary groups also reported lower levels of multicultural attitudes and greater negative attitudes towards vegans. Compared to vegetarian and pescatarian identities, vegan identities appeared to be perceived as a distinctive multicultural identity whereby non-veg\*ns that reported lower multicultural awareness also reported greater negative attitudes towards vegans. However, this may be complicated with the inverse relationship between attitudes towards those with different dietary groups and vegans to which those who reported negative attitudes towards different dietary groups also reported positive attitudes towards vegans. Non-veg\*ns may be misinformed and have misunderstandings about veganism through a lack of knowledge and awareness about their beliefs and reactions towards veg\*nism and veg\*ns, especially vegans.

## CHAPTER 4

### DISCUSSION

With increasing concerns about meat consumption and nonhuman animal use, there is an increasing interest towards veg\*nism. Despite such interest in veg\*nism and increase in veg\*n identification among U.S. American adults, veg\*ns remain to be a distinct social minority. Further, veg\*ns experience cultural, structural, and interpersonal devaluation of their identities (Joy, 2020; Kahn, 2011) and, consequently, navigate such devaluation throughout all level of society. Emerging scholarship evidenced bias and stigma towards veg\*ns amongst non-veg\*ns. Specifically, such scholarship highlights negative attitudes and discriminatory behaviors towards veg\*ns amongst non-veg\*ns (Markowski & Roxburgh, 2019). Notably, much of the assessment of negative attitudes towards veg\*ns was through hegemonic ideologies (Judge & Wilson, 2019; MacInnis & Hodson, 2017), gendered beliefs (Timeo & Suitner, 2017), or beliefs that veg\*nism as a symbolic threat (i.e., MacInnis & Hodson, 2017; Stanley, 2021) with little examinations through multicultural ideologies. Of note, with such examinations of bias towards veg\*ns, majority of these examinations include perceptions of non-veg\*ns, often excluding veg\*ns. Existing scholarship that centered veg\*ns' perspectives highlight interpersonal stressors and tensions and navigations of anti-veg\*n stigma in society (LeRette, 2014; Hirschler, 2011; Rosenfeld, 2018; Rosenfeld & Tomiyama, 2019). Thus,

there has been minimal exploration of how veg\*ns understand, perceive, and navigate stigma within society as well as how this stigma impacts them. The purpose of this study was to examine the relationship between attitudes towards veg\*ns amongst non-veg\*ns through a multicultural approach and explore how veg\*ns navigate their experiences with stigma in a society that values nonhuman animal use.

Underpinned by critical feminist theory, the present study quantitatively examined the associations between attitudes towards veg\*ns and multicultural attitudes towards the awareness and acceptance of similarities and differences that persist among people and qualitatively examined how veg\*ns understand and navigate their experience in the context of anti-veg\*n stigma. The findings suggest multicultural attitudes and awareness significantly and negatively associated with attitudes toward vegans but was not associated with vegetarians. Namely, participants who reported lower social attitude of appreciation and acceptance for the similarities and differences that exist among people also reported greater attitudes towards vegans, but not for vegetarians. Additionally, and contrary to expectations, outgroup regard significantly and negatively associated with attitudes towards vegans and vegetarians. Specifically, participants that reported greater negative attitudes towards those whose dietary patterns were different from theirs also reported less negative attitudes towards veg\*ns. Though participants reported greater negative attitudes towards those with differing dietary patterns and less negative attitudes towards veg\*ns, those who reported less multicultural attitudes also reported more negative attitudes towards vegans.

Veg\*n participants in this study discussed their complex experiences within the context of stigma. Namely, veg\*n participants described negative messages

communicated about and to veg\*ns and complex reactions to their disclosure amongst non-veg\*ns whereby unwanted reactions amongst non-veg\*ns occurred in the context of disclosure of veg\*n identity. Veg\*ns shared concealment and disclosure and complex impact of these strategies. Per characteristics outlined with concealable stigmatized identities (CSIs) (Quinn & Chaudoir, 2013), it may appropriate to similarly conceptualize veg\*ns identities based upon study findings. Notably, veg\*n identity development, navigation strategies, concerns outside the veg\*n experience, and complex reactions to anti-veg\*n stigma elucidated upon the experiences of veg\*ns within the context of stigma and cultural devaluation of veg\*ns. Notably, though veg\*n described anti-veg\*n messages and experiences and costs associated with veg\*n identity, they demonstrated strengths and connections that emerged through benefits of veg\*nism and veg\*n identification. Notably, veg\*ns discussed how their veg\*n identity intersected with their other privileged and marginalized identities, shaping their unique experience with and resources to buffer stigma and how engage their veg\*n identity.

### **Integration with Previous Research**

The absence of a relationship between multicultural attitudes and awareness and negative relationships with outgroup regard and attitudes towards vegetarians and vegans is somewhat consistent with the literature. Namely, there are mixed findings regarding attitudes towards veg\*ns where some research documents highly negative attitudes (see MacInnis & Hodson, 2017; Povey et al., 2003; Timeo & Suitner, 2017), other findings suggest neutral and positive attitudes towards veg\*ns (see Chin et al., 2001). This study's findings may be related to the unique circumstances of how people understand veg\*n identities. These findings may be reflective of identity blindness or an ideological



perspective that minimizes the significance of group membership and communicates that identity should not matter. Copious amounts of scholarship documents the impact of identity blindness in the denial, minimization, and disregard of systemic and interpersonal oppression (Sue & Spanierman, 2020). For example, colorblind racial ideologies and approaches minimize the racial differences and inequities that persist within institutions and daily interactions, resulting in the assertion of equality among all groups. Though appearing as a remedy to racial discrimination, extant literature documents deleterious interpersonal and systemic outcomes (APA Taskforce, 2012; Neville et al., 2013; Plaut et al., 2018; Zou & Dickter, 2013). For example, Correll and colleagues (2008) found that high conflict was associated with greater racial prejudice among those who were assigned to colorblind strategies to reduce racial prejudice. In another experimental study Zou and Dicketer (2013) found that participants who endorsed high levels of colorblind racial ideology perceived the target, a racial group minority member who confronts White person's racist statement, more negatively and inappropriate than those who endorsed low levels. In a similar way for this study's participants, dietarian identity, especially veg\*n identity, may not be fully perceived to matter though participants may hold implicit biases towards diverse groups, including veg\*ns. Interestingly, there was a significant and negative relationship between multicultural attitudes and awareness with attitudes towards vegans whereby participants who reported lower multicultural attitudes and awareness with as well as acceptance of similarities and differences also reported greater negative attitudes towards vegans. Thus, this finding offers unique insights into the role of multicultural attitudes in negative attitudes towards vegans.

Among veg\*ns in the present study, support for previous research was found. Participants' internalization of their veg\*n identity is consistent with McDonald's (2000) and Rosenfeld and Burrow's (2017) unified model of vegetarian identity (UMVI) whereby veg\*ns navigate contextual experiences (e.g., catalytic events, social context, timing of, shifts towards, and durations of veg\*nism in their lives), evaluate their beliefs and self-concept, and act upon identity through behavior. Notably and consistent with McDonald's (2000) findings, veg\*n participants navigated the universality of meat consumption through contact and critical moments, experimented with veg\*nism, where they either vacillate with veg\*nism or actively engage with veg\*nism where it is maintained by their motivations. Consistent with prior literature, our participants described multiple motivations for their veg\*n practice (see Hoffman et al, 2013; Janssen et al., 2016; Rosenfeld, 2018). Though few, participants cited health, environmental, ethical, and religious reasons. Further, participants described experiencing anti-veg\*n encounters, societal messages, and stereotypes consistent with anti-veg\*n scholarship. Namely, veg\*nism and veg\*ns were associated with unidimensional motivations, hostile dogmatism, superiority, difficult, faddism (see Cole & Morgan, 2011; Markowski & Roxburgh, 2019), associated with presence or absence of health (Branković, M. & Budžak, 2021), and conflated with being gendered (see Adams, 2015; Timeo & Suitner, 2017), privileged (Greenebaum, 2016), and Whiteness (Gorski, 2019; Greenebaum, 2018). Additionally, participants' reports of discriminatory experiences through interpersonal (i.e., microaggressions, jokes, derogatory statements) and systemic sources (i.e., businesses, employment, and universities) (Kahn, 2011; Joy, 2020) are consistent with previous findings and extends work that documents how veg\*ns navigate and react

to such experiences (see LeRette, 2014). Consistent within previous anti-veg\*n scholarship and expanding upon Sue and colleagues' (2007) taxonomy, microaggressions in various forms (i.e., microassaults, microinvalidations, and microinsults) communicated lack of acceptance towards veg\*ns and veg\*n practice due to carnism and speciesism being upheld in cultural norms (Joy, 2020; LeRette, 2014). Corroborating previous findings, participants shared experiences of interpersonal (LeRette, 2014) and environmental (Kahn, 2011) manifestations of microaggressions that undermined veg\*ns and their practice. Notably, the study findings highlighted microaggressions that were specific to social identities (i.e., male, queer identities), variants (i.e., vegan and pescatarian), and practice (i.e., admiration, difficulty, association with health). The study's findings center veg\*ns' beliefs and reactions to the perceptions of veg\*ns from mainstream culture and non-veg\*ns, noting how misunderstandings about veg\*ns and veg\*n practice occur. Also, consistent with anti-veg\*n scholarship, veg\*n participants highlighted greater stigma towards vegans (Rosenfeld, 2018). Of note, pescatarian participants highlighted unique experiences of stigma within and outside the veg\*n community. With a paucity of research on pescatarians (Rosenfeld & Tomiyama, 2021), these findings elucidate upon pescatarians' experiences in the context of stigma.

### **Implications for Clinical Practice, Advocacy, and Education/Training**

There is a dearth of research on clinical practices and approaches related to veg\*n identities. Given the scarcity of this scholarship, mental health clinicians may seek out literature that is relevant to CSIs, using these approaches to inform their work with veg\*ns. Though similar to other CSIs, veg\*n identities are distinct wherein veg\*n identities and concerns may not be fully perceived of societal importance (Soifer, 2002)

and unique needs related to their identities (Rosenfeld, 2018). It is imperative that mental health clinicians be cognizant of their biases and assumptions about the role of culture, including food, and veg\*ns, especially those with marginalized identities different from their own. Clinicians may benefit from working with a culturally humble stance that provides them with opportunities to remain open to veg\*ns within therapeutic conversations (Hook et al., 2017).

As prior research and current findings documented microaggressions, veg\*n clients may benefit from exploring these microaggressions as manifestations of anti-veg\*n stigma. As copious amounts of research documented the deleterious impact of microaggressions on health (Cheng, Pagano, & Shariff, 2018; Cheng, Pagano, & Shariff, 2019; Donovan et al., 2012; Nadal et al., 2010; Nadal, 2013; Nadal et al., 2014; Williams, 2020), veg\*n clients can learn how these microaggressions facilitate harm to their well-being, and, consequently be aware of such impact. Of importance, clinicians must be aware of the inauspicious nature of microaggressions that may be delivered to veg\*n clients in their relationships, interactions, and, further, in therapy. Previous research documents the unfavorable impact of microaggressions on the therapeutic alliance, and consequently, therapy outcomes (see Owen et al., 2011; Owen et al., 2017), especially amongst those with CSIs (mental illness, see Gonzales et al., 2014; Peters et al., 2017; sexual orientation, see Shelton & Delgado-Romero, 2013). As veg\*n clients may benefit from exploring the nature of microaggressions in therapy, clinicians must remain open and willing to acknowledge and discuss delivered microaggressions as well as engage in reparative strategies (Shelton & Delgado-Romero, 2017; Yeo & Torres-Harding, 2021).

Clinicians may also benefit from intentional focus on veg\*n identity and stigma-related factors associated with distress. Interventions that promote healing for veg\*ns are crucial, especially within the context of relationships. Given that veg\*ns experience much of their stigma within their relationships, special attention may focus on the coping strategies with specific focus on individual and collective coping strategies (Bresnahan et al., 2016). Specific interventions that are appropriate for the unique needs of veg\*ns are important. These interventions could focus on cultural devaluation of veg\*ns in media (i.e., negative portrayals) and challenge negative thoughts about veg\*n identity experienced by veg\*n clients, especially within their relationships. The veg\*n community is not monolithic, and, consequently, neither are their concerns (Greenebaum, 2018). Veg\*ns with marginalized identities may experience unique stigma with the intersection of these identities. For example, veg\*ns with marginalized racial identities may present to therapy with concerns unique to their veg\*n and racial identities. Given the intersecting nature of identities, clinicians should be cautious not to utilize approaches that address only veg\*n identities. Clinicians may benefit from self-reflection of the intersection of their dietarian identity with other identities, exploring with the client about their understanding of their identities, and acknowledgement of power dynamics that emerge within the therapeutic relationship (Petty John, Tseng, & Blow, 2020).

The study's findings have implications for pedagogy and clinical training. As APA (2017) encourages the incorporation of multiculturalism in educational and training programs, it is crucial for trainees to be aware of their biases and assumptions about their own dietarian identity and that of others, specifically veg\*ns. Given the dearth of literature on pedagogical approaches to veg\*nism and dietarian identities, educators are

encouraged to utilize cultural humility within their instruction to intentionally foster openness, promote awareness, and honor dietarian identities, especially veg\*n identities, amongst students (Abbott, Pelc, & Mercier, 2019). It is important that students explore their understanding of their own dietarian identities as well as those different from their own. Educators may foster such exploration through assignments that intentionally evaluate worldviews and increase humility (e.g., cultural genograms; Hook et al., 2016; Shellenberger et al., 2007). Additionally, educators could promote knowledge of veg\*nism through inclusion of veg\*n scholarship as part of inclusive and multicultural training. This scholarship may further knowledge of veg\*nism and provide guidance on how to work with clients with veg\*n identities. Other multicultural scholarship (e.g., intersectionality) can complement this scholarship as veg\*n identities intersect with other identities. Educators are encouraged to examine pedagogical approaches that are inclusive and honor veg\*n identities of students. As nonhuman animal uses (e.g., dissection and vivisection, media that feature nonhuman animal exploitation) may be inappropriate for veg\*n students, it is crucial for educational and training programs develop appropriate and alternative approaches for veg\*n students (APA, 2017). As there has been an increasing interest in veg\*nism in recent years and growing scholarship on dietarian identities, it is possible there is an increase veg\*n identification amongst U.S. Americans. It is imperative that competence and guidelines be shaped in working with those with stigmatized dietarian identities (e.g., veg\*ns).

This study has implications for advocacy and policy development efforts. Anti-veg\*n bias emerges throughout all levels of society, especially at the structural level (Joy, 2020; Kahn, 2011). In recent years, there has been an increase in policy development to

address the concerns of veg\*ns. Namely, within the U.S. and U.K., existing guidelines and policies and legal cases offer protection and support for veg\*ns within the workplace (see Covey, 2018; Philips, 2021; The Vegan Society, n.d.). While support at the structural level is growing, it is important to note that veg\*ns experience stigma within interpersonal and organizational settings. Notably, there is a paucity of protection and support for interpersonal harassment in these settings. Policies within businesses, workplaces, and educational settings could highlight intolerance for harassment related to veg\*n practice. As psychologists engage in advocacy at the individual and organizational level (Kozan & Blustein, 2018), there are vast opportunities for advocacy for veg\*n communities. Psychologists can support culturally responsive and sensitive policies that destigmatize veg\*n identities. Additionally, psychologists can lead trainings and workshops that provide education about veg\*nism, which could be beneficial within these settings. Finally, veg\*n leaders, activists, and community organizers could be invited to participate in professional meetings and conferences to be involved in trainings, workshops, and policy development.

Veg\*n participants shared how financial resources and accessibility facilitate veg\*n practice, thus effort must be aimed at addressing structural barriers that impede veg\*n practice. Specifically, the lack of financial and geographical access to fresh and nutritious foods (e.g., vegetables and fruits) and veg\*n alternatives serve as an impediment to veg\*n practice (Bower et al., 2014; Havewala, 2021). One advocacy effort includes creation, promotion, and support of institutional and systemic policies that address and alleviate financial hardships (e.g., redlining, gentrification) at the local, state, and national level (Forbes, Wochele, Peterson, & Craggs, 2021; Hage et al., 2007).

