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A Meat Paradox: Media's Role in Mitigating the Omnivore's Dilemma

Karyn Lewis

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A MEAT PARADOX: MEDIA'S ROLE IN MITIGATING THE OMNIVORE'S
DILEMMA

by

Karyn Camille Lewis

A Thesis
Submitted to the Graduate School,
the College of Arts and Letters
and the School of Mass Communication and Journalism
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for the Degree of Master of Arts

May 2018

A MEAT PARADOX: MEDIA'S ROLE IN MITIGATING THE OMNIVORE'S
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by Karyn Camille Lewis

May 2018

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ABSTRACT

The purpose of this research is to identify and understand media's role in meat consumption and a disassociation of meat and its animal of origin. This study questions consumer behavior based on media portrayals of meat products as well as how consumers perceive these portrayals, meat consumption patterns based on media and family influence, and the types and levels of satisfaction (ex: self-esteem or masculinity) consumers receive from meat products.

A quantitative research approach was proposed for this study. The primary research method was a survey among students, faculty and staff at The University of Southern Mississippi. A total of 366 participants completed an online questionnaire concerning media and food consumption behaviors. Results revealed that, overall, individuals who spend more time watching television and video streaming are more likely to see meat products in media, less likely to associate meat with its animal of origin and tend to eat more meat. Results also revealed that media exposure is not related to how recipients view meat as social and self-esteem requirements or desires. However, there was a strong, positive correlation between family and culture influence over meat consumption, culture meaning the mainstream beliefs and cultures of individuals. There was not a significant difference in results based on sex.

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Sincerely,

Karyn Lewis

February 18,2018

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INTRODUCTION

The purpose of this study is to understand media's role in the perception of meat products and meat consumption. This study evaluates consumer behavior based on media portrayals of meat products. It questions how consumers perceive media portrayals of meat products, meat consumption patterns based on media and family influence, and the types and levels of satisfaction consumers receive from meat products. This study also questions whether individuals disassociate the meat they consume from its animal of origin due to the way meat products are portrayed in media. This disassociation is referred to as the omnivore's dilemma or a meat paradox, the desire to consume meat but not wanting to know about the meat process or the animal of origin. The omnivore's dilemma typically refers to the human struggle to decide on what to eat due to a wide variety of options. The researcher looks deeper into the omnivore's dilemma by comparing it to a meat paradox and suggesting that it refers to society's desire to consume meat with the dilemma of not wanting to know about the meat process or the animal of origin, therefore disassociating meat and animals.

This questioning of the dissociation of meat and animals is best explained by Hopkins and Dacey (2008); "Modern American society loves to watch television cooking shows—the creativity, the sensuousness, the clever techniques. But chances are if a lamb were dragged in and killed at the beginning of the program, most of the viewers would find themselves less interested in the lamb chop recipes. They would be too terrified or disgusted to enjoy the rest of the program. And yet, if the lamb's flesh is brought in

already killed and sliced, almost all sense of horror and sympathy is muted enough to be nearly unfelt” (Hopkins & Dacey, 2008).

Cultivation theory and framing theory is utilized to investigate culture and media portrayals’ roles in the way people think of non-human animals, factory farming, and the meat industry. A survey was conducted to review individuals’ perspectives of animals and meat consumption and whether media exposure, meat perception, disassociation, age and gender demographics, and family influence play a significant role in their views and behaviors.

CHAPTER I - LITERATURE REVIEW

The Omnivore's Dilemma/Disassociation of Meat and Animals

Pollan (2016) defines the omnivore's dilemma as having too many options of what to eat, therefore struggling to decide what to eat. This excessive variety of food options is accompanied by the lack of guidance on how to make wise consumption choices. Pollan compares American culture to French culture, referring to them as the French Paradox and the American Paradox. He states that French eating habits aren't as heavily influenced by media and government as American eating habits are. In the chapter, Pollan states that eating has become difficult by Americans' habit of relying on external sources such as advertising, government food pyramids, and diet books (Pollan, 2016 p. 303). He says that the omnivore's dilemma is so because society depends on fashionable theories and ideologies to decide what foods to consume.

There is a consciousness of enjoying meat and not wanting to harm animals, a meat paradox, despite meat's important role in most people's diets due to nutritional benefits. Two studies (Gossard, 2003; Tian, Hilton, & Becker, 2016) that focused primarily on meat processing and consumption analyzed if participants used reduction of willingness to eat meat and reduction of mind attribution as strategies to reduce cognitive dissonance from the meat paradox in the Chinese and French cultures.

In Tian et al.'s (2016) study, participants were less willing to consume beef in a condition that spotlighted that a cow was killed compared to a condition that showed a diagram of a cow as meat. Additionally, French but not Chinese participants were less likely to desire cow meat when the relationship between cow and beef was made obvious versus meat being presented as a recipe. These findings infer that dissecting cognitive

dissonance from the meat paradox depends on culture and representations of meat products (Tian et al., 2016).

According to Bratanova et al (2011), one way of reducing guilt from a meat paradox is to deny that non-humans have the ability to suffer. This study questioned if labeling animals as food decreases their perceived ability to suffer, which leads to a decrease in moral concern. Participants of this study read about animals in a nation different from their own. Researchers labeled the animal as either food or as killed. The results reveal that categorization of an animal as food, rather than killed, decreased how much individuals associated suffering with the animal's death, which restricted moral concern. This shows that people may be able to love meat and animals when animals are labeled as food and viewed as immune to agony or discomfort (Bratanova et al, 2011).

According to Gossard (2003), it is important to identify and analyze human activities that have substantial effects on the environment. Consumption can only be understood through the analysis of multiple factors: social, economic, technological, political, and psychological. While researchers have studied the influence of social psychological factors on meat consumption, social structural factors have not been examined as thoroughly. Rather than focusing on whether people identify as vegetarian, the quantity of meat people consume is evaluated in this study (Gossard, 2003). The exploration of the social structural factors that influence individual consumption patterns of environmentally significant commodities in meat-eating will help with understanding mass media's role in mitigating the omnivore's dilemma.

More people eat meat than ever before, and global meat consumption continues to grow. This is not an effect of the rising human population, but a result of rapid scientific,

technological and socio-cultural changes that have transformed meat production and consumption over the past century, particularly in industrialized countries following World War II (Potts, 2017). The history of creating contemporary ‘meat culture’ is an industrial history that blends agricultural science and increases with technology with mass production and the hyper stimulation of consumer demand emblemized by the rise of suburban fast food outlets since the 1950s. Large shifts have occurred over the past 50 years due to breeding and consumption of animals. Genetic engineering and selective breeding have created new ‘hybrid’ animals who eat less and grow faster. Smaller family farms have been replaced by factory farms, where animals live in cramped cages, pens or sheds and suppressed to extreme physical, mental, and emotional stress (Potts, 2017).

Disassociation Within Media

According to Marshall (2016), when an individual eats a plate of buffalo wings, he or she is unlikely to think about the chickens that their meal originated from. A study by Kunst (2016) confirms that the meat industry hopes to exploit this dissociation from animals to make consumers more willing to eat more meat. A series of studies from the University of Oslo (2016) found that individuals are more willing to eat meat when it’s processed in a way that disassociates it from its animal origin. Researchers showed participants in the study a whole chicken, drumsticks, and chopped chicken filets and asked them how much empathy they felt for the animal. Participants were also shown two roasted pigs, one with a head and one without. Participants reported feeling less empathy for the chopped chicken and headless pig.

Many people find pleasure in meat consumption but don’t like thinking of animals being raised for meat. Mentally separating meat from its animal origins bypasses

cognitive dissonance resulting in a meat paradox. In Kunst's (2016) study, processed meat made participants less compassionate towards the slaughtered animal than unprocessed meat. A full beheaded pig brought less empathy than the pig with its head still attached. The absence of a head made participants more willing to eat the roast. Presenting a living animal in a meat advertisement increased empathy and reduced willingness to eat meat. Describing meat processing as "harvesting" instead of "killing" or "slaughtering" also reduced understanding. Finally, swapping the terms "beef/pork" with "cow/pig" increased awareness as well as distaste, increased a desire for vegetarian or vegan meals (Kunst, 2016).

