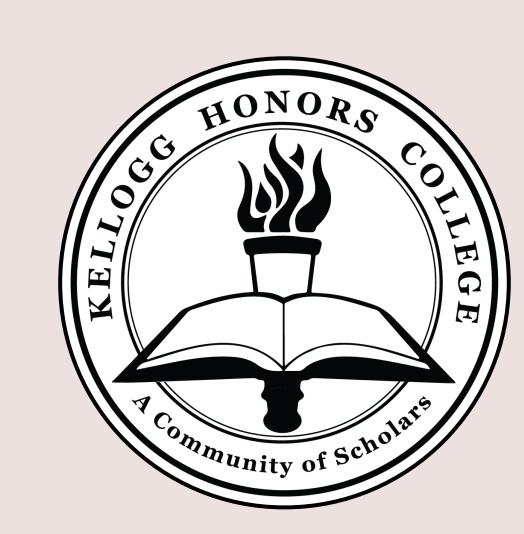


An Examination of Climate Concerns and Intention to Eat Less Meat Explored Through the Application of The Theory of Planned Behavior: The Moderating Effects of Age and Online Community Engagement



Vivian Graft, International Business & Marketing Mgmt.

Mentor: Dr. Elif Ozkaya

Student Research, Scholarship & Creative Activities Conference (2022)

Abstract

The recent trend in meat alternatives and the adoption of plant-based diets (vegetarianism, veganism, flexitarianism, etc.) has led to an increase in research that explores the reasons an individual might choose to reduce their meat consumption, since there are numerous motivations why one might choose to do so. However, there are still avenues to be explored in this realm of research. Ethical, moral, and environmental concerns have been researched as factors that may influence a reduction in meat consumption. With climate change concerns rising and consumers adopting more environmentally friendly purchase behaviors, the choice to buy less meat has also become an increasingly popular way to lessen one's impact on the environment. This study will examine how climate change concerns influence an individual's decision to eat less meat. Icek Ajzen's Theory of Planned Behavior is applied as the conceptual design of the study so that the behaviors of these individuals and the factors that lead to their choices can be thoroughly considered. The current study examines the subjective norm, attitude, and perceived behavioral control of individuals and how these factors influence their purchase intentions and overall purchase behaviors. As well, participants are examined by generational cohorts and their level of online community engagement. Age and online community engagement is explored as moderating factors toward the development of individuals' subjective norm, attitudes, and perceived behavioral control.

Purpose

The intention of this study is to explore the significance of climate change concern on one's intention to eat less meat. As well, the moderating role of age and online community engagement are examined as younger generations have been believed to be more inclined to reduce meat consumption due to the climate crisis era they grew up in. Similar research has been conducted in western European countries. However, with plant-based diets on the rise in the United States, it is important to understand why Americans are choosing to reduce their meat consumption, especially now that companies are choosing to evolve alongside this trend and add plant-based products to their menus.

Expected Contributions

- Help marketing managers understand the extent to which Americans are choosing to adopt plant-based diets based on their level of climate change concerns.
- Contribute to previous research and explore two moderators (age and online community engagement).