As interdisciplinary collaborators, psychologists can connect with other professionals and conduct presentations and engage in discussions with local, state, and national policymakers to highlight impediments on veg\*n practice. Collaborations with food justice organizations and community organizers can be another way to address systemic and institutional barriers. For example, intentional collaborations with food justice organizations serves as an advocacy effort. Namely, psychologists can coalesce in community efforts to address food justice that provides means for veg\*n practice (e.g., community gardens; community land trusts (CLTs) (Forbes et al., 2021). Of note, psychologists and other professionals may engage in critical dialogue and discussions with local veg\*n community members to collaborate on strategies that alleviate barriers to veg\*n practice.

### **Future Directions for Research**

Future research may focus on the examinations of the role multicultural attitudes play in anti-veg\*n attitudes among non-veg\*ns. One direction may include the association between hegemonic ideologies and multicultural attitudes and awareness within anti-veg\*n attitudes. As previous research highlights negative attitudes towards veg\*ns with differing motivations (see Minson & Monin, 2012), another direction includes examinations of how multicultural attitudes towards veg\*ns with differing motivations. Such examinations could highlight, if any, differences in multicultural attitudes.

Though the present study examined experiences of veg\*ns broadly, future studies could consider investigations in differences, if any, across veg\*ns. Namely, as studies examine experiences of vegans and ovo-lacto vegetarians, more studies are needed to



further examine the experiences of pescatarians and fruitarians within the context of anti-veg\*n stigma. An aforementioned study found that pescatarians experience pride in their dietary pattern but feel stigmatized for it (Rosenfeld & Tomiyama, 2021). Examinations amongst pescatarians and fruitarians would increase understanding of how they navigate anti-veg\*n stigma.

In the present study, the majority of the veg\*n participants were raised as non-veg\*ns and identified as veg\*ns later in their lives (e.g., adulthood) with few participants who were raised as veg\*ns. More studies are needed to examine, if any, differences between veg\*ns raised as veg\*ns than those who raised as non-veg\*n in the context of anti-veg\*n stigma. Additionally, more studies are needed to examine any possible differences amongst newly identified veg\*ns. Clinicians and researchers could benefit from studies that explore these differences such that these findings can inform clinical interventions and research approaches that adequately address their experiences.

The author encourages multiple research methodologies (i.e., quantitative, qualitative, mixed methods) to uncover multiple ways of knowing about veg\*n stigma throughout all levels of society. Further, the author encourages qualitative and mixed methodologies that utilize critical and constructivist paradigms to explicitly acknowledge how power structures facilitate the lived experiences of veg\*ns and nuances of veg\*n stigma in the context of stigma. Though often critiqued as antithetical to social justice and historically legitimized injustices, quantitative methodologies, when employed appropriately for marginalized populations, can lend itself to address social injustices (Cokely & Awad, 2011; Fassinger & Morrow, 2013). Specifically, quantitative methodologies can involve stakeholders and populations of interest within the study,

implement pilot testing with feedback and avoid unnecessary comparison between groups to reduce suspicion, and include proximal variables for deeper interpretations) (Cokely & Awad, 2011). Given that policies are informed by quantitative data, quantitative inquiry centered on social justice and stigma offer opportunities to reduce stigma due to its strength of generalizability for findings. As qualitative methodologies offer opportunities to explore the complexity of stigma and meaningful engagement with members of the population studied, these promote further inquiry into the phenomenon studied and reduce stigma with findings shaped by those whose lived experiences are impacted (Stutterheim & Ratcliffe, 2021). This study utilized a convergent mixed methods design. Future studies could include other designs (e.g., exploratory and explanatory sequential; Creswell & Plano Clark, 2017; Hanson et al., 2005) where quantitative and qualitative approaches and data expand upon the other to fully explore the health consequences of veg\*n stigma. Compared to the CSI framework (Quinn & Earnshaw, 2011), the Minority Stress framework (Meyer, 2003) would highlight coping, resiliency, and group resources that may buffer the impact of anti-veg\*n stigma among veg\*ns.

Veg\*ns are not a monolithic group, and members hold intersecting identities, much anti-veg\*n scholarship include populations with privileged White identities (i.e., Greenebaum, 2018; Harper, 2010). Intersectionality remains an understudied experience within such scholarship. Findings of available studies that examine experiences of veg\*ns in the context of anti-veg\*n stigma highlight the differing manifestations of such stigma given their intersecting and marginalized identities compared to their privileged counterparts (e.g., veg\*ns of color, see Greenbaum, 2018; queer veg\*ns, Kolb-Utinen, 2018). Researchers could consider investigations of

intersectional stigma, a concept that highlights the convergence of multiple stigmatized identities (Bowleg, 2011). Integration of intersectional stigma within anti-veg\*n studies highlight experiences of veg\*ns with marginalized identities and guide intervention strategies, multiculturally sensitive approaches, and policies that reduce stigma within clinical practice, training programs, and policy development (Turan et al., 2019).

### **Limitations**

There are limitations in this study that must be discussed. Due to correlational and cross-sectional nature of the present study, causality cannot be inferred. Future research using experimental and longitudinal designs can shed light on the consequences of stigma experienced by veg\*ns and how multicultural attitudes facilitate negative attitudes towards vegans among non-veg\*ns. Of note, future research using qualitative and mixed methods inquiries could utilize variables such as multicultural awareness, minority stress, veg\*n identity, and dietarian identity. The manner by which the author asked open-ended questions influenced the qualitative responses received. For example, while the author asked veg\*n participants to share their experiences with stigma, they may have felt less inclined to share the full depth and breadth of their experiences. Given that veg\*ns' concerns are not seen as a societal issue (Horta, 2002; Horta, 2018), veg\*ns may minimize negative experiences or less likely attribute them to veg\*n stigma. Further, the author acknowledges how the sociopolitical climate and changing nature of COVID-19 pandemic may have influenced quantitative and qualitative responses received. Namely, participants may have been influenced by nationwide conversations about nonhuman animal consumptions, markets (i.e., wet markets in populated areas), and the pandemic's impact on industries that center nonhuman animal agriculture. The author did not ask the

participants to highlight how such events impacted them. Without interview of former veg\*ns, it is unclear to know what the drawbacks of veg\*nism are. Veg\*ns in the current study identify with veg\*n identification and may feel inclined to highlight benefits of veg\*nism. Future studies are encouraged to include former veg\*ns to include their perspectives on, drawbacks, and, if any, benefits of veg\*nism in the context of stigma. Both samples were highly educated, predominantly White, and primarily comprised of women; therefore, the findings may not be generalizable to those with fewer resources or people of differing genders and racial identities. Future studies could include greater veg\*ns with diverse identities to document their experiences, especially in the context of stigma. Of note, with no collection of political ideology or centrality and salience of dietarian identity amongst non-veg\*ns, the potential influence of these dynamics is unknown. Future explorations could gather more representation of people with differing gender, racialized, and sexual identities and political ideology and information about centrality and salience of dietarian identity to further elucidate upon the attitudes and experiences of the populations studied. The operationalization of veg\*nism is also noted as a limitation. Monomethod bias emerges as a possible threat to the construct validity through examination of vegetarianism/veganism through one measure. Specifically, the ATVS measure (Chin et al., 2002) was adapted into a separate measure to focus on vegans, and, thus, may not have accurately measured veganism.

## **Conclusions**

Using a critical feminist lens with phenomenological approach, the present study suggests veg\*ns perceive anti-veg\*n stigma from non-veg\*ns whereas non-veg\*ns perceived little to no negative attitudes towards veg\*ns. The two groups share differing

perspectives towards anti-veg\*n stigma and, through multicultural approaches, there is a call to further understand these perspectives. Veg\*ns share their experiences, disclosing their navigation strategies and complex reactions to instances of anti-veg\*n bias. The mixed methods approach to this study elucidates upon the connections between multicultural awareness and anti-veg\*n stigma among veg\*ns and non-veg\*ns. The study findings unearth how the veg\*n experience is beyond food. Namely, the veg\*n experience encompasses ethics and challenges to cultural value of (non)human animal (ab)use. As a whole, this study uncovers how veg\*ns navigate the complex nature of anti-veg\*n stigma in a society that values and normalizes (non)human exploitation and (ab)use.

## REFERENCES

- Abbott, D. M., & Mollen, D. (2018). Atheism as a concealable stigmatized identity: Outness, anticipated stigma, and well-being. *The Counseling Psychologist, 46*(6), 685-707. <https://doi.org/10.1177/0011000018792669>
- Abbott, D. M., Mollen, D., Mercier, C., Anaya, E. J., & Rukus, V. A. (2020). “Isn't atheism a White thing?”: Centering the voices of atheists of color. *Journal of Counseling Psychology, 67*(3), 275–287. <https://doi.org/10.1037/cou0000399>
- Abbott, D. M., Pelc, N., & Mercier, C. (2019). Cultural humility and the teaching of psychology. *Scholarship of Teaching and Learning in Psychology, 5*(2), 169-181. <https://doi.org/10.1037/stl0000144>
- Adams, C. J. (2015). *The sexual politics of meat: A feminist-vegetarian critical theory*. Bloomsbury Publishing USA.
- Alexander, D.D., Weed, D.L., Cushing, C.A., & Lowe, K.A. (2011). Meta-analysis of prospective studies of red meat consumption and colorectal cancer. *European Journal of Cancer Prevention, 20*(4), 293-307. <https://doi.org/10.1097/cej.0b013e328345f985>
- Allison, K. C., Lundgren, J. D., O'Reardon, J. P., Geliebter, A., Gluck, M. E., Vinai, P., ... & Engel, S. (2010). Proposed diagnostic criteria for night eating syndrome. *International Journal of Eating Disorders, 43*(3), 241-247. <https://doi.org/10.1002/eat.20693>

- Allison, K. C., Spaeth, A., & Hopkins, C. M. (2016). Sleep and eating disorders. *Current Psychiatry Reports*, 18(10), 92. <https://doi.org/10.1007/s11920-016-0728-8>
- American Dietetic Association. (2003). Position of the American Dietetic Association and Dietitians of Canada: Vegetarian diets. *Journal of the Academy of Nutrition and Dietetics*, 103(6), 748-765. <https://doi.org/10.1053/jada.2003.50142>
- American Psychological Association. (2017). Ethical principles of psychologists and code of conduct (2002, amended effective June 1, 2010, and January 1, 2017). Retrieved from <https://www.apa.org/ethics/code/index.aspx>
- American Psychological Association Task Force on Preventing Discrimination and Promoting Diversity (2012). Dual Pathways to a Better America: Preventing Discrimination and Promoting Diversity. Retrieved from <https://www.apa.org/pubs/reports/promoting-diversity>
- Amiot, C. E., & Bastian, B. (2015). Toward a psychology of human–animal relations. *Psychological Bulletin*, 141(1), 6-47. <https://doi.org/10.1037/a0038147>
- Andrews, P. & Johnson, R.J. (2019). Evolutionary basis for the human diet: Consequences for human health. *Journal of Internal Medicine*, 287(3), 226-237. <https://doi.org/10.1111/joim.13011>
- Ang, C. S., Chan, N. N., & Singh, L. (2019). A comparison study of meat eaters and non-meat eaters on mind attribution and moral disengagement of animals. *Appetite*, 136, 80-85. <https://doi.org/10.1016/j.appet.2019.01.019>
- Anomaly, J. (2015). What’s wrong with factory farming?. *Public Health Ethics*, 8(3), 246-254. <https://doi.org/10.1093/phe/phu001>

- Antoniou, E. E., Bongers, P., & Jansen, A. (2017). The mediating role of dichotomous thinking and emotional eating in the relationship between depression and BMI. *Eating Behaviors*, 26, 55-60. <https://doi.org/10.1016/j.eatbeh.2017.01.007>
- Antonovici, L., & Turliuc, M. N. (2020). A Qualitative Study of Health-Related Beliefs and Practices among Vegetarians. *International Journal of Psychological and Behavioral Sciences*, 14(7), 526-529. Retrieved from <https://scholarly.org/display/a-qualitative-study-of-health-related-beliefs-and-practices-among-vegetarians>
- Appleby, P.N. & Key, T.J. (2016). The long-term health of vegetarians and vegans. *Proceedings of the Nutrition Society*, 75(3), 287-293. <https://doi.org/10.1017/s0029665115004334>
- Asher, K., Green, C., Gutbrod, H., Jewell, M., Hale, G., & Bastian, B. (2014, December). *Study of current and former vegetarians and vegans*. Retrieved from <https://faunalytics.org/feature-article/hrc-study-of-current-and-former-vegetarians-and-vegans/>
- Asvatourian, V., Craig, T., Horgan, G. W., Kyle, J., & Macdiarmid, J. I. (2018). Relationship between pro-environmental attitudes and behaviour and dietary intake patterns. *Sustainable Production and Consumption*, 16, 216-226. <https://doi.org/10.1016/j.spc.2018.08.009>
- Back, K.W. & Glasgow, M. (1981). Social networks and psychological conditions in diet preferences: Gourmets and vegetarians. *Basic and Applied Social Psychology*, 2(1), 1-9. [https://doi.org/10.1207/s15324834basp0201\\_1](https://doi.org/10.1207/s15324834basp0201_1)



- Baines, S., Powers, J., & Brown, W. J. (2007). How does the health and well-being of young Australian vegetarian and semi-vegetarian women compare with non-vegetarians?. *Public Health Nutrition*, *10*(5), 436-442.  
<https://doi.org/10.1017/s1368980007217938>
- Bakker, M., & Wicherts, J. M. (2014). Outlier removal, sum scores, and the inflation of the Type I error rate in independent samples t tests: the power of alternatives and recommendations. *Psychological methods*, *19*(3), 409-427.  
<https://doi.org/10.1037/met0000014>
- Baltic, M. Z., & Boskovic, M. (2015). When man met meat: Meat in human nutrition from ancient times till today. *Procedia Food Science*, *5*, 6-9.  
<https://doi.org/10.1016/j.profoo.2015.09.002>
- Barahal, H. S. (1946). The cruel vegetarian. *Psychiatric Quarterly*, *20*(1), 3-13.  
<https://doi.org/10.1007/bf01575046>
- Baroni, L., Cenci, L., Tettamanti, M., & Berati, M. (2007). Evaluating the environmental impact of various dietary patterns combined with different food production systems. *European Journal of Clinical Nutrition*, *61*(2), 279-286. <https://doi.org/10.1038/sj.ejcn.1602522>
- Beardsworth, A. D., & Keil, E. T. (1991a). Vegetarianism, veganism, and meat avoidance: Recent trends and findings. *British Food Journal*, *93*(4), 19-24.  
<https://doi.org/10.1108/00070709110135231>
- Beardsworth, A., & Keil, T. (1991b). Health-related beliefs and dietary practices among vegetarians and vegans: a qualitative study. *Health Education Journal*, *50*(1), 38-42. <https://doi.org/10.1177/001789699105000111>

- Beardsworth, A., & Keil, T. (1992). The vegetarian option: varieties, conversions, motives and careers. *The Sociological Review*, *40*(2), 253-293.  
<https://doi.org/10.1111/j.1467-954x.1992.tb00889.x>
- Beezhold, B.L., Johnston, C.S., & Daigle, D.R. (2010). Vegetarian diets are associated with healthy mood states: A cross sectional study in Seventh Day Adventist adults. *Nutritional Journal*, *9*(1), 26-33. <https://doi.org/10.1186/1475-2891-9-26>
- Beezhold, B., Radnitz, C., Rinne, A., & DiMatteo, J. (2014). Vegans report less stress and anxiety than omnivores. *Nutritional Neuroscience*, *18*(7), 1-8.  
<https://doi.org/10.1179/1476830514y.0000000164>
- Bell, E. C. (1958). Nutritional deficiencies and emotional disturbances. *The Journal of Psychology*, *45*(1), 47-74. <https://doi.org/10.1080/00223980.1958.9916240>
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, *15*(2), 219-234.  
<https://doi.org/10.1177/1468794112468475>
- Berndsen, M., & Van der Pligt, J. (2004). Ambivalence towards meat. *Appetite*, *42*(1), 71-78. [https://doi.org/10.1016/s0195-6663\(03\)00119-3](https://doi.org/10.1016/s0195-6663(03)00119-3)
- Biesalski, H. K. (2005). Meat as a component of a healthy diet—are there any risks or benefits if meat is avoided in the diet?. *Meat Science*, *70*(3), 509-524.  
<https://doi.org/10.1016/j.meatsci.2004.07.017>
- Bilewicz, M., Imhoff, R., & Drogosz, M. (2011). The humanity of what we eat: Conceptions of human uniqueness among vegetarians and omnivores. *European Journal of Social Psychology*, *41*(2), 201-209. <https://doi.org/10.1002/ejsp.766>