Packaging and advertising also play a role in dissociation. When shown two ads for lamb chops, participants avoided eating the meat when viewing the ad featuring a baby sheep. Even the words "beef" and "pork" complicate societies relationship with meat. Participants from the same study conducted at the University of Oslo were less willing to eat both when they were listed as "cow" and "pig" on a menu. This suspension of disbelief regarding meat has been called the "dissociation hypothesis" by those who have studied this phenomenon in the past. The Oslo study suggests the research might help governments limit meat consumption (Marshall, 2016).

In total, more than 1,000 people participated in the studies, and most of them were meat eaters. They all disassociated meat from animals in their daily lives, but those that spent the most effort on disassociating were more sensitive when the presentations and descriptions of meat changed. Oslo did not test whether these sensitive individuals ate less meat than others in general (University of Oslo, 2016).

The Meat Industry

The goal of the meat industry is to make sure consumer's appetite for meat grows so to support the billions of dollars spent on meat product promotions annually. Some researchers argue that increasing meat consumption is supply driven rather than demand driven. Between 1987 and 2013, the U.S. beef checkoff collected \$1.2 billion to increase domestic and international demand. One of few campaigns created to promote vegetable consumption was Five A Day for Better Health. This campaign was created by the National Cancer Institute and the Produce for Better Health Foundation. The campaign ran on fewer than three million dollars in 1999 (Zaraska, 2016).

Meat in The Media

In 1992, the meat industry spent \$42 million spreading the slogan "Beef. It's What's for Dinner." In 2015, the beef industry spent around \$39 million on promotions and research. Websites consist of different ways make people buy more beef, including cooking demonstrations on university campuses and student contests, in-store food samples of beef recipes, and hiring popular cooks (Zaraska, 2016).

Ethan's (2012) analysis of a Bronx sales paper serves as evidence of food's association with social class. Diabetes is rising in the Bronx, where most residents are Hispanic (53.8 %) and African-American (43.3 %), and over 28 percent are living below the poverty level, double the national rate of 13.8 percent. Environmental determinants of health such as restricted access to healthy foods have also impacted residents of the Bronx with more than 35 percent of residents having to walk more than ten minutes to purchase fresh fruits and vegetables. Bronx adults also report a higher rate of fair or poor health status compared with adults from the other boroughs.

Over a two-month period, 2,311 food and beverage products placed on the first page of online circulars for fifteen Bronx-based grocery stores were analyzed. Over 84 percent of the products were processed, and almost 40 percent had at least one carbohydrate. Only 16.5 percent of the products were fresh fruits and green leafy vegetables. The most frequently advertised foods in the reported circulars were 39.9% carbohydrates and 20.3% meats (Ethan, 2012).

Food commercials often impact children's food preferences. Keller's (2011) content analysis of commercials aired via eight children's television stations was conducted over a six-month period. Overall, 1,365 hours of programming were recorded. Of the 11,613 advertisements found, 26.4 percent were for food and 23.3 percent promoted toys. Advertisements containing fast-food or candy were in 55 percent of aired commercials. Every four commercials were about food, most filled with fat and sugar. This analysis infers that food in media contributes to childhood obesity.

The meat industry's marketing plans include "beef education" curriculums for grade school and beef recipes on social media to encourage younger people to eat more meat. According to an industry marketing how-to guide, this is essential to attracting millennial consumers (Zaraska, 2016).

Pettigrew (2013) examined the impact these forms of media had on parents and children in Australia. The children, between eight and 14 years of age, were exposed to either a television advertisement, an internet ad, or a control picture for four regularly advertised foods. After viewing each advert, parents evaluated the products more favorably and had a greater desire to consume the products than parents in the control condition. Similar trends were observed among children. The findings imply that adults

may also be immune to some advertising, which is essential to address when discussing childhood obesity and parental roles in mediating the effects of food in media (Pettigrew, 2013).

In 2008, Burger King began a new advertising campaign, “The Whopper Virgins”, which claimed to go to the remote parts of the world to discover cultures that were unfamiliar with hamburgers. The purpose of these travels was so that Burger King could conduct the “purest taste test in the world.” This ad campaign was one of the most successful in Burger King’s history. The company received multiple awards, significant web traffic, widespread media attention and correlating with one of the largest stock price increase in the company's history. Potts (2017) argues that the success of the advertisements was due to the linkage between meat consumption from Western-style fast food restaurants and stereotypes of the ‘effeminate rice eater’ which has a long history of being deployed as a rhetorical means to naturalize colonialism and xenophobia.

Production of prepackaged foods skyrocketed after WWII. The widespread of convenience foods represented industrial and scientific progress and symbolized America's high standard of living. Prepackaged mixes provided women with foods to prepare for their families that didn’t take up as much time. The availability of boxed mixes democratized consumption by providing uniform goods, however, women remained attached to tradition. Advertisers had the challenge of convincing middle-class women that prepackaged foods symbolized convenience, affluence and good taste. At the same time, large distributors of natural foods like United Fruit Company and American dairy and meat industries competed for sales by promoting the nutritional qualities of their products. Prepackaged, processed foods with natural foods were combined in

advertising strategies, creating a profitable union for both sides (Batchelor, 2014, p. 355-356).

According to Hutter (2012), the meat industry is promoting false advertising. A commercial for Maple Leaf features a butcher carving meat. Each movement is portrayed in an artistic fashion such as a musician. The company's slogan is, "Your butcher shop." Maple Leaf's meats are carved in a factory, not a butcher shop. Also, Maple Leaf meat also does not come wrapped in brown paper but a plastic-wrapped Styrofoam trays (Hutter, 2012).

Hutter suggests that McDonald's dictates how the meat industry produces its products. Its "Big Nothing" advertisement features children playing on a farm. The end of the advertisement states that the company only adds salt and pepper to burgers. This is false advertisement because McDonald's burgers are produced in a factory, not by a farmer who has free range cows. These types of unethical advertisements surround society every day but do not reflect the truths of factory farming (Hutter, 2012).

The treatment of farm animals is a growing issue amongst meat consumers. Recently U.S. residents in several states have signaled concern for animal well-being through ballot initiatives that prohibit the use of particular practices such as gestation crates/stalls in swine production. The estimated economic model suggests media exposure of animal welfare issues has indirectly reduced both pork and poultry demand (Kansas State University, 2010). Humane advocates want society to consider the environmental impacts of meat consumption and hardship of animals, and doctors discuss health implications (Carmen, 2012).

Tonsor et al (2009) questioned how animal welfare awareness groups effects meat demand in the United States. Particular attention is focused on alternative techniques in acquiring animal welfare media listings. Results of this study suggest awareness of animal welfare within media has statistically significant effect on meat demand. Alternative inferences of media listings alter conclusions regarding spillover effects across meats, net impacts on total meat demand, and longevity of impacts. Articles that referenced consumer groups impacted demand more than those observing U.S. government or livestock industry entities (Tonsor et al, 2009).

Media Framing and Cultivation Theory

Cultivation Theory suggests that exposure to television over time molds the viewer's perception of reality. This theory is derived from a research project titled “Cultivation Indicators” and was developed by George Gerbner and Larry Gross in 1976 (Shanahan & Morgan, 1999; Hammermeister, Brock, Winterstein, & Page, 2005). Gerbner’s hypothesis for cultivation theory inferred that an individual with similar beliefs, values, and outlooks of the portrayals of characters in television programs will be more drawn to those mediums than others. That individual would also be encouraged to nourish and sustain those life views over an extended period due to the reinforcement of the programs in which they engage (Shanahan & Morgan, 1999).