Meat Consumption & Climate Change

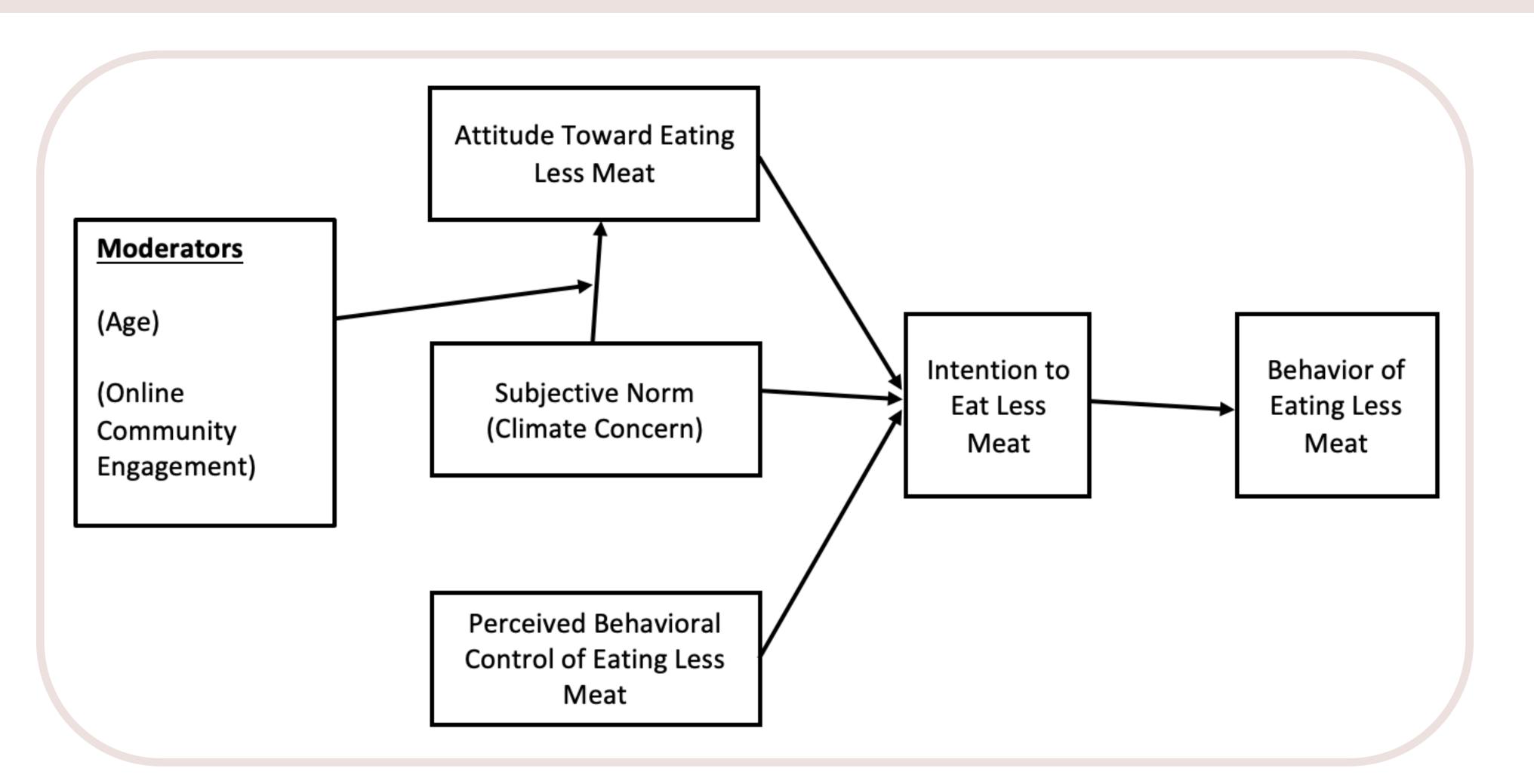
Human activities substantially impact the environment and contribute to the ever-growing climate crisis. Environmentally impactful human activities lead to global warming, loss of biodiversity, water depletion and pollution, air pollution, land degradation, deforestation, ozone layer depletion, and several other detrimental environmental crises. A major issue in regard to human behavior that leads to various environmental crises, in and of itself, is meat consumption, and animal agriculture in general. In the food category, the most environmentally harmful foods are meat and milk products (FAO, 2006). The Food and Agriculture Organization (FAO) of the United Nations reported that the raising and maintenance of livestock for human consumption is one of the major contributors to climate change due to factors such as: land use and deforestation, transportation of feed, and insufficient management of gas emitting processes (e.g., methane and nitrous oxide emitted from manure) (FAO, 2006). In 2006, the FAO estimated that the livestock sector is responsible for 18 percent of global anthropogenic greenhouse gas emissions (FAO, 2006).