- Blanchflower, D.G., Oswald, A.J., & Brown, S.S. (2013). Is psychological well-being linked to the consumption of fruit and vegetables?. *Social Indicators Research*, *114*(3), 785-801. <https://doi.org/10.1007/s11205-012-0173-y>
- Bohrer, B. M. (2017). Nutrient density and nutritional value of meat products and non-meat foods high in protein. *Trends in Food Science & Technology*, *65*, 103-112. <https://doi.org/10.1016/j.tifs.2017.04.016>
- Bosson, J. K., Weaver, J. R., & Prewitt-Freilino, J. L. (2012). Concealing to belong, revealing to be known: Classification expectations and self-threats among persons with concealable stigmas. *Self and Identity*, *11*(1), 114-135. <https://doi.org/10.1080/15298868.2010.513508>
- Bowleg, L. (2012). The problem with the phrase women and minorities: intersectionality—an important theoretical framework for public health. *American Journal of Public Health*, *102*(7), 1267-1273. <https://doi.org/10.2105/ajph.2012.300750>
- Bourette, S. (2009). *Meat: A Love Story-Pasture to Plate-A Search for the Perfect Meal*. Penguin.
- Bower, K. M., Thorpe Jr, R. J., Rohde, C., & Gaskin, D. J. (2014). The intersection of neighborhood racial segregation, poverty, and urbanicity and its impact on food store availability in the United States. *Preventive Medicine*, *58*, 33-39. <https://doi.org/10.1016/j.ypmed.2013.10.010>
- Bullers, S. (2005). Environmental stressors, perceived control, and health: the case of residents near large-scale hog farms in eastern North Carolina. *Human Ecology*, *33*(1), 1-16. <https://doi.org/10.1007/s10745-005-1653-3>

- Branković, M., & Budžak, A. (2021, March 12). The healthy, yet unhealthy choice: stereotypes about vegetarians and vegans in a meat-eating culture.  
<https://doi.org/10.31234/osf.io/rdfs3>
- Bresnahan, M., Zhuang, J., & Zhu, X. (2016). Why is the vegan line in the dining hall always the shortest? Understanding vegan stigma. *Stigma and Health*, 1(1), 3–15. <https://doi.org/10.1037/sah0000011>
- Brummett, B. R., Wade, J. C., Ponterotto, J. G., Thombs, B., & Lewis, C. (2007). Psychosocial well-being and a multicultural personality disposition. *Journal of Counseling and Development*, 85(1), 73-81. <https://doi.org/10.1002/j.1556-6678.2007.tb00446.x>
- Bruers, S. (2015). In defense of eating vegan. *Journal of Agricultural and Environmental Ethics*, 28(4), 705-717. <https://doi.org/10.1007/s10806-015-9555-x>
- Calvert, S. J. (2007). A taste of Eden: Modern Christianity and vegetarianism. *The Journal of Ecclesiastical History*, 58(3), 461-481. <https://doi.org/10.1017/s0022046906008906>
- Camacho, G., Reinka, M. A., & Quinn, D. M. (2020). Disclosure and concealment of stigmatized identities. *Current Opinion in Psychology*, 31, 28-32. <https://doi.org/10.1016/j.copsyc.2019.07.031>
- Campbell, T. (2017). A plant-based diet and stroke. *Journal of Geriatric Cardiology*, 14(5), 321-326. <https://dx.doi.org/10.11909%2Fj.issn.1671-5411.2017.05.010>
- Canty, A., & Ripley, B. (2020). *boot: Bootstrap r (s-plus) functions* (Version 1.3-25) [R package]. <https://CRAN.r-project.org/package=boot>

- Caviola, L., Everett, J. A. C., & Faber, N. S. (2019). The moral standing of animals: Towards a psychology of speciesism. *Journal of Personality and Social Psychology, 116*(6), 1011–1029. <https://doi.org/10.1037/pspp0000182>
- Chaudoir, S. R., & Quinn, D. M. (2010). Revealing concealable stigmatized identities: The impact of disclosure motivations and positive first-disclosure experiences on fear of disclosure and well-being. *Journal of Social Issues, 66*(3), 570-584. <https://doi.org/10.1111/j.1540-4560.2010.01663.x>
- Chiles, R.M. & Fitzgerald, A.J. (2018). Why is meat so important in Western history and culture? A genealogical critique of biophysical and political-economic explanations. *Agriculture and Human Values, 35*(1), 1-17. <https://doi.org/10.1007/s10460-017-9787-7>
- Cheng, Z. H., Pagano, L. A., Jr., & Shariff, A. F. (2018). The development and validation of the Microaggressions Against Non-religious Individuals Scale (MANRIS). *Psychology of Religion and Spirituality, 10*(3), 254–262. <https://doi.org/10.1037/rel0000203>
- Cheng, Z. H., Pagano, L. A., Jr., & Shariff, A. F. (2019). The development, validation, and clinical implications of the Microaggressions Against Religious Individuals Scale (MARIS). *Psychology of Religion and Spirituality, 11*(4), 327–338. <https://doi.org/10.1037/rel0000126>
- Cherry, E. (2006). Veganism as a cultural movement: A relational approach. *Social Movement Studies, 5*(2), 155-170. <https://doi.org/10.1080/14742830600807543>

- Cherry, E. (2015). I was a teenage vegan: Motivation and maintenance of lifestyle movements. *Sociological Inquiry*, 85(1), 55-74.  
<https://doi.org/10.1111/soin.12061>
- Chin, M. G., Fisak Jr, B., & Sims, V. K. (2002). Development of the attitudes toward vegetarians scale. *Anthrozoös*, 15(4), 332-342.  
<https://doi.org/10.2752/089279302786992441>
- Choudhury, D., Singh, S., Si Han Seah, J., Chen Loong Yea, D., & Poh Tan, L. (2020). Commercialization of plant-based meat alternatives. *Trends in Plant Sciences*, 25(11), 1055-1058. <https://doi.org/10.1016/j.tplants.2020.08.006>
- Çiçekoğlu, P., & Tunçay, G. Y. (2018). A comparison of eating attitudes between vegans/vegetarians and nonvegans/nonvegetarians in terms of orthorexia nervosa. *Archives of Psychiatric Nursing*, 32(2), 200-205.  
<https://doi.org/10.1016/j.apnu.2017.11.002>
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.  
<https://doi.org/10.1037/0033-2909.112.1.155>
- Cokley, K., & Awad, G. H. (2013). In defense of quantitative methods: Using the “master’s tools” to promote social justice. *Journal for Social Action in Counseling & Psychology*, 5(2), 26-41. <https://doi.org/10.33043/jsacp.5.2.26-41>
- Cole, M., & Morgan, K. (2011). Vegaphobia: derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers. *The British Journal of Sociology*, 62(1), 134-153. <https://doi.org/10.1111/j.1468-4446.2010.01348.x>
- Connor, M., & Armitage, C. J. (2002). *The Social Psychology of Food*. Open University Press.

- Cook, E. A. J., de Glanville, W. A., Thomas, L. F., Kariuki, S., de Clare Bronsvort, B. M., & Fèvre, E. M. (2017). Working conditions and public health risks in slaughterhouses in western Kenya. *BMC Public Health*, *17*(1), 14-26. <https://doi.org/10.1186/s12889-016-3923-y>
- Correll, J., Park, B., & Allegra Smith, J. (2008). Colorblind and multicultural prejudice reduction strategies in high-conflict situations. *Group Processes & Intergroup Relations*, *11*(4), 471-491. <https://doi.org/10.1177/1368430208095401>
- Covey, A. (2018). Ethical Veganism as Protected Identity: Constructing a Creed Under Human Rights Law. In E. Quinn & B. Westwood (Eds.), *Thinking veganism in literature and culture: Towards a vegan theory* (pp. 225-247). Palgrave Macmillan.
- Craig, W.J. (2009). The health effects of a vegan diet. *American Journal of Clinical Nutrition*, *89*(5), 1627S-1633S. <https://doi.org/10.3945/ajcn.2009.26736n>
- Cramer, H., Kessler, C. S., Sundberg, T., Leach, M. J., Schumann, D., Adams, J., & Lauche, R. (2017). Characteristics of Americans choosing vegetarian and vegan diets for health reasons. *Journal of Nutrition Education and Behavior*, *49*(7), 561-567. <https://doi.org/10.1016/j.jneb.2017.04.011>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3<sup>rd</sup> ed.). Sage Publications.
- Creswell, J. W. and Plano Clark, V. L. (2017). *Designing and Conducting Mixed Methods Research* (3<sup>rd</sup> Edition). Sage Publications.
- Cross, A.J., Ferrucci, L. M., Risch, A., Graubard, B. I., Ward, M. H., Park V., Hollenbeck, A. R., Schatzkin, A., & Sinha, R. (2010). A large prospective study

- of meat consumption and colorectal cancer risk: An investigation of potential mechanisms underlying this association. *Prevention and Epidemiology*, 70(6), 2406-2414. <https://doi.org/10.1158/0008-5472.can-09-3929>
- Culbert, K. M., Racine, S. E., & Klump, K. L. (2015). Research review: What we have learned about the causes of eating disorders—a synthesis of sociocultural, psychological, and biological research. *Journal of Child Psychology and Psychiatry*, 56(11), 1141-1164. <https://doi.org/10.1111/jcpp.12441>
- Daniel, C. R., Cross, A. J., Koebnick, C., & Sinha, R. (2011). Trends in meat consumption in the USA. *Public Health Nutrition*, 14(4), 575-583. <https://doi.org/10.1017/s1368980010002077>
- Dantzer, R., & Mormède, P. (1983). Stress in farm animals: a need for reevaluation. *Journal of Animal Science*, 57(1), 6-18. <https://doi.org/10.2527/jas1983.5716>
- Davis, D. H. (2019). The phenomenological method. In G. Weiss, A. V. Murphy, & G. Salamon (Eds.), *50 concepts for a critical phenomenology* (pp. 3–9). Northwestern University Press. <https://doi.org/10.2307/j.ctvmx3j22.5>
- De Backer, C. J., & Hudders, L. (2015). Meat morals: relationship between meat consumption consumer attitudes towards human and animal welfare and moral behavior. *Meat Science*, 99, 68-74. <https://doi.org/10.1016/j.meatsci.2014.08.011>
- de Bakker, E., & Dagevos, H. (2012). Reducing meat consumption in today's consumer society: questioning the citizen-consumer gap. *Journal of Agricultural and Environmental Ethics*, 25(6), 877-894. <https://doi.org/10.1007/s10806-011-9345-z>



- De Smet, S., & Vossen, E. (2016). Meat: The balance between nutrition and health. A review. *Meat Science*, *120*, 145-156.  
<https://doi.org/10.1016/j.meatsci.2016.04.008>
- de Vries, M., & de Boer, I. J. (2010). Comparing environmental impacts for livestock products: A review of life cycle assessments. *Livestock Science*, *128*(1-3), 1-11.  
<https://doi.org/10.1016/j.livsci.2009.11.007>
- Dhont, K., Hodson, G., Costello, K., & MacInnis, C. C. (2014). Social dominance orientation connects prejudicial human–human and human–animal relations. *Personality and Individual Differences*, *61-62*, 105-108.  
<https://doi.org/10.1016/j.paid.2013.12.020>
- Dhont, K., Hodson, G., & Leite, A. C. (2016). Common ideological roots of speciesism and generalized ethnic prejudice: The social dominance human–animal relations model (sd-harm). *European Journal of Personality*, *30*(6), 507-522.  
<https://doi.org/10.1002/per.2069>
- Dombrowski, D. A. (2014). Philosophical vegetarianism and animal entitlements. In G.L. Campbell (Ed.), *The Oxford handbook of animals in classical thought and life* (pp. 535-555). Oxford University Press.
- Donovan, R. A., Galban, D. J., Grace, R. K., Bennett, J. K., & Felicié, S. Z. (2013). Impact of racial macro-and microaggressions in Black women’s lives: A preliminary analysis. *Journal of Black Psychology*, *39*(2), 185-196.  
<https://doi.org/10.1177/0095798412443259>
- Dunlap, K. (1944). Stammering: its nature, etiology and therapy. *Journal of Comparative Psychology*, *37*(3), 187-202. <https://doi.org/10.1037/h0056727>

- Dwyer, J.T. (1988). Health aspects of vegetarian diets. *American Society for Clinical Nutrition*, 48(3), 712-738. <https://doi.org/10.1093/ajcn/48.3.712>
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Jovanovich College Publishers.
- Eaton, S. B. (2006). The ancestral human diet: what was it and should it be a paradigm for contemporary nutrition?. *Proceedings of the Nutrition Society*, 65(1), 1-6. <https://doi.org/10.1079/pns2005471>
- Engel, M. (2000). The immorality of eating meat. In *The moral life: An introductory reader in ethics and literature*. L. P. Pojman (Ed.) Oxford University Press.
- European Vegetarian Union (2018). Definitions of “vegan” and “vegetarian” in accordance with EU food information regulation. Retrieved from [https://www.euroveg.eu/wp-content/uploads/2018/08/EVU\\_PP\\_Definition.pdf](https://www.euroveg.eu/wp-content/uploads/2018/08/EVU_PP_Definition.pdf)
- Fassinger, R., & Morrow, S. L. (2013). Toward best practices in quantitative, qualitative, and mixed-method research: A social justice perspective. *Journal for Social Action in Counseling & Psychology*, 5(2), 69-83. <https://doi.org/10.33043/jsacp.5.2.69-83>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G\* Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149-1160. <https://doi.org/10.3758/brm.41.4.1149>
- Fiala, N. (2008). Meeting the demand: An estimation of potential future greenhouse gas emissions from meat production. *Ecological Economics*, 67(3), 412-419. <https://doi.org/10.1016/j.ecolecon.2007.12.021>

- Forbes, R., Wochele, S., Peterson, K., & Craggs, A. (2021). Environmental Justice and Black Lives Matter: Critical Reflection and Advocacy for Social Work in the United States. *Environmental Justice*, 14(6), 404-410.  
<https://doi.org/10.1089/env.2021.0023>
- Forestell, C.A. & Nezlek, J.B. (2018). Vegetarianism, depression, and the Five Factor Model of personality. *Ecology of Food and Nutrition*, 57(3), 246-259.  
<https://doi.org/10.1080/03670244.2018.1455675>
- Fox, N., & Ward, K. (2008). Health, ethics and environment: A qualitative study of vegetarian motivations. *Appetite*, 50(2-3), 422-429.  
<https://doi.org/10.1016/j.appet.2007.09.007>
- Fuertes, J. N., Miville, M. L., Mohr, J. J., Sedlacek, W. E., & Gretchen, D. (2000). Factor structure and short form of the Miville-Guzman Universality-Diversity Scale. *Measurement and Evaluation in Counseling and Development*, 33(3), 157-169. <https://doi.org/10.1080/07481756.2000.12069007>
- Good Food Institute. (2020). State of the industry report: Plant-based meat, eggs, and dairy. Retrieved from <https://gfi.org/wp-content/uploads/2021/05/COR-SOTIR-Plant-based-meat-eggs-and-dairy-2021-0504.pdf>
- George, K. P. (1994). Discrimination and bias in the vegan ideal. *Journal of Agricultural and Environmental Ethics*, 7(1), 19-28. <https://doi.org/10.1007/bf01997221>
- Gili, R. V., Leeson, S., Montes-Chañi, E. M., Xutuc, D., Contreras-Guillén, I. A., Guerrero-Flores, G. N., ... & Pacheco, S. O. (2019). Healthy Lifestyle Practices among Argentinian Vegetarians and Non-Vegetarians. *Nutrients*, 11(1), 154-172.  
<https://doi.org/10.3390/nu11010154>