Gerbner was also concerned with media institutions and messages in addition to those effects. His approach highlighted the exchange of influence across media institutions, the mass-produced messages, and their cultivated effect on large aggregates (Gerbner, 1970). He claimed there were specific mass-produced meanings that were widespread throughout media, regarding the message component. Gerbner argued the

meanings presented across media cultivated public beliefs. Those messages form a common culture that shares facts and values (Potter, 2014).

Framing theory was first introduced by Erving Goffman as frame analysis. Goffman explained that people interpret what is going on around the world through their primary framework. According to Goffman, these primary frameworks shape the consumer's perspective on multiple other news as well. It influences their views so much that it frames the way the individual views other things (Goffman, 1974). Media framing of meat products and animals contribute to the way consumers view the two subjects.

Irwin (1988) explored how information framing affects consumers opinions of products. This study evaluated the effect of deterministic product attribute framing on consumers overall product judgment. Participants were asked to sample and critique ground beef, labeling them greasy/greaseless, good tasting/bad tasting, and high quality/low quality. Participants appeared more attracted to the ground beef that was labeled by the percentage of lean it was versus the percentage of fat it consumed. This study also varied in sample stages. Some participants tasted the beef before being told what it consumed, and others were told about the meat before tasting it. Marketing literature such as the 1964 study by Allison and Uhl that showed consumers receive beer differently depending on their awareness of its brand, suggests that product labeling can have an impact on consumers' decisions prior to experiencing the product. Irwin's study using ground beef found that the framing effect tended to be largest when subjects did not actually taste the meat, less large when subjects tasted the meat after being given the label, and smallest when subjects tasted the meat before being given the label (Irwin, 1988).

Filmmakers rely on food to convey a character's personality, evolving relationships, and personal backgrounds. Baron (2014) explains how film often uses food to represent relationships and emotions. Food is framed within this medium in a way that causes society to associate certain foods with particular demographics, social statuses, and personal relationships. Some examples used are how Don Corleone in *The Godfather* uses orange peels as fangs to convey how monstrous he is or how hitmen Jules and Vincent in *Pulp Fiction* exchange quizzical worldviews while discussing European names for American hamburgers. Baron's examples disclose how food serves as not only a vital necessity for life but as an enormous part of the way society communicates. These examples are explained as the *mise-en-scène* of film. Baron goes on to explain that food and social power are closely related, thus making any interaction with food related to social status, ethnicity, cultural difference, sexuality and other markers of identity (Baron, 2014).

Halford (2004) explores the impact of television advertisements on children's eating behavior and health. This study examined children's ability to recognize eight food and eight non-food related advertisements in a repeated measures design based on their body type. Their consumption of sweet and savory, high and low-fat snack foods was measured after both sessions. There wasn't a significant difference in the number of non-food ads recognized between the lean and obese children, however, the obese children recognized significantly more of the food ads. The ability to recognize the food adverts significantly correlated with the amount of food eaten after exposure to them. The overall snack food intake of the obese and overweight children was significantly higher than the lean children in the control (non-food advert) condition. Overall, exposure to these

advertisements increased food intake in all children, excessive sedentary activity was more significant than the relationship between television viewing and childhood obesity, and exposure to food ads promotes consumption.

Matthews (2006) conducted a study to understand soap operas aired in the United Kingdom's impact on societal eating behaviors. Approximately one-third of content were related to food. Alcohol was the largest food group consumed. Sweets and fatty foods were the next most frequent food group consumed. Although food-related commercials were not the predominant source of food advertisements, of the food ads, however, sweet, fatty and/or alcoholic content dominated in three out of the four soap operas. The continual display of images food and alcohol consumption may result in a message about these foods being taken in by the audience. This form of passive learning may alter viewers' perception of reality, allowing them to accept these images as a form of normalcy (Matthews, 2006).

Adolescents receive framed messages from the media concerning food consumption as well. According to Russell (2015), fast food advertising is prominent on programs targeting children. These commercials are typically fast food and don't show negative consequences of consuming such foods. Cultivation research explains that constant exposure to television influences audience views and beliefs. Watching fast food advertisements may shape children's beliefs about these foods in a positive manner that leads to health risks (Russell, 2015).

Although meat advertisements are prominent online and on television, social media is creating a trend for plant-based dieting. According to Holmgren (2017), social media is becoming a popular platform for individuals to refer to for gathering information

on plant-based dieting. Holmgren conducted a study to see how social media is used to influence and inspire plant-based dieting. Findings revealed that YouTube, Instagram, and Facebook are popular networks for sharing lifestyle information. Individuals also refer to documentaries, vlogs, blogs, and photos concerning the environment, plant-based dieting and animal welfare. Overall, results showed that individuals are more likely to change their behavior after being exposed to content that makes them emotional, positive or negative, via social media.

Knowledge of Animal Cruelty

According to Julian (2015), wildlife agencies have realized that it's necessary to target nontraditional demographics to continue to fund conservation efforts as hunting participation declines. The new demographic in consideration is local food consumers. Local food consumers prefer clubs for food because they value easy access to chemical free and ethically produced. Participants emphasized their desire for animal food products to come from animals that have lived in good and kind conditions and were healthy and happy until the end of their lifecycle. Interviewees' definitions of a good life were often associated with humane treatment such as a quick and minimally painful death and being able to live naturally without being overly constrained or fed items animals wouldn't normally eat. Some also preferred to eat meat from larger animals like buffalo, which required only one animal be killed rather than killing the equivalent number of chickens for the same amount of meat.

Participants also looked for meat products produced from animals that were pasture-raised and grass-fed rather than being raised in factory conditions. Some preferred to purchase local meats instead of factory farmed meats but it often depends on

what they can afford financially. Some participants buy from local farmers to personally feed and pet the animals (Julian, 2015, p. 68-70). Overall, interviewees were concerned with the health of the animal they were consuming not for the animal's sake, but for the quality of food and their own personal health after consuming the animal.

According to Sepulveda (2017), human-animals have liberties denied to other animals simply because of their species membership. Sepulveda argues that societal beliefs that associate human-animals with intelligence, rational decision making, and ability to communicate grant human-animals far greater privileges than to those animals who are not human. The systematic exploitation of animals is termed speciesism. Although scholars suggest that anti-speciesism is the extension of movements against racism and sexism, discarding speciesism faces several challenges (Ryder, 1989). Most importantly among these challenges is establishing its existence.

Sepulveda says speciesism may not be recognized as a form of oppression due to the naturalization of animals as commodities that serve human-animal interests. Species inequality often hinges on the reality that how animals are socially constructed will often determine how they are treated. This includes whether they will be commodified and whether their interests will be forfeited over human-animal interests. Sepulveda reviews the social construction of animals that occurs within interpersonal communication, via auto ethnography, in practices of industry and politics, via critical secondary research, and in commercial media, via rhetorical analysis. The rhetorical analysis of over 1900 televised commercials and the critical exploration into concentrated animal feeding operations presented a prevailing discourse that animals are sharply categorized, commodified, and serve the interest of human-animals (Sepulveda, 2017).

Psychology of Eating Meat

Previous research has demonstrated that beliefs influence visual perception. Anderson (2015) tests whether opinions influence the hedonic experience of eating and whether the hedonic experience of eating is reflected in physiological changes in the body. This study tested individual's ideas about how animals were raised and how that impacts the experience of eating meat. Participants were given descriptions of how animals were kept, tasted meat samples, and gave feedback on their experience. Both meat samples were the same product, but testers perceived the samples differently. Meat described as living on a factory farm was perceived as being overall less enjoyable when compared to meat raised on humane farms. Overall, the testers consumed less meat described as factory farm raised. These findings demonstrate that experience is decided by both physical properties and what individuals believe (Anderson, 2015).