Vegan, vegetarian, flexitarian, and plant-based diets of all sorts have been adopted widely across the world over the last few decades. A 2017 Global Data report showed that in 3 years, there was a 600% increase in Americans that identify as vegan (Global Data, 2017). The population of Americans that identified as vegan at the time of the report was 6% and expected to grow. A 2020 YouGov study showed that 1 in 5 millennials say they have changed their diet in an effort to reduce their impact on the environment (YouGov, 2020). The trend in plant-based diets has led several companies to adopt trend-conducive efforts to remain relevant alongside the evolving expectations of today's consumers. The creation of the "McVegan" burger in McDonald's Scandinavia is a prominent example of how major companies are adapting to new demands. Companies such as Impossible Foods and Beyond Meat are two popular brands that are changing the food industry in an effort to make plant-based meats more accessible and combat climate change through more sustainable means of food production. Impossible Foods, started by CEO and founder, Dr. Patrick O. Brown, launched its first plant-based burger in 2016 and has grown considerably since its launch. Brown's mission since the beginning is to make the food industry truly sustainable by eliminating the need to make food from animals (Impossible Foods Inc., 2021).

Moderators: Age and Online Community Engagement

Two moderators were chosen for this study based on the generational differences in meat consumption habits that have been explored more extensively in recent years. Younger generations are believed to be more environmentally conscientious. However, research is limited on the actual pro-environmental behaviors displayed in each generational cohort. The emergence of environmental activists on social media sites has helped spark activism around the world and has led to the mobilization of new activists and supporters, as well as the circulation and discussion of environmental concerns and ideas. The higher volume of young people online and on social media sites is what prompted the inclusion of *online community engagement* as a moderating factor in this study. Therefore, the age of the individual and their level of engagement in online environmental communities will be examined to determine their influence on an individual's intention and actual reduction of meat consumption.

Theory of Planned Behavior Model



Hypotheses:

- **H1**: Individuals' subjective norm will be positively related to attitudes towards reducing meat consumption.
- H2: Individuals' attitudes towards reducing meat consumption will be positively related to the intention to reduce meat consumption.
- H3: Individuals' perceived subjective norm will be positively related to the intention to reduce meat consumption.
- **H4**: Individuals' perceived behavioral control will be positively related to the intention to reduce meat consumption. **H5**: Individuals' intention to reduce meat consumption will be positively related to their behavior of reducing their meat consumption.
- **H6a**: Individuals' age will moderate the relationship between subjective norm and attitude toward eating less meat, such that the relationship will be stronger as age decreases.

H6b: Individuals' engagement in online communities will moderate the relationship between subjective norm and attitude toward eating less meat, such that the relationship will be stronger as online community engagement increases.

Methodology

Based on previous applications of the TPB model, a questionnaire will be constructed to measure all variables within the study with several items. Participants across the United States will be sampled in a two-wave survey design. Respondents will be sampled a second time after 6 weeks to measure the results of their intention to reduce their meat consumption alongside their actual behavior of reducing their meat consumption. Survey distribution will take place using Mechanical Turk.

Measures

Constructs to measure the relationships of the variables in this study will be referenced and adapted from studies that have applied the TPB model and have measured similar relationships between variables. As well, constructs will be made, if necessary, in order to fully understand the influence of the variables. Online community engagement and involvement on social media sites will be determined though multiple scale items in order to explore all areas of a participant's involvement online.

Expected Outcomes

Based on recent studies, it is expected that younger individuals will feel more inclined to reduce their meat consumption based on the information they are exposed to and engage with online. The online community engagement from younger individuals is expected to be one of the most significant factors that lead to the intention to eat less meat due to climate change concerns that are learned and discussed online. As well, the nature of social media sites which allow users to engage, interact, and respond with one another (vs. one-way media, such as radio and television) is expected to have a greater influence on subjective norm due to the affect that peer influence has on one's perceived subjective norm.