- Gold, S. (2008). *The shameless carnivore: A manifesto for meat lovers*. Clarkson Potter.
- Gonzales, L., Davidoff, K. C., Nadal, K. L., & Yanos, P. T. (2015). Microaggressions experienced by persons with mental illnesses: An exploratory study. *Psychiatric Rehabilitation Journal*, 38(3), 234-241. <https://doi.org/10.1037/prj0000096>
- Goossens, L., Braet, C., Van Vlierberghe, L., & Mels, S. (2009). Loss of control over eating in overweight youngsters: The role of anxiety, depression and emotional eating. *European Eating Disorders Review: The Professional Journal of the Eating Disorders Association*, 17(1), 68-78. <https://doi.org/10.1002/erv.892>
- Gorski, P., Lopresti-Goodman, S., & Rising, D. (2019). "Nobody's paying me to cry": The causes of activist burnout in United States animal rights activists. *Social Movement Studies*, 18(3), 364-380. <https://doi.org/10.1080/14742837.2018.1561260>
- Grandin, T., & Shivley, C. (2015). How farm animals react and perceive stressful situations such as handling, restraint, and transport. *Animals*, 5(4), 1233-1251. <https://doi.org/10.3390/ani5040409>
- Greene, J. C., & Caracelli, V. J. (1997). Defining and describing the paradigm issue in mixed-method evaluation. *New Directions for Evaluation*, 74, 5-17. <https://doi.org/10.1002/ev.1068>
- Greenebaum, J. B. (2012a). Managing Impressions: "Face-Saving" Strategies of Vegetarians and Vegans. *Humanity & society*, 36(4), 309-325.
- Greenebaum, J.B. (2012b). Veganism, identity, and the quest for authenticity. *Food, Culture, & Society*, 15(1), 129-144. <https://doi.org/10.2752/175174412x13190510222101>

- Greenebaum, J.B. (2016). Questioning the concept of vegan privilege: A commentary. *Humanity and Society*, 41(3), 1-18. <https://doi.org/10.1177/0160597616640308>
- Greenebaum, J. (2018). Vegans of color: managing visible and invisible stigmas. *Food, Culture & Society*, 21(5), 680-697. <https://doi.org/10.1080/15528014.2018.1512285>
- Grosjean, P., & Ibanez, F. (2018). *pastecs: Package for analysis of space-time ecological series* (Version 1.3.21) [R package]. <https://CRAN.R-project.org/package=pastecs>
- Grotto, D., & Zied, E. (2010). The standard American diet and its relationship to the health status of Americans. *Nutrition in Clinical Practice*, 25(6), 603-612. <https://doi.org/10.1177/0884533610386234>
- Grunert, K. G. (2006). Future trends and consumer lifestyles with regard to meat consumption. *Meat Science*, 74(1), 149-160. <https://doi.org/10.1016/j.meatsci.2006.04.016>
- Guenther, L. (2019). Critical phenomenology. In G. Weiss, A. V. Murphy, & G. Salamon (Eds.), *50 concepts for a critical phenomenology* (pp. 11–16). Northwestern University Press. <https://doi.org/10.2307/j.ctvmx3j22.6>
- Haenfler, R., Johnson, B., & Jones, E. (2012). Lifestyle movements: Exploring the intersection of lifestyle and social movements. *Social Movement Studies*, 11(1), 1-20. <https://doi.org/10.1080/14742837.2012.640535>
- Hage, S. M., Romano, J. L., Conyne, R. K., Kenny, M., Matthews, C., Schwartz, J. P., & Waldo, M. (2007). Best practice guidelines on prevention practice, research, training, and social advocacy for psychologists. *The Counseling Psychologist*, 35(4), 493-566. <https://doi.org/10.1177/0011000006291411>

- Hanson, W. E., Creswell, J. W., Clark, V. L. P., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology, 52*(2), 224-235. <https://doi.org/10.1037/0022-0167.52.2.224>
- Harland, J., & Garton, L. (2016). An update of the evidence relating to plant-based diets and cardiovascular disease, type 2 diabetes and overweight. *Nutrition Bulletin, 41*(4), 323-338. <https://doi.org/10.1111/nbu.12235>
- Harper, A.B. (2010a). *Response to vegnews race and class privilege article*“, "we the people". The Sistah Vegan Project: A Critical Race Feminist’s Journey Through The ‘Post-Racial’ Ethical Foodscape And Beyond. <http://sistahvegan.com/2010/04/29/response-to-vegnews-race-and-class-privilege-article-we-the-people/>
- Harper, A.B. (Ed.) (2010b). *Sistah vegan: Black female vegans speak on food, identity, health, and society*. Latern Books
- Havewala, F. (2021). The dynamics between the food environment and residential segregation: An analysis of metropolitan areas. *Food Policy, 103*, 102015. <https://doi.org/10.1016/j.foodpol.2020.102015>
- Henning, B. (2011). Standing in livestock's “long shadow”: The ethics of eating meat on a small planet. *Ethics & the Environment, 16*(2), 63-93. <https://doi.org/10.2979/ethicsenviro.16.2.63>
- Hesse-Biber, S. N. (2010). *Mixed methods research: Merging theory with practice*. Guilford Press.

- Hibbeln, J. R., Northstone, K., Evans, J., & Golding, J. (2018). Vegetarian diets and depressive symptoms among men. *Journal of Affective Disorders*, 225, 13-17. <https://doi.org/10.1016/j.jad.2017.07.051>
- Hirschler, C. A. (2011). "What pushed me over the edge was a deer hunter": Being vegan in North America. *Society & Animals*, 19(2), 156-174. <https://doi.org/10.1163/156853011x562999>
- Hoffman, S. R., Stallings, S. F., Bessinger, R. C., & Brooks, G. T. (2013). Differences between health and ethical vegetarians. Strength of conviction, nutrition knowledge, dietary restriction, and duration of adherence. *Appetite*, 65, 139-144. <https://doi.org/10.1016/j.appet.2013.02.009>
- Hollis, J. F., Carmody, T. P., Connor, S. L., Fey, S. G., & Matarazzo, J. D. (1986). The Nutrition Attitude Survey: associations with dietary habits, psychological and physical well-being, and coronary risk factors. *Health Psychology*, 5(4), 359-374. <https://doi.org/10.1037/0278-6133.5.4.359>
- Hook, J. N., Watkins Jr, C. E., Davis, D. E., Owen, J., Van Tongeren, D. R., & Ramos, M. J. (2016). Cultural humility in psychotherapy supervision. *American Journal of Psychotherapy*, 70(2), 149-166. <https://doi.org/10.1176/appi.psychotherapy.2016.70.2.149>
- Horta, O. (2010). What is speciesism?. *Journal of agricultural and environmental ethics*, 23(3), 243-266. <https://doi.org/10.1007/s10806-009-9205-2>
- Horta, O. (2018). Discrimination Against Vegans. *Res Publica*, 24(3), 359-373. <https://doi.org/10.1007/s11158-017-9356-3>

- Hycner, R. H. (1985). Some guidelines for the phenomenological analysis of interview data. *Human Studies*, 8(3), 279-303. <https://doi.org/10.1007/bf00142995>
- Iacobbo, K., & Iacobbo, M. (2004). *Vegetarian America: A history*. Greenwood Publishing Group.
- Iguacel, I., Huybrechts, I., Moreno, L. A., & Michels, N. (2020). Vegetarianism and veganism compared with mental health and cognitive outcomes: A systematic review and meta-analysis. *Nutrition Reviews*, nuaa030. <https://doi.org/10.1093/nutrit/nuaa030>
- Ilea, R. C. (2009). Intensive livestock farming: Global trends, increased environmental concerns, and ethical solutions. *Journal of agricultural and environmental ethics*, 22(2), 153-167. <https://doi.org/10.1007/s10806-008-9136-3>
- International Agency for Research on Cancer. (2015). Consumption of red meat and processed meat. IARC Working Group: Lyon, France.
- Janssen, M., Busch, C., Rödiger, M., & Hamm, M. (2016). Motives of consumers following a vegan diet and their attitudes toward animal agriculture. *Appetite*, 105(1), 643-651. <https://doi.org/10.1016/j.appet.2016.06.039>
- Joy, M. (2020). *Why we love dogs, eat pigs, and wear cows: An introduction to carnism*. Red Wheel.
- Judge, M. & Wilson, M.S. (2018). A dual-process of motivational model of attitudes towards vegetarians and vegans. *European Journal of Social Psychology*, 49(1), 169-178. <https://doi.org/10.1002/ejsp.2386>



- Kahn, R. (2011). Towards an animal standpoint: Vegan education and the epistemology of ignorance. In E. Malewski & N. Jaramillo (Eds.), *Epistemologies of Ignorance in Education* (pp. 53-70). Information Age.
- Kanerva, M. (2013). *Meat consumption in Europe: Issues, trends and debates*. Universität Bremen, Germany. Retrieved from <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-58710-6>
- Kellman, S. G. (2000). Fish, flesh, and foul: The anti-vegetarian animus. *The American Scholar*, 69(4), 85-96. Retrieved from <https://www.jstor.org/stable/41213076?seq=1>
- Kenyon, P. M., & Barker, M. E. (1998). Attitudes towards meat-eating in vegetarian and non-vegetarian teenage girls in England—an ethnographic approach. *Appetite*, 30(2), 185-198. <https://doi.org/10.1006/appe.1997.0129>
- Key, T. J., Appleby, P. N., & Rosell, M. S. (2006). Health effects of vegetarian and vegan diets. *Proceedings of the Nutrition Society*, 65(1), 35-41. <https://doi.org/10.1079/pns2005481>
- Kincheloe, J. L., & McLaren, P. (2011). In Rethinking critical theory and qualitative research. In J. Kincheloe (Ed.), *Key works in critical pedagogy* (pp. 285-326). Brill Sense.
- Kohli, H.K., Ross, F., Kohli, A.S., & Peng, C. (2016). Universal-diverse orientation of business, education, and social work students in a north-eastern comprehensive university. *International Journal of Management in Education*, 10(2), 111-130. <https://doi.org/10.1504/ijmie.2016.075554>

- Kottke, J. L. (2011). Additional evidence for the short form of the Universality-Diversity Scale. *Personality and Individual Differences, 50*(4), 464-469. <https://doi.org/10.1016/j.paid.2010.11.008>
- Korkmaz, S., Goksuluk, D., & Zararsiz, G. (2014). MVN: A package for assessing multivariate normality. *The R Journal, 6*(2), 151-152. <https://doi.org/10.32614/RJ-2014-031>
- Kozan, S., & Blustein, D. L. (2018). Implementing social change: A qualitative analysis of counseling psychologists' engagement in advocacy. *The Counseling Psychologist, 46*(2), 154-189. <https://doi.org/10.1177%2F0011000018756882>
- Kubberød, E., Ueland, Ø., Tronstad, Å., & Risvik, E. (2002). Attitudes towards meat and meat-eating among adolescents in Norway: a qualitative study. *Appetite, 38*(1), 53-62. <https://doi.org/10.1006/appe.2002.0458>
- LaFollette, H., & Shanks, N. (1996). The origin of speciesism. *Philosophy, 71*(275), 41-61. <https://doi.org/10.1017/s0031819100053250>
- Larsson, S.C. & Orsini, N. (2014). Red meat and processed meat consumption and all-cause mortality: A meta-analysis. *American Journal of Epidemiology, 179*(3), 282-289. <https://doi.org/10.1093/aje/kwt261>
- Larsson, S.C. & Wolk, A. (2006). Meat consumption and risk of colorectal cancer: A meta-analysis of prospective studies. *International Journal of Cancer, 119*, 2657-2664. <https://doi.org/10.1002/ijc.22170>
- Leibler, J. H., Janulewicz, P. A., & Perry, M. J. (2017). Prevalence of serious psychological distress among slaughterhouse workers at a United States beef packing plant. *Work, 57*(1), 105-109. <https://doi.org/10.3233/wor-172543>

- Leite, A. C., Dhont, K., & Hodson, G. (2019). Longitudinal effects of human supremacy beliefs and vegetarianism threat on moral exclusion (vs. inclusion) of animals. *European Journal of Social Psychology, 49*(1), 179-189. <https://doi.org/10.1002/ejsp.2497>
- Leitzmann, C. (2014). Vegetarian nutrition: past, present, future. *The American Journal of Clinical Nutrition, 100*(suppl\_1), 496S-502S. <https://doi.org/10.3945/ajcn.113.071365>
- LeRette, D. E. (2014). *Stories of microaggressions directed toward vegans and vegetarians in social settings* [Doctoral dissertation, Fielding Graduate University]. <https://www.proquest.com/docview/1523728680?pq-origsite=gscholar&fromopenview=true>
- Leys, C., Delacre, M., Mora, Y. L., Lakens, D., & Ley, C. (2019). How to classify, detect, and manage univariate and multivariate outliers, with emphasis on pre-registration. *International Review of Social Psychology, 32*(1), 1-10. <https://doi.org/10.5334/irsp.289>
- Lindeman, M. (2010). The state of mind of vegetarians: Psychological well-being or distress? *Ecology of Food and Nutrition, 41*(1), 75-86. <https://doi.org/10.1080/03670240212533>
- Levinson, C. A., & Rodebaugh, T. L. (2012). Social anxiety and eating disorder comorbidity: The role of negative social evaluation fears. *Eating Behaviors, 13*(1), 27-35. <https://doi.org/10.1016/j.eatbeh.2011.11.006>

- Loughnan, S., Bastian, B., & Haslam, N. (2014). The psychology of eating animals. *Current Directions in Psychological Science*, 23(2), 104-108.  
<https://doi.org/10.1177/0963721414525781>
- Loughnan, S., Bratanova, B., & Puvia, E. (2012). The meat paradox: how are we able to love animals and love eating animals. *Mind*, 1, 15-18. <http://it.in-mind.org/>
- Loughnan, S., Haslam, N., & Bastian, B. (2010). The role of meat consumption in the denial of moral status and mind to meat animals. *Appetite*, 55(1), 156-159. <https://doi.org/10.1016/j.appet.2010.05.043>
- Lundström, M. (2019). The political economy of meat. *Journal of Agricultural and Environmental Ethics*, 32 (1), 95-104. <https://doi.org/10.1007/s10806-019-09760-9>
- Lyman, B. (2012). *A psychology of food: More than a matter of taste*. Springer Science & Business Media.
- McAfee, A.J., McSorley, E.M., Cuskelly, G.J., Moss, B.W., Wallace, J.M.W., Bonham, M.P., & Fearon, A.M. (2010). Red meat consumption: An overview of the risks and benefits. *Meat Science*, 84(1), 1-13.  
<https://doi.org/10.1016/j.meatsci.2009.08.029>
- McDonald, B. (2000). "Once You Know Something, You Can't Not Know It": An Empirical Look at Becoming Vegan. *Society & Animals*, 8(1), 1-23.  
<https://doi.org/10.1163/156853000x00011>
- MacInnis, C. C., & Hodson, G. (2017). It ain't easy eating greens: Evidence of bias toward vegetarians and vegans from both source and target. *Group Processes & Intergroup Relations*, 20(6), 721-744. <https://doi.org/10.1177/1368430215618253>

- Maes, D. G., Dewulf, J., Piñeiro, C., Edwards, S., & Kyriazakis, I. (2020). A critical reflection on intensive pork production with an emphasis on animal health and welfare. *Journal of Animal Science*, 98(Supplement\_1), S15-S26.  
<https://doi.org/10.1093/jas/skz362>
- Mann, N. (2013). Human evolution and diet: a modern conundrum of health versus meat consumption, or is it?. *Animal Production Science*, 53(11), 1135-1142.  
<https://doi.org/10.1071/an13197>
- Mann, N. J. (2018). A brief history of meat in the human diet and current health implications. *Meat science*, 144, 169-179.  
<https://doi.org/10.1016/j.meatsci.2018.06.008>
- Markowski, K. L., & Roxburgh, S. (2019). “If I became a vegan, my family and friends would hate me:” Anticipating vegan stigma as a barrier to plant-based diets. *Appetite*, 135, 1-9. <https://doi.org/10.1016/j.appet.2018.12.040>
- Mason, Q. M. (2018). Intersectional ambiguity and the phenomenology of #BlackGirlJoy. In S. C. Shabot and C. Landry (Eds.), *Rethinking feminist phenomenology: Theoretical and applied perspectives* (pp. 51-68). Rowan & Littlefield Intl.
- Matta, J., Czernichow, S., Kesse-Guyot, E., Hoertel, N., Limosin, F., Goldberg, M., ... & Lemogne, C. (2018). Depressive symptoms and vegetarian diets: Results from the constances cohort. *Nutrients*, 10(11), 1695-1707.  
<https://doi.org/10.3390/nu10111695>

- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674-697. <https://doi.org/10.1037/0033-2909.129.5.674>
- Michalak, J., Zhang, X.C., & Jacobi, F. (2012). Vegetarian diet and mental disorders: Results from a representative survey. *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 67-77. <https://doi.org/10.1186/1479-5868-9-67>
- Minson, J. A., & Monin, B. (2012). Do-gooder derogation: Disparaging morally motivated minorities to defuse anticipated reproach. *Social Psychological and Personality Science*, 3(2), 200-207. <https://doi.org/10.1177/1948550611415695>
- Miville, M. L., Carlozzi, A. F., Gushue, G. V., Schara, S. L., & Ueda, M. (2006). Mental health counselor qualities for a diverse clientele: Linking empathy, universal-diverse orientation, and emotional intelligence. *Journal of Mental Health Counseling*, 28(2), 151-165. <https://doi.org/10.17744/mehc.28.2.6khc06t87c2fr7y3>
- Miville, M. L., Carlozzi, A. F., Gushue, G. V., Schara, S. L., & Ueda, M. (2016). Mental health counselor qualities for a diverse clientele: Linking empathy, universal-diverse orientation, and emotional intelligence. *Mental Health Counseling*, 28(2), 151-165. <https://doi.org/10.17744/mehc.28.2.6khc06t87c2fr7y3>
- Miville, M. L., Gelso, C. J., Pannu, R., Liu, W., Touradji, P., Holloway, P., & Fuertes, J. (1999). Appreciating similarities and valuing differences: The Miville-Guzman Universality-diversity scale. *Journal of Counseling Psychology*, 46(3), 291-307. <https://doi.org/10.1037/0022-0167.46.3.291>

- Miville, M. L., Romans, J. S. C., Johnson, D., & Lone, R. (2004). Universal diverse orientation: Linking social attitudes with wellness. *Journal of Student Psychotherapy, 19*(2), 61-79. [https://doi.org/10.1300/j035v19n02\\_06](https://doi.org/10.1300/j035v19n02_06)
- Monteiro, C. A., Pfeiler, T. M., Patterson, M. D., & Milburn, M. A. (2017). The Carnism Inventory: Measuring the ideology of eating animals. *Appetite, 113*, 51-62. <https://doi.org/10.1016/j.appet.2017.02.011>
- Morrow, S. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology, 52*(2), 250-260. <https://doi.org/10.1037/0022-0167.52.2.250>
- Murray, S. B., Nagata, J. M., Griffiths, S., Calzo, J. P., Brown, T. A., Mitchison, D., ... & Mond, J. M. (2017). The enigma of male eating disorders: A critical review and synthesis. *Clinical Psychology Review, 57*, 1-11. <https://doi.org/10.1016/j.cpr.2017.08.001>
- Nadal, K. L. (2013). *That's so gay! Microaggressions and the lesbian, gay, bisexual, and transgender community*. American Psychological Association.
- Nadal, K. L., Griffin, K. E., Wong, Y., Hamit, S., & Rasmus, M. (2014). The impact of racial microaggressions on mental health: Counseling implications for clients of color. *Journal of Counseling & Development, 92*(1), 57-66.
- Nadal, K. L., Issa, M.-A., Griffin, K. E., Hamit, S., & Lyons, O. B. (2010). Religious microaggressions in the United States: Mental health implications for religious minority groups. In D. W. Sue (Ed.), *Microaggressions and marginality: Manifestation, dynamics, and impact* (pp. 287–310). John Wiley & Sons Inc.

- Nezlek, J. B., Cyprianska, M., & Forestell, C. A. (2020). Dietary Similarity of Friends and Lovers: Vegetarianism, Omnivorism, and Personal Relationships. *The Journal of Social Psychology, 161*(5), 519-525.
- Nezlek, J.B. & Forestell, C.A. (2020). Vegetarianism as a social identity. *Current Opinion in Food Science, 33*, 45-51. <https://doi.org/10.1016/j.cofs.2019.12.005>
- Newheiser, A. K., & Barreto, M. (2014). Hidden costs of hiding stigma: Ironic interpersonal consequences of concealing a stigmatized identity in social interactions. *Journal of Experimental Social Psychology, 52*, 58-70. <https://doi.org/10.1016/j.jesp.2014.01.002>
- Newheiser, A. K., Barreto, M., & Tiemersma, J. (2017). People like me don't belong here: Identity concealment is associated with negative workplace experiences. *Journal of Social Issues, 73*(2), 341-358. <https://doi.org/10.1111/josi.12220>
- Nicole, W. (2013). CAFOs and environmental justice: The case of North Carolina. *Environmental Health Perspectives, 121*(6), 182-189. <https://doi.org/10.1289/ehp.121-a182>
- Niemyjska, A., Cantarero, K., Byrka, K., & Bilewicz, M. (2018). Too humanlike to increase my appetite: Disposition to anthropomorphize animals relates to decreased meat consumption through empathic concern. *Appetite, 127*, 21-27. <https://doi.org/10.1016/j.appet.2018.04.012>
- North American Vegetarian Society (n.d). *Frequently Asked Questions*. <https://navs-online.org/faq/>
- Olmedilla-Alonso, B., Jiménez-Colmenero, F., & Sánchez-Muniz, F. J. (2013). Development and assessment of healthy properties of meat and meat products



designed as functional foods. *Meat Science*, 95(4), 919-930.

<https://doi.org/10.1016/j.meatsci.2013.03.030>

Owen, J., Imel, Z., Tao, K. W., Wampold, B., Smith, A., & Rodolfa, E. (2011). Cultural ruptures in short-term therapy: Working alliance as a mediator between clients' perceptions of microaggressions and therapy outcomes. *Counselling and Psychotherapy Research*, 11(3), 204-212.

<https://doi.org/10.1080/14733145.2010.491551>

Owen, J., Tao, K. W., Imel, Z. E., Wampold, B. E., & Rodolfa, E. (2014). Addressing racial and ethnic microaggressions in therapy. *Professional Psychology: Research and Practice*, 45(4), 283–290. <https://doi.org/10.1037/a0037420>

Oxford University Press. (2020) *Lexico*. Retrieved September 15, 2019, from

<https://www.lexico.com/en/definition/diet>

Pan, A., Sun, Q., Bernstein, A. M., Manson, J. E., Willett, W. C., & Hu, F. B. (2013). Changes in red meat consumption and subsequent risk of type 2 diabetes mellitus: Three cohorts of US men and women. *Journal of the American Medical Association Internal Medicine*, 173(14), 1328-1335.

<https://doi.org/10.1001/jamainternmed.2013.6633>

Paxton, S. J., & Diggins, J. (1997). Avoidance coping, binge eating, and depression: An examination of the escape theory of binge eating. *International Journal of Eating Disorders*, 22(1), 83-87. [https://doi.org/10.1002/\(sici\)1098-](https://doi.org/10.1002/(sici)1098-108x(199707)22:1%3C83::aid-eat11%3E3.0.co;2-j)

[108x\(199707\)22:1%3C83::aid-eat11%3E3.0.co;2-j](https://doi.org/10.1002/(sici)1098-108x(199707)22:1%3C83::aid-eat11%3E3.0.co;2-j)

- Pereira, P. M. D. C. C., & Vicente, A. F. D. R. B. (2013). Meat nutritional composition and nutritive role in the human diet. *Meat Science*, 93(3), 586-592.  
<https://doi.org/10.1016/j.meatsci.2012.09.018>
- Petherick, J. C. (2005). Animal welfare issues associated with extensive livestock production: The northern Australian beef cattle industry. *Applied Animal Behaviour Science*, 92(3), 211-234.  
<https://doi.org/10.1016/j.applanim.2005.05.009>
- Peters, H. J., Schwenk, H. N., Ahlstrom, Z. R., & McIalwain, L. N. (2017). Microaggressions: The experience of individuals with mental illness. *Counselling Psychology Quarterly*, 30(1), 86-112.  
<https://doi.org/10.1080/09515070.2016.1164666>
- PettyJohn, M. E., Tseng, C. F., & Blow, A. J. (2020). Therapeutic utility of discussing therapist/client intersectionality in treatment: When and how?. *Family process*, 59(2), 313-327. <https://doi.org/10.1111/famp.12471>
- Phillips, T. (2021). Veganism and the US legal system. In L. Wright (Ed.), *The Routledge Handbook of Vegan Studies* (pp. 134-149). Routledge.
- Piazza, J., Ruby, M. B., Loughnan, S., Luong, M., Kulik, J., Watkins, H. M., & Seigerman, M. (2015). Rationalizing meat consumption. The 4Ns. *Appetite*, 91, 114-128. <https://doi.org/10.1016/j.appet.2015.04.011>
- Pilgrim, K. (2013). 'Happy Cows,' 'Happy Beef': A Critique of the Rationales for Ethical Meat. *Environmental Humanities*, 3(1), 111-127.  
<https://doi.org/10.1215/22011919-3611257>

- Pimentel, D., & Pimentel, M. (2003). Sustainability of meat-based and plant-based diets and the environment. *The American Journal of Clinical Nutrition*, 78(3), 660S-663S. <https://doi.org/10.1093/ajcn/78.3.660s>
- Pollan, M. (2006). *The omnivore's dilemma: A natural history of four meals*. Penguin Books Limited.
- Ponterotto, J. G. (2005). Qualitative research in counseling psychology: A primer on research paradigms and philosophy of science. *Journal of Counseling Psychology*, 52(2), 126-136. <https://doi.org/10.1037/0022-0167.52.2.126>
- Ponterotto, J. G. (2010). Qualitative research in multicultural psychology: Philosophical underpinnings, popular approaches, and ethical considerations. *Cultural Diversity and Ethnic Minority Psychology*, 16(4), 581-589. <https://doi.org/10.1037/a0012051>
- Povey, R., Wellens, B., & Conner, M. (2001). Attitudes towards following meat, vegetarian, and vegan diets: An examination of the role of ambivalence. *Appetite*, 37(1), 15-26. <https://doi.org/10.1006/appe.2001.0406>
- Quinn, D. M., Camacho, G., Pan-Weisz, B., & Williams, M. K. (2020). Visible and concealable stigmatized identities and mental health: Experiences of racial discrimination and anticipated stigma. *Stigma and Health*, 5(4), 488–491. <https://doi.org/10.1037/sah0000210>
- Quinn, D.M. & Chaudoir, S.R. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *Journal of Personality*, 97 (4), 634-651. <https://doi.org/10.1037/2376-6972.1.s.35>

- Quinn, D. M., & Earnshaw, V. A. (2011). Understanding concealable stigmatized identities: The role of identity in psychological, physical, and behavioral outcomes. *Social Issues and Policy Review*, 5(1), 160-190. <https://doi.org/10.1111/j.1751-2409.2011.01029.x>
- Quinn, D. M., & Earnshaw, V. A. (2013). Concealable stigmatized identities and psychological well-being. *Social and Personality Psychology Compass*, 7(1), 40-51. <https://doi.org/10.1111/spc3.12005>
- Quinn, D. M., Williams, M. K., & Weisz, B. M. (2015). From discrimination to internalized mental illness stigma: The mediating roles of anticipated discrimination and anticipated stigma. *Psychiatric Rehabilitation Journal*, 38(2), 103-108. <https://doi.org/10.1037/prj0000136>
- R Core Team. (2020). *R: A language and environment for statistical computing* [Computer software]. R Foundation for Statistical Computing. <https://www.R-project.org>
- Ramos, A. K., Carlo, G., Grant, K., Trinidad, N., & Correa, A. (2016). Stress, depression, and occupational injury among migrant farmworkers in Nebraska. *Safety*, 2(4), 23-34. <https://doi.org/10.3390/safety2040023>
- Ramos, A. K., Fuentes, A., & Carvajal-Suarez, M. (2018). Self-reported occupational injuries and perceived occupational health problems among Latino immigrant swine confinement workers in Missouri. *Journal of Environmental and Public Health*, 2018, 1-8. <https://doi.org/10.1155/2018/8710901>

- Rance, N., Moller, N. P., & Clarke, V. (2017). 'Eating disorders are not about food, they're about life': Client perspectives on anorexia nervosa treatment. *Journal of Health Psychology*, 22(5), 582-594. <https://doi.org/10.1177/1359105315609088>
- Rapp, D. J. (1978). Does diet affect hyperactivity?. *Journal of Learning Disabilities*, 11(6), 383-389. <https://doi.org/10.1177/002221947801100611>
- Reinhart, R.J. (2018). Snapshot: Few Americans vegetarians or vegans. Gallup. Retrieved from [https://news.gallup.com/poll/238328/snapshot-few-americans-vegetarian-vegan.aspx?g\\_source=link\\_NEWSV9&g\\_medium=NEWSFEED&g\\_campaign=item\\_&g\\_content=Snapshot%3a%2520Few%2520Americans%2520Vegetarian%2520or%2520Vegan](https://news.gallup.com/poll/238328/snapshot-few-americans-vegetarian-vegan.aspx?g_source=link_NEWSV9&g_medium=NEWSFEED&g_campaign=item_&g_content=Snapshot%3a%2520Few%2520Americans%2520Vegetarian%2520or%2520Vegan)
- Reinka, M. A., Pan-Weisz, B., Lawner, E. K., & Quinn, D. M. (2020). Cumulative consequences of stigma: Possessing multiple concealable stigmatized identities is associated with worse quality of life. *Journal of Applied Social Psychology*, 50(4), 253-261. <https://doi.org/10.1111/jasp.12656>
- Reis, H. T. (2007). Similarity-Attraction Effect. In R. F. Baumeister & K. D. Vohs (Eds.), *Encyclopedia of Social Psychology* (p. 876). <https://doi.org/10.4135/9781412956253.n517>
- Richardson, A. S., Arsenault, J. E., Cates, S. C., & Muth, M. K. (2015). Perceived stress, unhealthy eating behaviors, and severe obesity in low-income women. *Nutrition Journal*, 14(1), 122-. <https://doi.org/10.1186/s12937-015-0110-4>
- Romo, L. K., & Donovan-Kicken, E. (2012). "Actually, I don't eat meat": A multiple-goals perspective of communication about vegetarianism. *Communication Studies*, 63(4), 405-420. <https://doi.org/10.1080/10510974.2011.623752>

- Rosseel, Y. (2012). lavaan: An r package for structural equation modeling. *Journal of Statistics Software*, 48(2), 1-36. <https://doi.org/10.18637/jss.v048.i02>
- Rosenfeld, D.L. (2018). The psychology of vegetarianism: Recent advances and future directions. *Appetite*, 131, 125-138. <https://doi.org/10.1016/j.appet.2018.09.011>
- Rosenfeld, D.L. (2019a). A comparison of dietarian identity profiles between vegetarians and vegans. *Food Quality and Preferences*, 72(X), 40-44. <https://doi.org/10.1016/j.foodqual.2018.09.008>
- Rosenfeld, D.L. (2019b). Psychometric properties of the Dietarian Identity Questionnaire among vegetarians. *Food Quality and Preferences*, 74, 135-141.
- Rosenfeld, D.L. & Burrow, A.L. (2017). The unified model of vegetarian identity: A conceptual framework for understanding plant-based food choices. *Appetite*, 112, 78-95. <https://doi.org/10.1016/j.appet.2017.01.017>
- Rosenfeld, D. L., & Burrow, A. L. (2018). Development and validation of the Dietarian Identity Questionnaire: Assessing self-perceptions of animal-product consumption. *Appetite*, 127, 182-194. <https://doi.org/10.1016/j.appet.2018.05.003>
- Rosenfeld, D. L., & Tomiyama, A. J. (2019). When vegetarians eat meat: Why vegetarians violate their diets and how they feel about doing so. *Appetite*, 143, 104417. <https://doi.org/10.1016/j.appet.2019.104469>
- Rosenfeld, D. L., & Tomiyama, A. J. (2021). How proximal are pescatarians to vegetarians? An investigation of dietary identity, motivation, and attitudes toward animals. *Journal of health psychology*, 26(5), 713-727. <https://doi.org/10.1177/1359105319842933>

- Rothgerber, H. (2014). Efforts to overcome vegetarian-induced dissonance among meat eaters. *Appetite*, 79, 32-41. <https://doi.org/10.1016/j.appet.2014.04.003>
- Rothgerber, H. (2020). Meat-related cognitive dissonance: A conceptual framework for understanding how meat eaters reduce negative arousal from eating animals. *Appetite*, 146, 104511. <https://doi.org/10.1016/j.appet.2019.104511>
- Revelle, W. (2020). *psych: Procedures for psychological, psychometric, and personality research* (Version 2.0.9) [R package]. Northwestern University. <https://CRAN.R-project.org/package=psych>
- Rozin, P. (1996). Towards a psychology of food and eating: From motivation to module to model to marker, morality, meaning, and metaphor. *Current Directions in Psychological Science*, 5(1), 18-24. <https://doi.org/10.1111/1467-8721.ep10772>690
- Rozin, P., Fischler, C., Imada, S., Sarubin, A., & Wrzesniewski, A. (1999). Attitudes to food and the role of food in life in the USA, Japan, Flemish Belgium and France: Possible implications for the diet–health debate. *Appetite*, 33(2), 163-180. <https://doi.org/10.1006/appe.1999.0244>
- Rozin, P., Hormes, J. M., Faith, M. S., & Wansink, B. (2012). Is meat male? A quantitative multimethod framework to establish metaphoric relationships. *Journal of Consumer Research*, 39(3), 629-643. <https://doi.org/10.1086/664970>
- Ruby, M.B. (2012). Vegetarianism: A blossoming field of study. *Appetite*, 58(1), 141-150. <https://doi.org/10.1016/j.appet.2011.09.019>

Ruby, M. B., Alvarenga, M. S., Rozin, P., Kirby, T. A., Richer, E., & Rutzstein, G.