Eating animals is common, however, it can cause stress between a desire for meat but not wanting to harm an animal. Research has begun to examine what allows people to negotiate the meat paradox. Loughnan (2014) examined characteristics of the meat eaters and animals and discovered that individuals who value masculinity, do not have issues with consuming meat. Viewing animals as different from people and as lacking the ability to feel pain were also common in meat consumers (Loughnan, 2014).

Family Influence of Eating Habits

Ruby (2012) states that meat is valued more highly, yet tabooed more frequently, than any other type of food within most societies. Past research suggests that people avoid eating animals they consider similar to themselves. Samples from the USA, Canada, Hong Kong, and India, perceived animal intelligence and appearance were major

predictors of disgust with meat consumption. Disgust was a major predictor of willingness to eat animals along with social influences, revealing that friends and family have a stronger influence on food choices (Ruby, 2012).

Hussar (2010) questions whether children can make their own moral choices when those decisions don't match those of guardians or other authority. Six to 10-year-old children who have elected to become vegetarians, despite being raised in omnivore families, were asked why they've chosen not to consume meat; replies were compared with those made by vegetarian children from vegetarian families and non-vegetarian children from non-vegetarian families. These independent vegetarians universally focused on the suffering that meat eating implies for animals, however, they did not condemn others for meat eating. All children in the study condemned meat eating by morally committed vegetarians, but not by those who have made no such commitment. The two studies show that independent vegetarians are committed to not eating meat on moral grounds and judge that it would be wrong to break that commitment. The children remained tolerant toward people who haven't made a commitment to vegetarianism (Hussar, 2010).

Gender, Age and Meat Consumption

Pohlmann (2014) says masculinity is bestowed upon men by others in society and needs to be continuously earned by following male gender role norms. Previous research has found that meat is associated with maleness in Western cultures and men use meat incorporation as a signal to communicate masculinity. This association leads to heavier meat consumption among men and has been linked to negative physical health outcomes as well as increased mortality. This study demonstrates that men express higher

preference for meat compared to women using four studies: Men tend to consume more meat when facing threats to masculinity; compared to vegetables, only meat incorporation has the ability to symbolically restore threatened masculinity and alleviate the aversive emotional states triggered by threats to masculinity; and finally, affirming men's global sense of masculine identity by priming a masculine prototype complementary to their inherent masculine gender identification alleviates the aversive psychological state triggered by the threat; and leads to improved attitudes toward an otherwise eschewed vegetarian food item (Pohlmann, 2014).

CHAPTER II – HYPOTHESIS/QUESTIONS

This thesis questions the volume of influence media has over perceptions of meat and animals and meat consumption behavior within society. There is research testing and questioning why society disassociates meat and animals and what aids in decreasing a desire for meat, however, there has been little research examining why many people continue to eat meat although they are uncomfortable with discussing the cruelty animals face in factory farming. With knowledge and use of cultivation and framing theory, the following research questions and hypotheses are proposed to evaluate the media's role in the omnivore's dilemma:

H1: The more exposure to media, the more likely consumers associate meat products with social and self-esteem needs.

H2: The more exposure to media, the more likely consumers disassociate meat products with their animals of origin.

H3: Gender moderates the effects of media exposure on consumers' perception of meat products.

RQ1: What is the role of family influence?

Method

The goal of this thesis is to grasp an understanding of how consumers respond to media portrayals of meat products, particularly the dissociation of meat from its animal of origin. The primary research method for this study is a survey among students, faculty, and staff at The University of Southern Mississippi.

Sample

Students, faculty, and staff (18 years of age and older) of The University of Southern Mississippi were the participants of this survey during the Fall 2017 semester. The survey was open to both the Hattiesburg, MS campus and the Long Beach, MS campus. For this convenience sample, the researcher encouraged peers to share with other USM students and faculty members to share with their classes. The survey was also included in the weekly university mailout during the Fall 2017 semester as well as shared via social media group pages related to The University of Southern Mississippi to ensure outreach. Each participant was asked to read and sign an informed consent form prior to beginning the survey and promised their complete anonymity. There was no incentive for participation. The goal was to reach at least 300 students, faculty, and staff. The final results consisted of 366 survey recipients.

Procedure

A pretest was conducted in July of 2017. There was a total of 14 participants. This pretest was conducted for the researcher to measure the relevance of the survey questions associated with the study. Participant comprehension of the pretest was also observed. The test questioned participant's meat consumption behaviors as well as their influencers. Pretest survey participants answered questions concerning the role of meat within their culture and how media consumption has influenced this role. Pretest participants were ineligible to participate in the final survey associated with the study because the researcher seeks initial responses.

The researcher began circulating the survey in late September 2017 after the pretest results were evaluated. The survey was open from September 2017 until October

2017. All surveys were conducted online. The survey consisted of 16 questions, mostly closed-ended. The survey questions prompted participants to evaluate their media consumption behaviors, meat consumption patterns, whether they notice a disassociation between meat and its animal of origin and family influence.

Measures

A total of 16 questions were developed by the researcher to explore media exposure, disassociation of meat from its animal of origin, meat consumption, as well as a few personal variables (see Appendix A).

Media exposure. Participants were asked how many hours they spent consuming media every week, including TV/video, internet, radio, and print media (newspapers and magazines). Participants were also asked to report how often (1-not at all, 7-always) they saw meat products in advertising, movie/TV shows, and text-based publications (news, articles, recipes, etc.).

Perception of meat products. This measurement is to investigate whether participants associated meat products with certain social and self-esteem needs. They were asked to rate (1-not at all, 7-very much) on the following statements: (1) meat products are essential to social gatherings, especially holidays; (2) a person who does not eat meat is usually not popular; (3) eating meat makes a person appear more masculine/strong; (4) eating meat makes a person sexier; (5) I always eat meat when I am around my family or friends; and (6) I eat meat to feel masculine/strong.

Disassociation of meat from its animal of origin. Participants were asked to answer questions related to their awareness of a disassociation of meat and its animal of origin within the media they consume (1-not at all, 7-always). Questions include: (1) when you

see meat in media, how often do you think of its animal of origin? (2) how often do you think of the animal you are eating? And (3) how often do you think of the animal other people are eating? Cronbach's alpha was .91.

Meat consumption. Participants were asked to indicate how often they consumed meat products (1-at least once daily, 7-not at all). They were also asked to describe the types of meat they eat, as well as their food consumption behaviors. Consumption behavior options were omnivore, pescetarian, vegetarian, and vegan.

Personal variables. Participants were asked to answer questions related to age, gender, family influence, and awareness of animal cruelty within factory farming. Questions included: (1) Does any of your family members hunt or fish? (2) Do you fish or hunt? (3) Did you grow up around animals, either family pets or farm animals? (4) Do you feel that meat defines your culture or plays a significant role in your culture? (5) How much do you know about animal rights or animal welfare? (6) Are you concerned with animal rights or animal welfare?

CHAPTER III – RESULTS

The survey explored media exposure, disassociation of meat from its animal of origin, meat consumption, as well as a few personal variables. Participants shared the amount of time spent consuming various forms of media each week. Participants were also asked to report how often they noticed meat products in advertising, movie/TV shows, and text-based publications. There were four measures used when developing survey questions: perception of meat products, disassociation of meat from its animal of origin, meat consumption and personal variables, which asked demographic related information. The researcher used correlations and descriptive statistics to analyze the survey data. All data were analyzed via PSPP, a free alternative to IBM SPSS Statistics.

Media Exposure and Perception of Meat Products

The first hypothesis (H1) examined the relationship between media exposure and how consumers associate meat products with social and self-esteem needs. This hypothesis was not supported. A correlation analysis revealed that media exposure was not related to how recipients view meat as social and self-esteem requirements or desires (see Table 1).

Television consumption averaged at 12.37 hours per week with a mean of 10 hours. Radio consumption averaged 8.32 hours per week with a mean of 5 hours. Magazine consumption averaged at 0.47 hours per week with a mean of 0. Internet consumption averaged at 25.67 hours per week with a mean of 20 hours. Only 14 recipients somewhat agree, agree, or strongly agree that meat consumption has an effect on their sexiness, 75 recipients either somewhat agree, agree, or strongly agree that meat consumption plays a role in their masculinity, 11 recipients reported that they either

somewhat agree, agree, or strongly agree that they eat meat to feel masculine, and 33 recipients either somewhat agree, agree, or strongly agree that non-meat eaters are unpopular (see Appendix B).

Table 1
Media Exposure and Meat Perceptions

Measure	1	2	3	4	5	6
How often do you use the following media? (Television/Video Streaming)	.03	.05	.05	.08	.00	1

NOTE:

1. A person who does not eat meat is usually not popular.
2. Eating meat makes a person appear more masculine/strong.
3. Eating meat makes a person sexier.
4. I always eat meat when I am around my family or friends.
5. I eat meat to feel masculine/strong.
6. How often do you use the following media? (Television/ Video Streaming)

*p<.05, **p<.01

In addition, exposure to TV/video media was positively correlated to exposure to meat products. A Pearson product-moment correlation coefficient was computed to assess the relationship between media exposure and exposure to meat products. There was a positive correlation between television/video exposure and meat product exposure, $r(366) = .14, p < .01$ (see Table 2). Overall, increases in meat product exposure (in movies and on TV shows) were correlated with increases in television/video exposure. Approximately 138 recipients (37.70 %) reported noticing meat consumption in movies and television daily and 144 recipients (39.34%) reported noticing at least once weekly. Out of the remaining recipients, 64 (17.49%) reported only noticing meat consumption in media once a month, 12 (3.28%) reported once a year, and eight recipients (2.19%) reported never noticing meat consumption in movies or on television.

Table 2
Media Exposure to Meat Product

Measure	1	2
1. How often do you use the following media? (Television/Video Streaming)	1	
2. How often do you see people eat meat in movies and on TV shows?	.14*	1

* $p < .05$, ** $p < .01$

Media Exposure and Disassociation

The second hypothesis (H2) examined if more exposure to media resulted in more consumer disassociation of meat products from the animal of origin. This hypothesis was partially supported. Correlation tests reveal that exposure to TV/video media was significantly correlated to disassociation of meat and its animal of origin, $r(366) = .12$, $p < .01$; as well as meat consumption, $r(366) = .15$, $p < .01$ (see Table 3). There is a strong, positive correlation between TV/video exposure and a disassociation between meat and animals.

Twenty-eight recipients (7.65%) reported always noticing the animal of origin of meat in media, 39 recipients (10.66%) reported never noticing the animal of origin, 27 recipients (7.38%) reported always thinking of the animal of origin of the meat they consume and 58 recipients (15.85%) reported never thinking of the origin of meats they consume. The most common response to associating meat with its animal of origin was 77 recipients (21.04%) responding as rarely associating the two. Eighty-nine recipients (24.32%) reported never associating meats consumed by others to its animal of origin (see Appendix B).

Disassociation of meat was also found to be significantly related to meat consumption, $r(366) = .53$, $p < .01$. The more individuals disassociate meat from its animal of origin, the more meat he or she eats. The most common response to associating meat with its animal of origin was 77 recipients (21.04%) responding as rarely associating the two. Eighty-nine recipients (24.32%) reported never associating meats others consume to its animal of origin.

A total of 276 recipients (67.49%) reported daily meat consumption. Three hundred-forty-two recipients either fish and hunt or grew up with pets or farm animals, leaving 24 recipients who were not accustomed to being around animals as a child. Only 33 recipients were never taught that meat was a necessity. Of the 366 recipients, 292 (79.78%) described their consumption behaviors as omnivore, 50 (13.66%) as pescetarian, 11 (3.01%) as vegetarian, and 13 (3.55%) as vegan. Approximately 247 recipients (67.49%) consume meat daily, 84 (22.95%) consume meat weekly, 11 (3.01%) consume meat at least once a month, 8 (2.19%) consume meat at least once a year, and 16 (4.37%) reported not consuming meat at all (see Appendix B).

Media exposure to TV/video media was also positively correlated to meat consumption. A Pearson product-moment correlation coefficient was computed to assess the relationship between media exposure and meat consumption. There is a positive correlation between TV/video exposure and meat consumption behaviors, $r(366) = .15, p < .01$; and between Internet/Mobile exposure and meat consumption behaviors, $r(366) = .14, p < .01$. There is also a positive correlation between TV/video exposure and Internet/Mobile exposure, $r(366) = .28, p < .01$ (see Table 3).

Table 3
Dissociation

Measure	1	2	3	4
How often do you use the following media? (Television/Video Streaming)	1			
How often do you use the following media? (Internet/Mobile)	.28*	1		
Disassociate	.12*	.07	1	
How often do you eat meat?	.15*	.14*	.53*	1

*p<.05, ** p<.01

People who spend more time watching television and video streaming are less likely to associate meat with its animal origin and tend to eat more meat. Internet usage is also related to meat consumption. Although some recipients reported a low average of media consumption per week, their eating behaviors did not defer to recipients who consumed large quantities of media per week. Overall, increases in media exposure correlate to increases in meat consumption.

Role of Gender and Family Influence

The third hypothesis (H3) questioned whether gender moderates the effects of media exposure on consumers' perception of meat products. This hypothesis was not supported. There was a total of 366 complete survey responses. Most survey recipients were white females and individuals between 18-24 years. The total percentages of ages of recipients are as follows: 18-24 years (36.61%), 25-34 years (24.32%), 35-44 (16.9%), 45-54 years (10.93%), 55-64 (8.74%), and 65 years and older (3.01%). Female recipients composed 81.69% (299 recipients) of results, leaving 18.31% to males (67 recipients). Consumption behavior did not defer much amongst ages and genders. In response to how often they consumed meat, 247 recipients (67.49%) responded daily, 87 recipients (22.95%) responded weekly, 11 recipients (3.01%) responded monthly, 8 recipients (2.19%) responded yearly (special occasions), and 16 recipients (4.37%) reported not eating meat at all. No significant differences were found between male and female respondents, possibly because 300 of the 366 survey participants were female. Income and race were also asked in this study, but the results were not significant enough to be measured in this study.

The research question (RQ1) explored the role of family influence in perception and meat products and meat consumption. A significant correlation was found between "How often do you fish or hunt animals" and disassociation, $r(366) = .15, p < .01$; as well as between "How often do you fish or hunt animals" and meat consumption, $r(366) = .17, p < .01$. There is also a significant correlation between disassociation and meat consumption, $r(366) = .53, p < .01$. Participants who fish or hunt more often are more

likely to disassociate meat from its animal of origin and tend to eat more meat. Also, those participants who eat more meat are more likely to disassociate meat and animals (see Table 4).

Table 4

Family Influence

Measure	1	2	3
1. Disassociate	1		
2. How often do you eat meat?	.53*	1	
3. How often do you fish or hunt animals?	.15*	.17*	1

*p<.05, ** p<.01

Table 5
Summary of Hypothesis and Findings

<p>H1: The more exposure to media, the more likely consumers associate meat products with social and self-esteem needs.</p>	<p>Media exposure is not related to how recipients view meat as social and self-esteem requirements or desires.</p>
<p>H2: The more exposure to media, the more likely consumers disassociate meat products with their animals of origin.</p>	<p>TV/video media was significantly correlated to disassociation of meat and its animal of origin as well as meat consumption.</p>
<p>H3: Gender moderates the effects of media exposure on consumers' perception of meat products.</p>	<p>No significant differences were found between male and female respondents.</p>
<p>R1: What is the role of family influence?</p>	<p>There was a strong, positive correlation between family and culture influence over meat consumption, culture meaning the mainstream beliefs and cultures of individuals.</p>

Other Findings

Although some survey questions concerned race, age, and income, results did not reveal any significant relationships to the study. The researcher included questions on race, age, and income because of research included in the literature review that found that food is advertised differently to different economic demographics. Differences in economics typically lead to differences in race, but none of these traits were of importance in this study.