(2016). Attitudes toward beef and vegetarians in Argentina, Brazil, France, and the USA. *Appetite*, *96*, 546-554. <https://doi.org/10.1016/j.appet.2015.10.018>

Ruby, M. B. & Heine, S. J. (2011). Meat, morals, and masculinity. *Appetite*, *56*(2), 447-450.

<https://doi.org/10.1016/j.appet.2011.01.018>

Ruby, M.B., Heine, S.J., Kamble, S., Cheng, T.K., & Waddar, M. (2013). Compassion and contamination. Cultural differences in vegetarianism. *Appetite*, *71*, 340-348.

<https://doi.org/10.1016/j.appet.2013.09.004>

Rüsch, N., Abbruzzese, E., Hagedorn, E., Hartenhauer, D., Kaufmann, I., Curschellas, J.,

... & Kawohl, W. (2014). Efficacy of Coming Out Proud to reduce stigma's impact among people with mental illness: Pilot randomized controlled trial. *The British Journal of Psychiatry*, *204*(5), 391-397.

<https://doi.org/10.1192/bjp.bp.113.135772>

Ryan, W. S., Legate, N., & Weinstein, N. (2015). Coming out as lesbian, gay, or

bisexual: The lasting impact of initial disclosure experiences. *Self and Identity*, *14*(5), 549-569. <https://doi.org/10.1080/15298868.2015.1029516>

Ryder, R. D. (1970). Speciesism. Leaflet.

Sanders, T. A. B. (1999). The nutritional adequacy of plant-based diets. *Proceedings of the Nutrition Society*, *58*(2), 265-269.

<https://doi.org/10.1017/s0029665199000361>



- Sans, P. & Combris, P. (2015). World meat consumption patterns: An overview of the last fifty years (1961–2011). *Meat Science*, *109*, 106-111. <https://doi.org/10.1016/j.meatsci.2015.05.012>
- Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology*, *57*(1), 1-10. <https://doi.org/10.1037/a0018082>
- Selling, L. S. (1946). Behavior problems of eating. *American Journal of Orthopsychiatry*, *16*(1), 163-169.
- Shabot, S. C. (2018). In S. C. Shabot and C. Landry (Eds.), *Rethinking feminist phenomenology: Theoretical and applied perspectives* (pp. 13-32). Rowan & Littlefield Intl.
- Shellenberger, S., Dent, M. M., Davis-Smith, M., Seale, J. P., Weintraut, R., & Wright, T. (2007). Cultural genogram: A tool for teaching and practice. *Families, Systems, & Health*, *25*(4), 367–381. <https://doi.org/10.1037/1091-7527.25.4.367>
- Shelton, K., & Delgado-Romero, E. A. (2013). Sexual orientation microaggressions: The experience of lesbian, gay, bisexual, and queer clients in psychotherapy. *Psychology of Sexual Orientation and Gender Diversity*, *1*(S), 59–70. <https://doi.org/10.1037/2329-0382.1.S.59>
- Singley, D. B. & Sedlacek, W. E. (2009). Differences in universal-diverse orientation by race-ethnicity and gender. *Journal of Counseling and Development*, *87*(4), 404-411. <https://doi.org/10.1002/j.1556-6678.2009.tb00124.x>
- Singer, P. (2009). Speciesism and moral status. *Metaphilosophy*, *40*(3-4), 567-581. <https://doi.org/10.1111/j.1467-9973.2009.01608.x>

- Skinner-Dorkenoo, A. L., Sarmal, A., Andre, C. J., & Rogbeer, K. G. (2021). How microaggressions reinforce and perpetuate systemic racism in the United States. *Perspectives on Psychological Science, 16*(5), 903-925.  
<https://doi.org/10.31219/osf.io/3ucf5>
- Small, M. L. (2011). How to conduct a mixed methods study: Recent trends in a rapidly growing literature. *Annual Review of Sociology, 37*(1), 57-86.  
<https://doi.org/10.1146/annurev.soc.012809.102657>
- Soifer, S. (2002). Vegan discrimination: An emerging and difficult dilemma. *Loy. LAL Rev., 36*, 1709-1732.
- Steinfeld, H., Gerber, P., Wassenaar, T. D., Castel, V., Rosales, M., Rosales, M., & de Haan, C. (2006). *Livestock's long shadow: environmental issues and options*. Food & Agriculture Organization.
- Stutterheim, S. E., & Ratcliffe, S. E. (2021). Understanding and addressing stigma through qualitative research: Four reasons why we need qualitative studies. *Stigma and Health, 6*(1), 8–19. <https://doi.org/10.1037/sah0000283>
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: implications for clinical practice. *American Psychologist, 62*(4), 271- 286.  
<https://doi.org/10.1037/0003-066x.62.4.271>
- Sue, D. W., & Spanierman, L. (2020). *Microaggressions in everyday life*. John Wiley & Sons.
- Swinbourne, J., Hunt, C., Abbott, M., Russell, J., St Clare, T., & Touyz, S. (2012). The comorbidity between eating disorders and anxiety disorders: Prevalence in an

eating disorder sample and anxiety disorder sample. *Australian & New Zealand Journal of Psychiatry*, 46(2), 118-131.

<https://doi.org/10.1177/0004867411432071>

Talley, A. E., & Littlefield, A. K. (2014). Pathways between concealable stigmatized identities and substance misuse. *Social and Personality Psychology Compass*, 8(10), 569-582. <https://doi.org/10.1111/spc3.12117>

The Vegan Society (n.d.). *The Vegan Society issues advice to employers after court ruling confirms vegans in the workplace are protected by law.*

<https://www.vegansociety.com/whats-new/news/advice-issued-employers-after-veganism-ruled-protected-belief-workplace>

The Vegan Society (n.d.) *Definition of veganism.* <https://www.vegansociety.com/go-vegan/definition-veganism>

The Vegetarian Resource Group (2016, March). How many people are vegan? Retrieved from [https://www.vrg.org/nutshell/Polls/2016\\_adults\\_veg.htm](https://www.vrg.org/nutshell/Polls/2016_adults_veg.htm)

The Vegetarian Resource Group (2019, March). How many people are vegan? Retrieved from [https://www.vrg.org/nutshell/Polls/2019\\_adults\\_veg.htm](https://www.vrg.org/nutshell/Polls/2019_adults_veg.htm)

The Vegetarian Society UK (n.d.) *What is a vegetarian?* <https://vegsoc.org/info-hub/definition/>

Thomas, M. A. (2016). Are vegans the same as vegetarians? The effect of diet on perceptions of masculinity. *Appetite*, 97, 79-86.

<https://doi.org/10.1016/j.appet.2015.11.021>

Thompson, R. L., Brossart, D. F., Canlozzi, A. F., & Miville, M. L. (2002). Five-factor model (Big Five) personality traits and universal-diverse orientation in counselor

trainees. *The Journal of Psychology*, 136(5), 561-572.

<https://doi.org/10.1080/00223980209605551>

Timeo, S. & Suitner, C. (2017). Eating meat makes you sexy: Conformity to dietary gender norms and attractiveness. *Psychology of Men & Masculinity*, 19(3), 418-429. <https://doi.org/10.1037/men0000119>

Toumpanakis, A., Turnbull, T., & Alba-Barba, I. (2018). Effectiveness of plant-based diets in promoting well-being in the management of type 2 diabetes: A systematic review. *BMJ Open Diabetes Research and Care*, 6(1), e000534.

<https://doi.org/10.1136/bmjdr-2018-000534>

Trusts, C., & Hopkins, J. (2008). Putting meat on the table: Industrial farm animal production in America. *A Report of the Pew commission on industrial Farm Animal Production*. Retrieved from

<https://www.pewtrusts.org/~media/legacy/uploadedfiles/peg/publications/report/pcfifapfinalpdf.pdf>

Turan, J. M., Elafros, M. A., Logie, C. H., Banik, S., Turan, B., Crockett, K. B., ... & Murray, S. M. (2019). Challenges and opportunities in examining and addressing intersectional stigma and health. *BMC medicine*, 17(1), 1-15.

<https://doi.org/10.1186/s12916-018-1246-9>

Tuso, P. J., Ismail, M. H., Ha, B. P., & Bartolotto, C. (2013). Nutritional update for physicians: Plant-based diets. *The Permanente Journal*, 17(2), 61-66.

<https://doi.org/10.7812/tpp/12-085>.

Tziva, M., Negro, S. O., Kalfagianni, A., & Hekkert, M. P. (2020). Understanding the protein transition: The rise of plant-based meat substitutes. *Environmental*

*Innovation and Societal Transitions*, 35, 217-231.

<https://doi.org/10.1016/j.eist.2019.09.004>

van Strien, T., Konttinen, H., Homberg, J. R., Engels, R. C., & Winkens, L. H. (2016).

Emotional eating as a mediator between depression and weight

gain. *Appetite*, 100, 216-224. <https://doi.org/10.1016/j.appet.2016.02.034>

Van Wezemael, L., Caputo, V., Nayga Jr, R. M., Chryssochoidis, G., & Verbeke, W.

(2014). European consumer preferences for beef with nutrition and health claims:

A multi-country investigation using discrete choice experiments. *Food Policy*, 44,

167-176. <https://doi.org/10.1016/j.foodpol.2013.11.006>

Von Essen, S. G., & Auvermann, B. W. (2005). Health effects from breathing air near

CAFOs for feeder cattle or hogs. *Journal of Agromedicine*, 10(4), 55-64.

[https://doi.org/10.1300/j096v10n04\\_08](https://doi.org/10.1300/j096v10n04_08)

Wang, Y., Beydoun, M. A., Caballero, B., Gary, T. L., & Lawrence, R. (2010). Trends

and correlates in meat consumption patterns in the US adult population. *Public*

*Health Nutrition*, 13(9), 1333-1345. <https://doi.org/10.1017/s1368980010000224>

Wang, F., & Basso, F. (2019). “Animals are friends, not food”: Anthropomorphism leads

to less favorable attitudes toward meat consumption by inducing feelings of

anticipatory guilt. *Appetite*, 138, 153-173.

<https://doi.org/10.1016/j.appet.2019.03.019>

Weisz, C., & Quinn, D. M. (2018). Stigmatized identities, psychological distress, and

physical health: Intersections of homelessness and race. *Stigma and Health*, 3(3),

229–240. <https://doi.org/10.1037/sah0000093>

- Weisz, B. M., Quinn, D. M., & Williams, M. K. (2016). Out and healthy: Being more “out” about a concealable stigmatized identity may boost the health benefits of social support. *Journal of health psychology, 21*(12), 2934-2943.  
<https://doi.org/10.1177/1359105315589392>
- Wendler, A. M. (2009). Universal-Diverse Orientation, cognitive complexity, and sociopolitical advocacy in counselor trainees. *Journal of Multicultural Counseling and Development, 37*(1), 28-39. <https://doi.org/10.1002/j.2161-1912.2009.tb00089.x>
- White, B. A., Horwath, C. C., & Conner, T. S. (2013). Many apples a day keep the blues away-Daily experiences of negative and positive affect and food consumption in young adults. *British Journal of Health Psychology, 18*(4), 782-798.  
<https://doi.org/10.1111/bjhp.12021>
- Wiederman, M. W. (1996). Women, sex, and food: A review of research on eating disorders and sexuality. *Journal of Sex Research, 33*(4), 301-311.  
<https://doi.org/10.1080/00224499609551847>
- Williams, M. T. (2020). Microaggressions: Clarification, evidence, and impact. *Perspectives on Psychological Science, 15*(1), 3-26.  
<https://doi.org/10.1177/1745691619827499>
- Wilson, S. M., Howell, F., Wing, S., & Sobsey, M. (2002). Environmental injustice and the Mississippi hog industry. *Environmental Health Perspectives, 110*(suppl 2), 195-201. <https://doi.org/10.1289/ehp.02110s2195>

- Wrenn, C. L. (2019). Atheism in the American rights movement: An invisible majority. *Environmental Values*, 28(6), 715-739.  
<https://doi.org/10.3197/096327119x15579936382509>
- Wrenn, C., & Lizardi, A. (2021). Older, greener, and wiser: charting the experiences of older women in the American vegan movement. *Journal of Women & Aging*, 1-23. <https://doi.org/10.1080/08952841.2020.1749501>
- Yahia, N., Brown, C., Potter, S., Szymanski, H., Smith, K., Pringle, L., ... & Geliebter, A. (2017). Night eating syndrome and its association with weight status, physical activity, eating habits, smoking status, and sleep patterns among college students. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 22(3), 421-433. <https://doi.org/10.1007/s40519-017-0403-z>
- Yeh, H. Y. (2014). Voice with every bite: Dietary identity and vegetetarian' "the second best" boundary work. *Food, Culture, & Society*, 17(4), 591-613.  
<https://doi.org/10.2752/175174414x13948130848502>
- Yeo, E., & Torres-Harding, S. R. (2021). Rupture resolution strategies and the impact of rupture on the working alliance after racial microaggressions in therapy. *Psychotherapy*, 58(4), 460–471. <https://doi.org/10.1037/pst0000372>
- Yip, C. S. S., Lam, W., & Fielding, R. (2018). A summary of meat intakes and health burdens. *European Journal of Clinical Nutrition*, 72(1), 18-29.  
<https://doi.org/10.1038/ejcn.2017.117>
- Young, R. A. (1999). *Is God a vegetarian?: Christianity, vegetarianism, and animal rights*. Open Court Publishing.

Zou, L. X., & Dickter, C. L. (2013). Perceptions of racial confrontation: The role of color blindness and comment ambiguity. *Cultural Diversity and Ethnic Minority Psychology, 19*(1), 92-96. <https://doi.org/10.1037/a0031115>



## **APPENDIX A: HUMAN SUBJECTS CONSENT FORM (QUANTITATIVE)**

**The following is a brief summary of the project in which you are asked to participate. Please read this information before signing the statement below. You must be of legal age or must be co-signed by parent or guardian to participate in this study.**

**TITLE OF PROJECT:** Attitudes and Dietary Habits

**PURPOSE OF STUDY/PROJECT:** The purpose of the study is to learn about the ways in which attitudes are related to dietary habits.

**SUBJECTS:** Adults (18 years of age or older) currently residing in U.S. American regions and territories and identifying as an omnivore.