CHAPTER IV - DISCUSSION

Findings and Implications

This study focused on media consumption's role in eating behaviors. The purpose was to detect whether framing of meat presentations and cultivation from media consumption resulted in a higher consumption of meat products. An online survey was conducted over a series of four months, collecting 366 completed questionnaires. Recipients were students, faculty, and staff of The University of Southern Mississippi. There were four measures used when developing survey questions: perception of meat products, disassociation of meat from its animal of origin, meat consumption and personal variables, which asked demographic related information.

Perception of meat products investigated whether participants associated meat products with certain social and self-esteem needs. Disassociation of meat from its animal of origin asked about an awareness of a disassociation of meat and its animal of origin within media consumed. Meat consumption observed consumption behaviors such as omnivore, pescetarian, vegetarian, and vegan diets. Lastly, personal variables asked questions related to age, gender, family influence, and awareness of animal cruelty within meat production. Cultivation theory and framing theory were the foundation for this study.

Goffman introduced Framing theory, or Framing Analysis, as the way people interpret what is going on around their world through their primary framework (Goffman, 1974). Goffman says these primary frameworks shape the media consumer's perspective of multiple other news and events as well. Media framing is so powerful that it shapes the consumer's perspectives on other topics as well. Cultivation theory suggests that

exposure to television over time molds the viewer's perception of reality. As stated in the literature review, Gerbner's hypothesis for cultivation theory inferred that an individual with similar beliefs, values, and outlooks of the portrayals of characters in television programs will be more drawn to those mediums than others.

This study revealed that individuals who spend more time watching television and video streaming are more likely to see meat products in media, less likely to associate meat with its animal of origin and tend to eat more meat. These findings are congruent with Cultivation theory and Framing theory as well as with patterns found in studies used in the literature review. This study also contributes to previous studies that have suggested that media affects a disassociation between meat and animals.

Personal factors such as selective exposure and cognitive dissonance also significantly impact the findings of this study. Individuals may choose to defend meat consumption because of their religion, culture, and multiple other factors that have nothing to do with the meat itself. Media's role is to sell products by subtly selling consumers non-material desires such as family, friendship, and romance. Food presentation within media is significant to the disassociation of meat product and animals, as Hopkins & Dacey (2008) live lamb vs chopped lamb example explains. The significance of this research is in bringing awareness that media is an equal or greater influence than personal factors in meat consumption.

This study offers practical implications to advertisers and scholars by revealing a relationship between meat consumption, meat and animal disassociation, and media consumption. Scholars may take this information to further investigate the relationship between media consumption, particular video streaming and television, and meat

consumption to see how embedded meat consumption is within different cultures and if the disassociation exists in most cultures. Advertisers may take the information from this study to see how frequently meat products appear in ads and other television or video streaming programming to promote their own brands and products (not necessarily meat related products).

Only one of the hypothesized relationships (H2: The more exposure to media, the more likely consumers disassociate meat products with their animals of origin.) developed was supported in this study. This hypothesis is significant in understanding if the amount of media consumed plays a role in cultivating meat consumption and leading consumers to think of meat separately from animals. Meat products are often framed to represent a social class, desirability, masculinity, humor, and many other traits. Steak and seafood are considered delicacies and framed as being sensual, appealing cuisines. Hamburgers, ribs, and chicken wings are often framed as masculine or advertised in a sexualized manner. An example is the Carl's Jr. ads where the hamburger is profoundly sexualized by the usage of half-naked women consuming burgers. Hunting and fishing are considered sports, making the two symbols of comradeship. Ironically, society has been cultivated to cherish and find companionship within certain animals such as cats and dogs while other animals such as pigs, cows, chickens, and lamb are deemed for human consumption. This often results in the disassociation of meats from their animal of origin.

Just as Marshall (2016) stated, when an individual eats a plate of buffalo wings or a cheeseburger, he or she is unlikely to think about the chickens or cows that their meal originated from. Most individuals probably won't think of the animal they are consuming unless it is presented in a way that the meat resembles the animal, just as in the study by

Kunst (2016) where focus groups we presented with chicken and pork presented in different forms (chopped chicken, drumsticks and a whole chicken as well as a headless roasted pig and a roasted pig with the head). Individuals were less likely to eat the meat that resembled its animal of origin and more likely to eat meat when the presentation wasn't closely related to the animal's appearance. Meat is often portrayed in media in a way that distances it from the animal of origin, just as some of the representations in Kunst's study. Hamburgers and chicken nuggets featured in commercials and on restaurant menus look nothing like the animal of origin, so people are less likely to think of the animal. These findings are why the researcher made the hypothesis that media consumption leads to disassociation of meat and animals.

H1 (The more exposure to media, the more likely consumers associate meat products with social and self-esteem needs.) is significant to understand media's role in influencing the consumption of meat by giving the impression that certain food groups improve certain characteristics and traits such as masculinity and sexiness. Meat is often portrayed as a delicacy or necessity in the media. The consumption of meats such as lobster and steak are often glamorized and romanticized, labeling class or how much individuals value a significant other.

Meat commercials are also often comedic or sensual. Companies such as KFC and Arby's have commercials that bring positive emotions such as a sense of togetherness or masculinity from eating their products; Hardee's and Carl's Jr. commercials sexualize meat, and companies such as Chick Fil A or Raising Cane's have animal mascots that are not associated with the meats they sell, distracting the consumer from the true origin of his or her meal. The enormous budgets for meat marketing explain

the exhaustion of meat-related advertisements and coverage within the mass media. The meat industry has a significant influence on society's continued desire for meat consumption.

As Baron (2014) explained, film often uses food to represent relationships and emotions. Food is framed within film to associate certain foods with particular demographics, social statuses, and personal relationships. The same goes for other mediums. This explanation of media's influence on meat consumption as well as Loughnan's (2014) study that evaluated the characteristics of meat eaters, finding that meat eaters tend to care less about animal welfare, value masculinity, and accept social hierarchy, lead the researcher to predict that recipients of this study would eat meat due to self-esteem needs and values such as masculinity.

However, this hypothesis was not supported by this study because a correlation analysis revealed that media exposure was not related to how recipients view meat as social and self-esteem requirements or desires. Recipients also reported that they did not view meat as a necessity for holiday gatherings. A total of 197 recipients either somewhat agree, agree, or strongly agree that meat products are essential for social gatherings. A total of 168 recipients reported that they somewhat agree, agree, or strongly agree to always eat meat when with family and friends. These recipients were not any more likely to think meat consumption is essential to social settings or self-esteem than any other participants (see Appendix B). These findings are not congruent with other studies listed in the literature review. This is possibly because of the lack of diversity in demographics, particularly gender, amongst survey recipients.

Results for H3 (Gender moderates the effects of media exposure on consumers' perception of meat products.) revealed no significant differences were found between male and female respondents, probably because 300 of the 366 survey participants were female. Pohlmann (2014) states that masculinity is presented as a male characteristic by society. Previous research has found that meat is associated with maleness in Western cultures and men eat meat to communicate masculinity. This study's results may have differed if there was more diversity within gender amongst participants since meat consumption is more likely associated with masculinity amongst males. However, since most participants were female, and most responses stated that meat was not associated with masculinity, this could suggest that gender does moderate the effects of media exposure on consumers' perceptions of meat products. More male participant data would need to be collected, however.