**PROCEDURE:** Should you qualify for participation, you will be asked to complete a demographics questionnaire and (4) surveys. Participation is voluntary and may be terminated at any time. Following this informed consent, you will be directed to follow a hyperlink to the survey platform in order to complete the study. Completion of all questions should require no more than 30 minutes.

**BENEFITS/COMPENSATION:** Participation will enhance knowledge about attitudes of omnivores towards other developing public policy and guiding the work of mental health professionals.

**RISKS, DISCOMFORTS, ALTERNATIVE TREATMENTS:**

There is a potential risk of loss of confidentiality or potential loss of privacy in all email, downloading, and internet transactions. Participants' personal identifying data will not be collected with the survey. Data collected through Qualtrics will be stored in a password protected electronic file stored in an encrypted storage drive. The researchers will not capture IP addresses or geolocation on participants.

Participation also risks the loss of your time. The surveys have been created to be as short as possible to minimize the risk. The surveys are estimated to take about 30 minutes of a participant's time. Participants may choose to complete the surveys at a time and place of their choosing. Additionally, participants may take breaks as needed or discontinue their participation at any time.

Answering survey questions related to physical and mental health may become uncomfortable for some participants. Participants are free to take breaks if they become fatigued or withdraw at any point of the study without penalty. Should you experience emotional discomfort after completing the survey, you are encouraged to visit APA's Psychologist Locator, <http://locator.apa.org>, to find a convenient mental health professional from whom they may seek services. Or, if you need assistance urgently, contact the crisis call center at 1 (800) 273-8255 to further address these feelings.

I attest that I have read and understood the following description of the study, "Attitudes and Diets" and its purposes and methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study is completely at my discretion. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. I understand that the results of my survey will be confidential and accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

Additionally, I am aware this server may collect information and my IP address indirectly and automatically via "cookies". I understand that Louisiana Tech is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

- By clicking "continue" below, you are
- (a) indicating that you have read the information about this study;
  - (b) providing consent to participate in the study; and
  - (c) indicating that you are at least 18 years of age.

If you do not wish to participate in this study, please decline participation by closing the window.

Contact Information: The principal investigator and research supervisor listed below may be reached to answer questions about the research, subjects' rights, or related matters.

Caitlin Mercier, (337) 967-6398  
Dr. Michael Ternes, (318) 257-2271

Members of the Human Use Committee of Louisiana Tech University may also be contacted if a problem cannot be discussed with the experimenters.

Dr. Richard Kordal, Director of Intellectual Properties  
(318) 257-2484; rkordal@latech.edu

## **APPENDIX B: HUMAN SUBJECTS CONSENT FORM (QUALITATIVE)**

**The following is a brief summary of the project in which you are asked to participate. Please read this information before signing the statement below. You must be of legal age or must be co-signed by parent or guardian to participate in this study.**

**TITLE OF PROJECT:** Experiences of Vegans and Vegetarians

**PURPOSE OF STUDY/PROJECT:** The purpose of the study is to learn about the experiences of vegans and vegetarians (i.e., ovo-lacto vegetarian and pescatarian).

**SUBJECTS:** Adults (18 years of age or older) currently residing in U.S. American regions and territories and identifying as a vegan or vegetarian.

**PROCEDURE:** Should you qualify for participation, you will be asked to complete a demographics questionnaire and your willingness for an interview. Should you indicate willingness, you will be asked to provide contact information and scheduling for an interview. You will be contacted for an interview with the researcher. Following this informed consent, you will be directed to follow a hyperlink to the survey platform in order to complete the study. Completion of all questions should require no more than 20 minutes. The interview will be structured as a focus group and should take no less than 90 minutes.

**BENEFITS/COMPENSATION:** Participation is voluntary and may be terminated at any time. Participation of vegetarians and vegans will benefit the veg\*n community given the results of the research will be publicly shared, enhance understandings of experiences individuals in the communities stated, and, ideally, inform psychological research, practice and training.

**RISKS, DISCOMFORTS, ALTERNATIVE TREATMENTS:**

There is a potential risk of loss of confidentiality or potential loss of privacy in all email, downloading, and internet transactions. Participants' personal identifying data will not be collected with the survey. Data collected through Qualtrics and in the interview will be stored in a password protected electronic file stored in an encrypted storage drive. The researchers will not capture IP addresses or geolocation on participants.

Participation also risks the loss of your time. The surveys have been created to be as short as possible to minimize the risk. The surveys and interviews are

estimated to take about 20 and 90 minutes of a participant's time, respectively. Participants may choose to complete the surveys at a time and place of their choosing. Additionally, participants may take breaks as needed or discontinue their participation at any time within the survey and interview.

Answering survey questions related to physical and mental health may become uncomfortable for some participants. Participants are free to take breaks if they become fatigued or withdraw at any point of the study without penalty. Should you experience emotional discomfort after completing the survey, you are encouraged to visit APA's Psychologist Locator, <http://locator.apa.org>, to find a convenient mental health professional from whom they may seek services. Or, if you need assistance urgently, contact the crisis call center at 1 (800) 273-8255 to further address these feelings.

I attest that I have read and understood the following description of the study, "Experiences of Vegans and Vegetarians", and its purposes and methods. I understand that my participation in this research is strictly voluntary and my participation or refusal to participate in this study is completely at my discretion. Further, I understand that I may withdraw at any time or refuse to answer any questions without penalty. I understand that the results of my survey will be confidential and accessible only to the principal investigators, myself, or a legally appointed representative. I have not been requested to waive nor do I waive any of my rights related to participating in this study.

Additionally, I am aware this server may collect information and my IP address indirectly and automatically via "cookies". I understand that Louisiana Tech is not able to offer financial compensation nor to absorb the costs of medical treatment should you be injured as a result of participating in this research.

By clicking "continue" below, you are:

- (a) indicating that you have read the information about this study;
- (b) providing consent to participate in the study; and,
- (c) indicating that you are at least 18 years of age.

If you do not wish to participate in this study, please decline participation by closing the window.

Contact Information: The principal investigator and research supervisor listed below may be reached to answer questions about the research, subjects' rights, or related matters.

Caitlin Mercier, (337) 967-6398

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Dr. Richard Kordal, Director of Intellectual Properties  
(318) 257-2484; rkordal@latech.edu

## APPENDIX C: DEMOGRAPHIC SURVEY

Please indicate the following:

1. Please indicate the dietary habit
  - a. I consume nonhuman animal flesh and nonhuman animal by-products for vital and non-vital purposes; I am an omnivore
  - b. I consume a lesser amount of meat and greater amount of fruits, vegetables, and nonhuman animal by-products for vital and non-vital purposes; I am a flexitarian
  - c. I abstain from consumption of nonhuman animal flesh and consume fruits, vegetables, and dairy and egg products; I am an ovo-lacto vegetarian
  - d. I abstain from consumption of nonhuman animal flesh and consume fruits, vegetables, and fish products; I am a pescatarian.
  - e. I abstain from nonhuman animal flesh and nonhuman animal by-products and consume fruits and vegetables; I am a vegan.
  
2. Please indicate the number of years you have followed your dietary habit.
3. Please indicate dietary habit(s) you were raised in (e.g., dietary habit your family practiced)
  - a. Omnivorous
  - b. Ovo-Lacto Vegetarian
  - c. Pescatarian
  - d. Vegan
  - e. Other
  - f. Multiple dietary habits
4. Are you currently residing within U.S. America or U.S. American territories?
  - a. Yes
  - b. No
5. In which of the following geographic regions within the U.S. do you currently reside?
  - a. Northeast U.S. (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, New Jersey, New York, Pennsylvania, and Vermont)
  - b. Southern U.S. (Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington, D.C., Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, Texas, and West Virginia)

- c. Midwest U.S. (Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota)
  - d. Western U.S. (Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming, Alaska, California, Hawaii, Oregon, and Washington)
  - e. U.S. Territory (e.g. Puerto Rico, Guam, U.S. Virgin Islands)
  - f. Outside the US
6. How do you identify your race/ethnicity? Please select all that apply
  - a. Native American/First Nation
  - b. Black/African American/African
  - c. Hispanic/Latinx
  - d. White, non-Hispanic/Latinx
  - e. Asian/Asian American/Pacific Islander
  - f. Bi- or Multiracial/Ethnic; Please specify
  - g. Other- Please specify: \_\_\_\_\_
7. Please indicate with which (non)religion you most closely identify
  - a. Christianity
  - b. Catholicism
  - c. Judaism
  - d. Protestantism (e.g. Baptist, Lutheran, Methodist)
  - e. Islam
  - f. Buddhism
  - g. Sikhism
  - h. Hinduism
  - i. Atheism
  - j. Agnosticism
  - k. No religion
  - l. Other (please specify \_\_\_\_\_)
8. Please indicate your gender
  - a. Man
  - b. Woman
  - c. Trans man
  - d. Trans woman
  - e. Nonbinary/gender variant
  - f. Different Identity (please state) \_\_\_\_\_
9. Please indicate your age in years \_\_\_\_\_
10. If you are financially independent, please select the range that best describes your annual income before taxes
  - a. \$19,000 and below
  - b. \$20,000 to \$23,000
  - c. \$24,000 to \$32,000
  - d. \$33,000 to \$60,000
  - e. \$61,000 to \$100,000
  - f. \$101,000 to \$150,000

- g. \$151,000 and above
- h. I am not financially independent.

11. Please indicate your sexual orientation

- a. Straight/Heterosexual
- b. Bisexual
- c. Gay/Lesbian
- d. Pansexual
- e. Asexual
- f. Other-Please specify

12. Please indicate your highest level of educational attainment

- a. Some high school
- b. High school diploma or GED
- c. Some college
- d. Bachelor's degree
- e. Some graduate training
- f. Graduate degree

13. Have you been diagnosed with any disability or impairment?

- a. Yes
- b. No
- c. I prefer not to answer
  - i. If yes, which of the following have been diagnosed ?
    - 1. A sensory impairment
    - 2. A mobility impairment
    - 3. A learning disability
    - 4. A mental health disorder
    - 5. A disability or impairment not listed above

## **APPENDIX D: ATTITUDES TOWARDS VEGETARIANS SCALE**

Vegetarians preach too much about their beliefs and eating habits.

1. Vegetarians should not try to hide their eating habits.
2. Vegetarians are unconcerned about animal rights.
3. Vegetarian eating habits are harmful to the traditions of this country.
4. Individuals who don't eat meat are "wimpier" than individuals who do eat meat.
5. You can eat a balanced diet without meat.
6. Vegetarians are overly concerned about gaining weight.
7. Vegetarians are psychologically unhealthy.
8. Restaurants do not provide enough selection to satisfy all tastes.
9. In some cases, people have no choice but to be vegetarian.
10. One of the best things that could happen to me is if I could no longer eat meat or meat products.
11. It's not O.K. to tease someone for being vegetarian.
12. Refusing to eat meat is just a phase.
13. There are some good reasons not to eat meat.
14. Vegetarians are too idealistic.
15. I would approve if my children turned out to be vegetarians.
16. Many vegetarians secretly crave meat.
17. It is acceptable for individuals to refuse to eat meat that they have been served.



18. Vegetarians respect the rights of others who choose to eat meat.
19. Vegetarian believe that eating like vegetarian is the only moral way to eat.
20. Vegetarian use their eating habits to attract attention to themselves.
21. Vegetarians would refuse to eat meat even if it were a matter of life and death.
22. Being a vegetarian is only an option for people living in modern society.
23. People who order vegetarian food often just are being cheap.
24. Many vegetarian secretly eat meat in private.
25. Humans are not above all other creatures.
26. I avoid interacting with vegetarian whenever possible.
27. If vegetarians had their way, companies that sell animal products would be put out of business.
28. Vegetarians believe that they are better than others are.
29. Vegetarians are especially kind and gentle.
30. I would feel guilty if I were to eat meat in front of a vegetarian.
31. People who refuse to eat meat are childish and immature.
32. Vegetarians often appear sickly and unhealthy.

## **APPENDIX E: ATTITUDES TOWARDS VEGANS SCALE**

1. Vegans preach too much about their beliefs and eating habits.
2. Vegans should not try to hide their eating habits.
3. Vegans are unconcerned about animal rights.
4. Vegan eating habits are harmful to the traditions of this country.
5. Individuals who don't eat meat are "wimpier" than individuals who do eat meat.
6. You can eat a balanced diet without meat.
7. Vegans are overly concerned about gaining weight.
8. Vegans are psychologically unhealthy.
9. Restaurants do not provide enough selection to satisfy all tastes.
10. In some cases, people have no choice but to be vegan.
11. One of the best things that could happen to me is if I could no longer eat meat or meat products.
12. It's not O.K. to tease someone for being vegan.
13. Refusing to eat meat is just a phase.
14. There are some good reasons not to eat meat.
15. Vegans are too idealistic.
16. I would approve if my children turned out to be vegans.
17. Many vegans secretly crave meat.
18. It is acceptable for individuals to refuse to eat meat that they have been served.

19. Vegans respect the rights of others who choose to eat meat.
20. Vegans believe that eating like vegan is the only moral way to eat.
21. Vegans use their eating habits to attract attention to themselves.
22. Vegans would refuse to eat meat even if it were a matter of life and death.
23. Being a vegan is only an option for people living in modern society.
24. People who order vegan food often just are being cheap.
25. Many vegans secretly eat meat in private.
26. Humans are not above all other creatures.
27. I avoid interacting with vegans whenever possible.
28. If vegans had their way, companies that sell animal products would be put out of business.
29. Vegans believe that they are better than others are.
30. Vegans are especially kind and gentle.
31. I would feel guilty if I were to eat meat in front of a vegan.
32. People who refuse to eat meat are childish and immature.
33. Vegans often appear sickly and unhealthy.



## APPENDIX F: DIETARIAN IDENTITY QUESTIONNAIRE

In general, which of the following food groups do you not eat? Please select all that apply. If you generally eat all of these food groups, please select the last response.

- a. I generally do not eat red meat.
- b. I generally do not eat poultry
- c. I generally do not eat fish
- d. I generally do not eat dairy
- e. I generally do not eat egg
- f. I generally eat all of these food groups

For the rest of this survey, please note that your “dietary pattern” represents those foods you indicated above. For example, if you selected “red meat” and “dairy,” your dietary pattern excludes red meat and dairy. If you selected the last response, your dietary pattern includes all of these foods.

Please indicate how strongly you agree or disagree with each of the following statements (1 = Strongly Disagree, 7 = Strongly Agree).

1. My dietary pattern is an important part of how I would describe myself.
2. My dietary pattern has a big impact on how I think of myself.
3. A big part of my lifestyle revolves around my dietary pattern.
4. My dietary pattern defines a significant aspect of who I am.
5. Following my dietary pattern is an important part of who I am.
6. People who follow my dietary pattern tend to be good people.
7. Following my dietary pattern is a respectable way of living.
8. People who follow my dietary pattern should take pride in their food.
9. People who follow my dietary pattern are judged negatively for their food choices.
10. People who follow my dietary pattern tend to receive criticism for their food choices.
11. Following my dietary pattern is associated with negative stereotypes.
12. I view people as less moral for eating foods that go against my dietary pattern.
13. I judge people negatively for eating foods that go against my dietary pattern.
14. Seeing people eat foods that go against my dietary pattern, I like him or her less.

15. If I see someone eat foods that go against my dietary patterns, I like him or her less.
16. It bothers me when people eat foods that go against my dietary pattern.
17. Seeing someone eat foods that go against my dietary pattern makes him or her less attractive to me.
18. People should feel guilty about eating foods that go against my dietary pattern.
19. I view my dietary pattern as a way of making the world a better place for others.
20. Concerns about social issues motivate me to follow my dietary pattern.
21. I follow my dietary pattern because I want to benefit society.
22. I feel motivated to follow my dietary pattern because I want to help others.
23. I follow my dietary pattern because eating this way is good for the world.
24. I follow my dietary pattern because I am concerned about the effects of my food choices on my well-being.
25. I follow my dietary pattern because eating this way improves my life.
26. When thinking about which animal products to consume, I consider the effects of my food choices on my own health.
27. I follow my dietary pattern because eating this way is good for the world.
28. I feel that I have moral obligation to follow my dietary pattern.
29. I am motivated to follow my dietary pattern because eating foods that go against my dietary pattern is immoral.
30. I follow my dietary pattern because eating this way is the morally right thing to do.
31. I can be flexible and sometimes eat foods that go against my dietary pattern.
32. From time to time, I eat foods that go against my dietary pattern.

33. I would a food product that goes against my dietary pattern if I were to hear that it tastes exceptionally good.

## **APPENDIX G: MIVILLE-GUZMAN UNIVERSALITY-DIVERSITY SCALE, SHORT FORM**

The following items are statements using several terms that are defined below for you. Please refer to these definitions through the rest of the questionnaire.

Culture refers to the beliefs, values, traditions, ways of behaving, and language of any social group. A social group may be racial, ethnic, religious, etc.

Race or racial background refers to a sub-group of people possessing common physical or genetic characteristics. Examples include White, Black, American Indian, etc.

Ethnicity or ethnic group refers to a specific social group sharing a unique cultural heritage (e.g., customs, beliefs, language, etc.). Two people can be of the same race (i.e., White), but from different ethnic groups (e.g., Irish-American, Italian-American, etc.).

Country refers to groups that have been politically defined; people from these groups belong to the same government (e.g., France, Ethiopia, United States). People of different race (White, Black, Asian) or ethnicities (Italian, Japanese) can be from the same country (United States).

Instructions: Please indicate how descriptive each statement is of you by circling the number corresponding to your response. This is not a test, so there are neither right nor wrong, good nor bad answers. All response are anonymous and confidential.

- 1 Strongly Disagree
- 2 Disagree
- 3 Disagree a Little Bit
- 4 Agree a Little Bit
- 5 Agree
- 6 Strongly Agree



1. I would like to join an organization that emphasizes getting to know people from different countries.
2. Person with disabilities can teach me things I could not learn elsewhere.
3. Getting to know someone of another race is generally an uncomfortable experience for me.
4. I would like to go to dances that feature music from other countries.
5. I can best understand someone after I get to know how he/she is both similar to and different from me.
6. I am only at ease with people of my race.
7. I often listen to music of other cultures.
8. Knowing how a person differs from me greatly enhances our friendship.
9. It's really hard for me to feel close to a person from another race.
10. I am interested in learning about the many cultures that have existed in this world.
11. In getting to know someone, I like knowing both how/she differs from me and is similar to me.
12. It is very important that a friend agrees with me on most issues.
13. I attend events where I might get to know people from different racial backgrounds.
14. Knowing about the different experiences other people helps me understand my own problems better.
15. I often feel irritated by person of a different race.

## APPENDIX H: Interview Questions

1. Tell me about the development of your veg\*n identity.
2. Tell me about your first, or most powerful, experience of being a veg\*n.
3. How do you decide with whom and in what settings to disclosure or conceal your veg\*n identity?
4. What messages have you received from others about your veg\*n identity?
5. What messages have you received specifically from omnivores about your veg\*n identity?
6. What messages have you received specifically from other veg\*ns about your veg\*n identity?
7. What perceptions, if any, do you believe others have about you and other veg\*ns?
8. What do you think people misunderstand most about veg\*ns?
9. How do others communicate to you their perceptions about veg\*ns?
10. How do others' perceptions of vegetarianism impact your life, happiness, and/or health?
11. What are other important parts of your identity (for example, age, race, gender, class, sexual orientation, geographic location) that intersect with your veg\*n identity?
12. Anything else you'd like me to know?

**APPENDIX I**  
**LIST OF TABLES**

**Table I-1***Sociodemographic Characteristics Of All Quantitative Participants In The Study*

Characteristic	<i>n</i>	%	Characteristic	<i>n</i>	%
Dietarian Identity			Race and Ethnicity		
Omnivore	136	82.4	White	124	75.5
Flexitarian	29	17.6	Black/African American	27	16.3
Dietarian Identity Raised			Hispanic/Latinx	3	4.2
Omnivorous	150	91.0	Asian American/Pacific Islander	2	1.2
Ovo-Lacto	2	1.2	Indigenous/First Nation	1	.006
Other	7	4.2	Biracial/Multiracial	3	.018
Multiple	5	3.0	Other	1	.006
Vegan	1	0.6	Sexual Orientation		
Gender Identity			Heterosexual	136	82.9
Woman	126	76.3	Gay/Lesbian	13	30.4
Man	35	21.2	Pansexual	4	4.2
Trans Woman	1	0.6	Bisexual	5	3.0
Gender-Nonbinary	2	1.2	Other identity	2	1.2
Other	1	0.6	Asexual	1	0.6
Impairment			Annual Income		
No Impairment	133	85.8	Dependent	4	2.6
Mental Health	9	4.5	19,000 and below	4	2.6
Mobility/Sensory	5	3.2	20,000 – 32,000	17	11.0
Learning	4	2.6	33,000 – 100,000	97	62.6
Other	6	3.9	101,000 and above	32	20.6
Education			Not Disclosed	1	.6
HS/GED	1	.6	U.S. Region		
Some College	8	5.2	South	109	70.3
Bachelor's Degree	17	11.0	Midwest	18	11.6
Some Graduate	12	7.7	West	17	11.0
Training			Northeast	10	6.5
Graduate Degree	117	75.5	US Territory	1	.6
Belief and Nonbelief					

Christianity	122	78.7
Islam	3	1.9
Atheism	2	1.3
Agnosticism	1	.6
No Religion	18	11.6
Other	5	3.2
Not Disclosed	4	2.6

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**Table I-2***Bootstrapped Correlations With Ranges, Means, And Standard Deviations*

Measure	1	2	3	4
1. Vegetarians	--	--	--	--
2. Vegans	.76*	--	--	--
3. Multicultural Awareness	.00	-.18*	--	--
4. Outgroup Regard	-.41*	-.25*	.13	--
Possible Range	1-33	1-33	1-6	1-7
<i>M</i>	117.6	120.57	57.17	42.90
<i>SD</i>	16.32	16.28	6.90	8.60

*Note.* \*  $p < .05$ ; confidence intervals are 95% bias-corrected and accelerated intervals; Vegetarians is the Attitudes towards Vegetarians Scale; Vegans is the modified Attitudes towards Vegetarian Scale; Outgroup Regard is a subscale of the DIQ

**Table I-3.1***Sociodemographic characteristics for all qualitative participants in the study*

Name	Identification	Raised	Age	Region of U.S.	Race
Arlene	Vegetarian (24)	Omnivorous	75	Midwest	White
Eli	Pescatarian (4)	Halal	33	West	Asian/Asian American
Ellis	Plant Based – Vegan	Omnivorous	53	Midwest	White
Emelie	Vegan	Omnivorous	26	South	White
Jasmine	Vegan (2)	Omnivorous	28	South	White
Jeff	Pescatarian (19)	Mixed (Omni + Veg*n)	43	Midwest	White
John	Vegetarian (Ovo-Lacto)	Omnivorous	25	South	Biracial
Lily	Pescatarian (8)	Omnivorous	23	South	White
Maxine	Vegetarian (8)	Omnivorous	30	Northeast	White
Megan	Vegan (28)	Vegan	35	Northeast	White
Michelle	Alkaline Vegan (5)	Omnivorous	40	West	Black American
Mina	Vegetarian (3)	Omnivorous	35	Midwest	Asian/Asian American
Ruth	Vegan (5)	Omnivorous	36	South	White

**Table I-3.2***Sociodemographic characteristics for all qualitative participants in the study*

Name	Gender	Sexual Orientation	Highest Level of Education	Ability	(Non)Faith	Socioeconomic Status
Arlene	Woman	Heterosexual	Bachelor's	None	Jewish	\$61,000 – \$100,000
Eli	Trans-Man	Pansexual	Bachelor's	None	Atheist	\$61,000 – \$100,000
Ellis	Woman	Heterosexual	Some Graduate Training	Mental Health	Atheist	\$101,000 - \$150,000
Emelie	Woman	Heterosexual	Some Graduate Training	Mental Health	Christian	\$24,000 - \$32,000
Jasmine	Woman	Bisexual	Graduate Degree	None	Agnostic	\$20,000 - \$23,000
Jeff	Man	Heterosexual	Graduate Degree	None	Atheist	\$33,000 – \$60,000
John	Man	Heterosexual	Some Graduate Training	None	Atheist	\$19,000 and below
Lily	Gender-nonbinary/Gender Variant	Bisexual	Bachelor's	Mental Health	Christian	\$19,000 and below
Maxine	Woman	Heterosexual	Bachelor's	None	Catholic	\$101,000 - \$150,000
Megan	Woman	Bisexual	Bachelor's	None	Atheism	\$61,000 - \$100,000
Michelle	Woman	Heterosexual	Graduate Degree	N.L.	Christian	\$33,000 - \$60,000
Mina	Woman	Bisexual	Some College	None	None	\$33,000 – \$60,000
Ruth	Woman	Heterosexual	Bachelor's	None	None	\$20,000 - \$23,000



**Table I-4***List of Themes that Emerged from Qualitative Analysis*

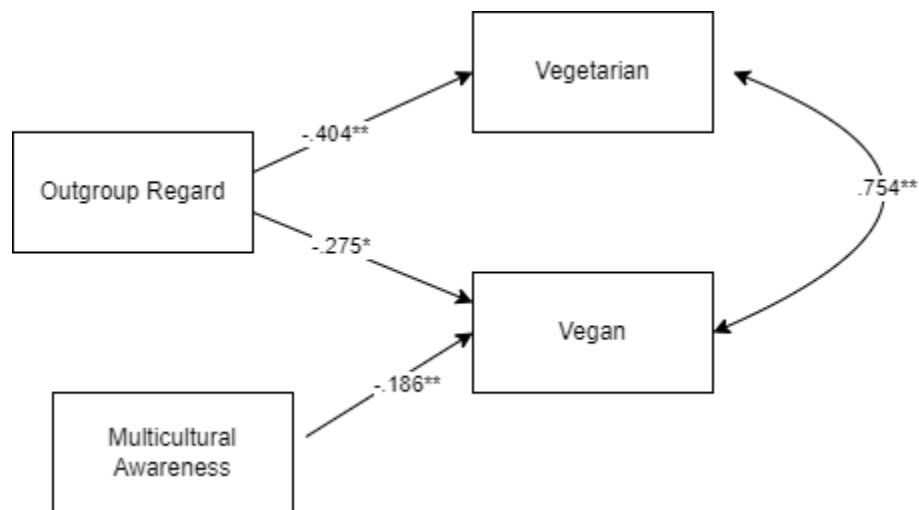
Themes	<i>n</i>
The Veg*n Experience	13
Veg*n Identity Development	13
Veg*n at the Intersection	13
Contextual Concealment & Outness	13
Context	
Food	6
Intention	4
Relevant	4
If It Comes Up	3
No Need to Conceal	3
Safety	4
Outing	2
Opportunity to Disclose	1
Reactions to Disclosure	12
Positive	9
Skeptical	5
Complex	7
Curiosity	5
Defensive	4
Surprised	3
Neutral	2
Costs	11
Practice	
Geography	4
Access	4
Health	3
Social media	3
Faith	2
Cross contamination	1
Restaurants and social outings	1
Negative Outness	
Isolation	3
Anticipated stigma or pushback	4
Inauthenticity	3
Unsolicited opinions	2
Pseudorejection	2
Little accountability	1
Benefits	12
Practice	
Less harm	7

Health/Mental health	2
Awareness	5
Financial	2
Positive Outness	10
Connection	7
Confidence	1
Access to Community	5
Assurance of Safety	3
Positive Influence	3
Anti-Veg*n Messages and Discrimination	6
Discrimination	13
Stereotyping	6
Superiority	6
Militant	4
Health	4
Privilege	2
Bothersome	2
Cultural Representations	1
Emotional	1
Insistent	2
Gendered	1
Gross or Disgusting	1
Politically democrat	2
Difficult	2
Consumerist/Faddish	2
Unconventional	7
Jokes	11
Microaggressions	12
Misunderstandings	10
Technicalities	3
Cultural beliefs	5
Lack of awareness to reactions	4
Nutritional biases and gaps	9
Reactions to Societal Messaging	4
Growing Normalcy for	4
Veg*nism	2
Annoyed	2
No bother	1
Uncomfortable	
Skeptical	
Navigation Strategies	
Interpersonal strategies	10
Concealment	9
Seeking and Providing Support	6
Lead by Example	4

Explaining Self	3
Humor	2
Refer	2
No Confrontation	1
Advocacy	9
Education	9
Non-abrasive activism	9
Avoidance of spaces	5
Identity Reconciliation	5
Immersion	5
Intrapersonal Strategies	2
Working Harder	2
Self-Care	1
Centrality of Nonhuman Consumption and Related Inequalities	10
Meat	11
Ethics	6

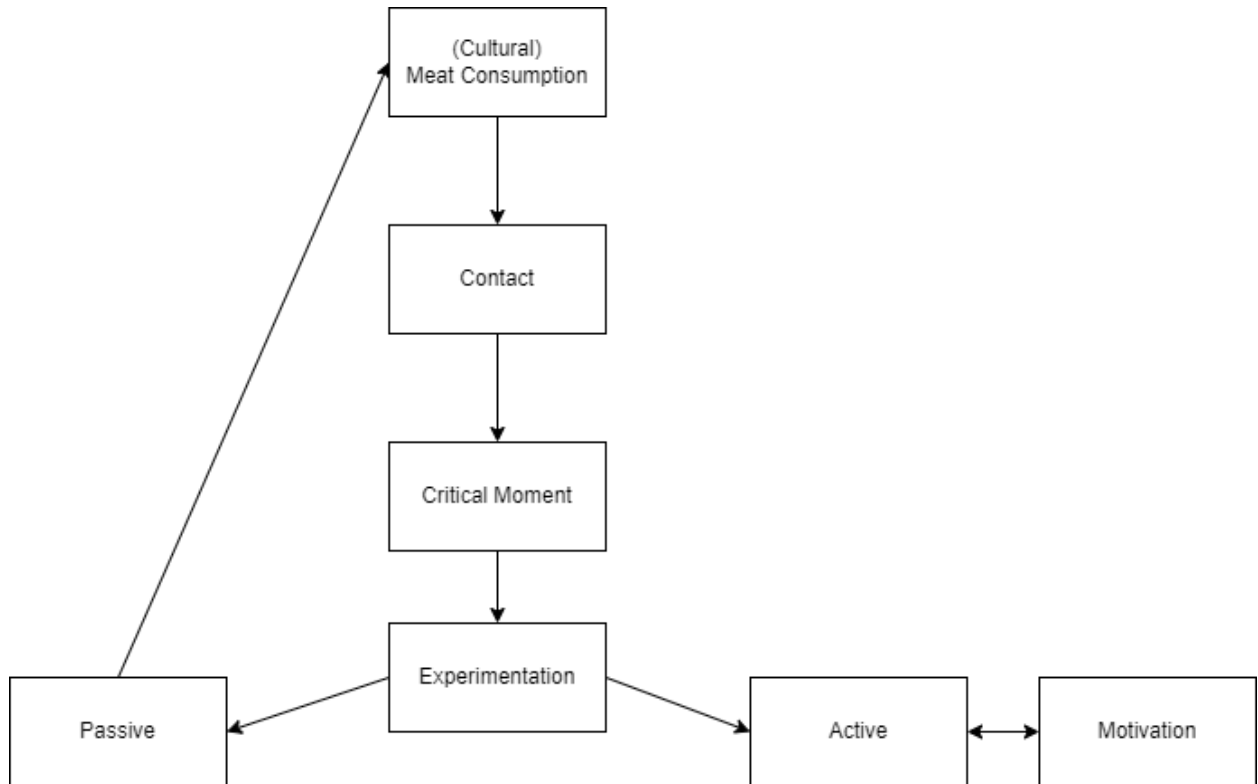
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**APPENDIX J**  
**LIST OF FIGURES**

**Figure J-1**

Final over-identified path model ( $\chi^2(2) = 3.010, p = .222, CFI = .994, RMSEA = .055(.000, .174), SRMR = .034$ ). This figure displays standardized regression coefficients. Outgroup Regard as measured by the DIQ. Universal Diverse Orientation as measured by the MGUDS-S. Vegetarians as measured by ATVS. Vegans as measured by the modified ATVS.  $n = 165$ .  $*p < .05$ .  $**p < .001$ .

**Figure J-2**  
*Veg\*n Identity Development*



Note. The flow chart depicts participants' progression of veg\*n identity development