RQ1 (What is the role of family influence?) is significant to understanding if there are factors outside of media exposure that lead to meat consumption. Just as Ruby (2012) stated, individuals' consumption behaviors tend to reflect the behaviors of their family and friends. Pettigrew (2013) explained that both parents and children were more likely to choose foods high in energy and poor in nutrition after seeing commercials for the product. This study reveals how media influences family behaviors. This study helps to bring an understanding of how the influence of advertisements on a household contributes to an individual's eating habits throughout his or her life. Long-term exposure to this distortion of the pyramid of recommended food should be considered in the discussion of legal restrictions for food advertising targeting children.

Survey results revealed that there is not a difference in eating behaviors between individuals who were taught that meat is a necessity and individuals who weren't taught that meat is a necessity. Most recipients reported being told that meat was a priority at some point as a child (19.13 % reported always being told that meat is a priority). However, those who were not taught that meat consumption was necessary had similar results to recipients who were taught that meat is a necessity when it comes to associating meat with the animal of its origin. The childhood teachings also did not make an impact in meat consumption for recipients. Even recipients who reported not being taught that meat is a priority consume similar amounts of meat to recipients who were taught that meat is a priority (See Appendix B).

Correlation tests indicated that there was a positive correlation between meat consumption and culture. Overall, there was a strong, positive correlation between family and culture influence over meat consumption, culture meaning the mainstream beliefs and practices of individuals.

CHAPTER V – CONCLUSIONS, LIMITATIONS AND FUTURE RESEARCH

Conclusions

This study revealed that media does, in fact, play a role in the omnivore's dilemma, the desire to consume meat but not wanting to know about the meat process or the animal of origin. Media representations of meat products are typically in the form of meal presentation, creating a disassociation of meat and its animal of origin. H1, H3, and R1 were not supported by survey results due to a lack of diversity in the sexes of recipients (a majority of recipients were female). H1(The more exposure to media, the more likely consumers associate meat products with social and self-esteem needs.) was not supported, possibly due to a majority of recipients being female and meat representations in media typically target masculinity. H3 (Gender moderates the effects of media exposure on consumers' perception of meat products.) could not be properly supported due to an imbalance between female and male recipients. R1 (What is the role of family influence?) was not supported because there was no significant difference in eating behaviors among those who were taught that meat is a necessity as a child and those who were not taught that meat is a necessity as a child. There was possibly no significant difference because a majority of survey recipients were taught that meat is a necessity whereas only 9.02% were never taught that meat is a necessity.

Limitations and Recommendations for Future Research

This research was limited in that most of the survey recipients were female. More gender diversity may have changed the survey results significantly, particularly when questioning social needs and desires. This research was also limited because it targeted a small demographic; only individuals associated with The University of Southern

Mississippi. Opening the research to all students, faculty, and staff within the state of Mississippi, or even all residents of the entire state may have brought more diversity to the results.

Although the findings shed light on how media exposure influences a disassociation of meat and animals, more research should be conducted to better understand outside influences, such as family and peers, as well as if meat is marketed differently to males and females, affecting the two groups' perspectives of a need for meat consumption (necessity, self-esteem, etc.) Further research on this topic could be conducted as qualitative research. A focus group where fast food advertisements and other forms of media involving meat consumption are shown could help individuals be more aware of a disassociation between meat and its animal of origin, should it exist. It would be most beneficial to have multiple focus groups; one with hunters and fishers, one with individuals who do not hunt and fish, and one consisting of both.

It would also be beneficial to survey males and females separately to compare results between the two genders. This could assist with measuring any associations between meat consumption and masculinity or sexiness. Future research may also explore racial and economic demographics more. This study did not explore social differences and meat consumption, but findings within the literature review suggest that meat marketers target different demographics in different ways based on economy class and race (which are generally closely related). The difference in marketing more than likely effects meat consumption behaviors within different communities.

APPENDIX A – Survey Questionnaire

Media exposure

- 1) How often do you use the following media? (Insert time in hours per week for each medium.)
 - a. Television/Video streaming sites
 - b. Radio (including music streaming apps)
 - c. Magazines
 - d. The Internet/Mobile

- 2) How often do you see advertisements (online and offline) for meat products such as chicken nuggets, steak, hamburgers...?
 - a. At least once daily
 - b. At least once weekly
 - c. At least once a month
 - d. At least once a year
 - e. Not at all

- 3) How often do you see people eat meat in movies and on TV shows?
 - a. At least once daily
 - b. At least once weekly
 - c. At least once a month
 - d. At least once a year
 - e. Not at all

- 4) How often do you see information on meat products (e.g., news, article, recipe) in magazines, on social media, and on news websites?
 - a. At least once daily
 - b. At least once weekly
 - c. At least once a month
 - d. At least once a year
 - e. Not at all

Association with social and self-esteem needs

- 5) Do you agree with the following statements?
- Meat products are essential for social gatherings, especially holidays.
 - A person who does not eat meat is usually not very popular.
 - Eating meat makes a person appear more masculine/strong.
 - Eating meat makes a person sexier.
 - I always eat meat when I am around my family or friends.
 - I eat meat to feel masculine/strong.

Select one response for each question:

1. Strongly Disagree
2. Disagree
3. Somewhat Disagree
4. Agree nor Disagree
5. Somewhat Agree
6. Agree
7. Strongly Agree

Disassociation from animal of origin

- 6) Rate the following:
- When you see meat in media, how often do you think of its animal of origin?
 - How often do you think of the animal you are eating?
 - How often do you think of the animal other people are eating?

Select one response for each questions:

1. Always
2. Almost Always
3. About Half the Time
4. Sometimes
5. Rarely
6. Very Rarely
7. Never

Family influence

7) Rate the following:

- How often do you fish or hunt animals?
- Do any of your family members hunt or fish?
- Do you feel that meat defines your culture or plays a significant role in your culture?
- As a child, were you taught that meat is a necessity?

Select one response for each questions:

1. Always
2. Almost Always
3. About Half the Time
4. Sometimes
5. Rarely
6. Very Rarely
7. Never

8) Did you grow up around animals?

- a. Yes – Family Pets
- b. Yes – Farm Animals
- c. Yes - Family Pets and Farm Animals
- d. Yes – Regularly Hunted/Fished
- e. Yes – All of the above
- f. No

Meat consumption

9) How often do you eat meat?

- a. At least once daily
- b. At least once weekly
- c. At least once a month
- d. At least once a year (holidays, special occasion, etc.)
- e. Not at all

10) What types of meat do you eat? (select all that apply)

- a. Chicken
- b. Beef
- c. Pork
- d. Seafood
- e. Other (please specify)
- f. None

- 11) Which best describes your food consumption behaviors?
- Omnivore (meat and animal by product)
 - Pescetarian (sea meats and animal by product)
 - Vegetarian (animal by product excluding meat)
 - Vegan (non-animal products)

Knowledge of animal cruelty

12) Rate the following:

- How much do you know about animal rights or animal welfare?
- Are you concerned with animal rights or animal welfare?

Select one response for each question:

1. Not at all
2. Very Little
3. Somewhat
4. Very Much
5. Extremely

Demographics

13) Please specify your gender.

- Male
- Female
- Other (please specify)

14) What is your age?

- 18-24 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65 years or older

15) Please specify your ethnicity.

- White
- Black or African American
- Hispanic or Latino
- Asian
- Native American or American Indian
- Other

What is your family's total household income?

- g. Less than \$25,000
- h. \$25,000-\$49,999
- i. \$50,000-\$74,999
- j. \$75,000 or more

APPENDIX B – Descriptives

How often do you see advertisements (online and offline) for meat products such as chicken nuggets, steak, hamburgers...?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
At least once daily	1	181	49.45	49.45	49.45
At least once weekly	2	140	38.25	38.25	87.70
At least once a month	3	19	5.19	5.19	92.90
At least once a year	4	10	2.73	2.73	95.63
Not at all	5	16	4.37	4.37	100.00
Total		366	100.0	100.0	

How often do you see people eat meat in movies and on TV shows?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
At least once daily	1	138	37.70	37.70	37.70
At least once weekly	2	144	39.34	39.34	77.05
At least once a month	3	64	17.49	17.49	94.54
At least once a year	4	12	3.28	3.28	97.81
Not at all	5	8	2.19	2.19	100.00
Total		366	100.0	100.0	

Do you agree with the following statements? - I eat meat to feel masculine/strong.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	219	59.84	59.84	59.84
Disagree	2	100	27.32	27.32	87.16
Somewhat disagree	3	8	2.19	2.19	89.34
Neither agree nor disagree	4	28	7.65	7.65	96.99
Somewhat agree	5	5	1.37	1.37	98.36
Agree	6	4	1.09	1.09	99.45
Strongly Agree	7	2	.55	.55	100.00
Total		366	100.0	100.0	

Do you agree with the following statements? - Eating meat makes a person appear more masculine/strong.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	96	26.23	26.23	26.23
Disagree	2	117	31.97	31.97	58.20
Somewhat disagree	3	29	7.92	7.92	66.12
Neither agree nor disagree	4	49	13.39	13.39	79.51
Somewhat agree	5	53	14.48	14.48	93.99
Agree	6	17	4.64	4.64	98.63
Strongly Agree	7	5	1.37	1.37	100.00
Total		366	100.0	100.0	

Do you agree with the following statements? - Eating meat makes a person sexier.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	141	38.52	38.52	38.52
Disagree	2	122	33.33	33.33	71.86
Somewhat disagree	3	22	6.01	6.01	77.87
Neither agree nor disagree	4	67	18.31	18.31	96.17
Somewhat agree	5	7	1.91	1.91	98.09
Agree	6	2	.55	.55	98.63
Strongly Agree	7	5	1.37	1.37	100.00
Total		366	100.0	100.0	

Do you agree with the following statements? - A person who does not eat meat is usually not very popular.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	112	30.60	30.60	30.60
Disagree	2	120	32.79	32.79	63.39
Somewhat disagree	3	34	9.29	9.29	72.68
Neither agree nor disagree	4	67	18.31	18.31	90.98
Somewhat agree	5	24	6.56	6.56	97.54
Agree	6	7	1.91	1.91	99.45
Strongly Agree	7	2	.55	.55	100.00
Total		366	100.0	100.0	

How often do you eat meat?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
At least once daily	1	247	67.49	67.49	67.49
At least once weekly	2	84	22.95	22.95	90.44
At least once a month	3	11	3.01	3.01	93.44
At least once a year (holidays, special occasion, etc.)	4	8	2.19	2.19	95.63
Not at all	5	16	4.37	4.37	100.00
Total		366	100.0	100.0	

Rate the following: - When you see meat in media, how often do you think of its animal of origin?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	28	7.65	7.65	7.65
Almost always	2	37	10.11	10.11	17.76
About half the time	3	34	9.29	9.29	27.05
Sometimes	4	89	24.32	24.32	51.37
Rarely	5	70	19.13	19.13	70.49
Very Rarely	6	69	18.85	18.85	89.34
Never	7	39	10.66	10.66	100.00
Total		366	100.0	100.0	

Rate the following: - How often do you think of the animal you are eating?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	27	7.38	7.38	7.38
Almost always	2	27	7.38	7.38	14.75
About half the time	3	31	8.47	8.47	23.22
Sometimes	4	75	20.49	20.49	43.72
Rarely	5	77	21.04	21.04	64.75
Very Rarely	6	71	19.40	19.40	84.15
Never	7	58	15.85	15.85	100.00
Total		366	100.0	100.0	

Rate the following: - How often do you think of the animal other people are eating?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	18	4.92	4.92	4.92
Almost always	2	21	5.74	5.74	10.66
About half the time	3	21	5.74	5.74	16.39
Sometimes	4	68	18.58	18.58	34.97
Rarely	5	79	21.58	21.58	56.56
Very Rarely	6	70	19.13	19.13	75.68
Never	7	89	24.32	24.32	100.00
Total		366	100.0	100.0	

How often do you see advertisements (online and offline) for meat products such as chicken nuggets, steak, hamburgers...?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
At least once daily	1	181	49.45	49.45	49.45
At least once weekly	2	140	38.25	38.25	87.70
At least once a month	3	19	5.19	5.19	92.90
At least once a year	4	10	2.73	2.73	95.63
Not at all	5	16	4.37	4.37	100.00
Total		366	100.0	100.0	

How often do you see people eat meat in movies and on TV shows?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
At least once daily	1	138	37.70	37.70	37.70
At least once weekly	2	144	39.34	39.34	77.05
At least once a month	3	64	17.49	17.49	94.54
At least once a year	4	12	3.28	3.28	97.81
Not at all	5	8	2.19	2.19	100.00
Total		366	100.0	100.0	

H3:

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Male	1	67	18.31	18.31	18.31
Female	2	299	81.69	81.69	100.00
Total		366	100.0	100.0	

Rate the following: - As a child, were you taught that meat is a necessity?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	70	19.13	19.13	19.13
Almost Always	2	97	26.50	26.50	45.63
About half the time	3	44	12.02	12.02	57.65
Sometimes	4	66	18.03	18.03	75.68
Rarely	5	38	10.38	10.38	86.07
Very Rarely	6	18	4.92	4.92	90.98
Never	7	33	9.02	9.02	100.00
Total		366	100.0	100.0	

Do you agree with the following statements? - Meat products are essential for social gatherings, especially holidays.

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Strongly Disagree	1	35	9.56	9.56	9.56
Disagree	2	48	13.11	13.11	22.68
Somewhat disagree	3	28	7.65	7.65	30.33
Neither agree nor disagree	4	58	15.85	15.85	46.17
Somewhat agree	5	76	20.77	20.77	66.94
Agree	6	74	20.22	20.22	87.16
Strongly Agree	7	47	12.84	12.84	100.00
Total		366	100.0	100.0	

Did you grow up around animals?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Yes – Family Pets	1	194	53.01	53.01	53.01
Yes – Farm Animals	2	4	1.09	1.09	54.10
Yes – Regularly Hunted/Fished	3	8	2.19	2.19	56.28
Yes – All of the above	4	61	16.67	16.67	72.95
No	5	24	6.56	6.56	79.51
Yes - Family Pets and Farm Animals	6	75	20.49	20.49	100.00
Total		366	100.0	100.0	

Rate the following: - Do any of your family members hunt or fish?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	37	10.11	10.11	10.11
Almost Always	2	43	11.75	11.75	21.86
About half the time	3	45	12.30	12.30	34.15
Sometimes	4	109	29.78	29.78	63.93
Rarely	5	28	7.65	7.65	71.58
Very Rarely	6	45	12.30	12.30	83.88
Never	7	59	16.12	16.12	100.00
Total		366	100.0	100.0	

Rate the following: - Do you feel that meat defines your culture or plays a significant role in your culture

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	33	9.02	9.02	9.02
Almost Always	2	64	17.49	17.49	26.50
About half the time	3	59	16.12	16.12	42.62
Sometimes	4	114	31.15	31.15	73.77
Rarely	5	33	9.02	9.02	82.79
Very Rarely	6	26	7.10	7.10	89.89
Never	7	37	10.11	10.11	100.00
Total		366	100.0	100.0	

Rate the following: - How often do you fish or hunt animals?

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Always	1	3	.82	.82	.82
Almost Always	2	4	1.09	1.09	1.91
About half the time	3	7	1.91	1.91	3.83
Sometimes	4	38	10.38	10.38	14.21
Rarely	5	42	11.48	11.48	25.68
Very Rarely	6	66	18.03	18.03	43.72
Never	7	206	56.28	56.28	100.00
Total		366	100.0	100.0	

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