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A Study on Attitudes towards Veganism in India

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Abstract
Purpose: This paper aims to explore the level of awareness about and attitudes towards veganism, its motivations and economic effects in Gujarat, India.

Design/methodology/approach: It uses a descriptive research design and a questionnaire with close-ended questions administered electronically to 185 respondents. The findings were analyzed using descriptive statistics, cross-tabulation, correlation and regression analysis.
Findings: The findings of this paper indicate a reasonably positive attitude towards veganism among the people of the Indian state of Gujarat with a large majority showing current and future willingness to move to a plant-based diet. Age was found to have a positive correlation with the proportion of meat in diet and there was a negative correlation between religion and proportion of meat in the diet.The regression analysis shows that religion of the respondent and willingness of the respondents to follow a plant-based diet are useful predictors of whether a respondent will follow plant-based or animal-based diet.
Practical implications: The findings of this study can help the food industry understand the preferences of people regarding veganism. This is especially important for India which has a large population that is interested in following a plant-based diet due to religious, environmental or animal-concern reasons, but does not have access to good quality vegan food options.
Originality/value: This paper offers insight into the level of awareness about a rising food trend among Indian urban population, addressing the dearth of such studies in the existing literature.
Keywords (any five): veganism, India, attitudes, preferences, factors
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I. Introduction

Veganism is the practice of not using animal products in a diet or using any products which are derived from rearing or causing cruelty to animals. Vegans can be categorised on the basis of their motivation for becoming one (Petre,2022):
1) Ethical vegans are those who are against the cruelty faced by animals
2) Environmental vegans are those who follow a vegan diet to preserve and conserve the environment
3) Health vegans are those who follow a vegan diet for better health conditions
A study carried out by Medichecks showed that a vegan diet could help cut the risk of developing cardiovascular disease and that turning to veganism leads to lower than average blood glucose levels and lower levels of unhealthy cholesterol(Medichecks, 2014).

Veganism can be said to have originated in 1944, when Donald Watson and Elsie Shringley published the Vegan News Journal and formed an organisation to promote veganism. This was dubbed vegan civilization since it went a step farther than vegetarianism and advocated avoidance of dairy and eggs (Vegan Society, 2014).Although both veganism and vegetarianism prevent consumption of meat, veganism is more rigid and does not allow consumption of any product derived from animals such as dairy, eggs, wool, honey etc.

Veganism is found to be widely prevalent in western countries such as the UK due to events like Veganuary, Australia where people are becoming vegan to battle climate change, USA, Austria, Netherlands and many more(TheVeganSociety, 2021).

Several researchers have studied veganism across the world. Sanon(2017) researched the economic impact of non-dairy alternative milk beverages on the US dairy industry and found that an increase in plant-based milk consumption was not propelled by those with alternative lifestyles, but by regular consumers who wanted healthier and better-tasting options. According to a study by Oxford University (2021), vegan diets are the most affordable and reduce food costs by up to one third.

According to Alexandratos&Bruinsma(2012), India has the lowest rate of meat consumption in the world due to 44 per cent of its 1.3 billion population being Hindus. Some estimates show around 500 million vegetarians in India in 2020 and of these, only one per cent are strict vegans. This means that the total number of vegans in India is around five million (Keshari,2021). According to Rakuten Insight (2021), more than 47 percent of respondents in India said they had consumed plant-based food products due to their concerns regarding animal welfare in food production.

In the state of Gujarat, awareness about veganism is gradually rising. Many vegan societies have been established and home cooks offer vegan products at reasonable prices. Many restaurants too have started offering vegan dishes along with the introduction of vegan-only restaurants.

With rising awareness about the positive effects of plant-based diets on the animals and the environmental damage caused by meat-based diets, people have become more open to vegan food. However, there is lesser awareness among people with lower socio-economic status. Additionally, the prices of vegan alternatives like mock meat or packaged plant-based milk are high owing to low demand being a barrier.

There has been very less research on veganism in India especially in the state of Gujarat. Therefore, this study aims to explore the level of awareness about and attitudes towards veganism, its motivations and drivers in Gujarat, India.

More specifically, the study addresses the following research questions:

RQ1: Is there an awareness about veganism in the Indian state of Gujarat?

RQ2. What are the attitudes of people in the Indian state of Gujarat towards veganism?

RQ3: Is there a relationship between age, education and income levels and their attitudes towards veganism?

The paper is organized as follows. The next section deals with an in-depth literature review about veganism and its awareness world-wide and in India. The next section discusses the research methodology adopted. This is followed by the findings of the survey conducted in the Indian state of Gujarat. The conclusions from the findings are presented next. Finally, the discussion section provides the practical implications of the study, limitations and further scope for research.

II. Literature Review

Concept and evolution of veganism

Only a few decades ago, the word ‘vegan’ might have been viewed as ambiguous, with some confusion over its meaning as well as antipathy to its implications. This may still be the case, with such prevailing semantic symbolism being perhaps reflective of its marginality and social rejection (Wescombe, 2019). The beginning of veganism has often been associated with the founding of the first vegan society in 1944, when a group of Vegetarian Society members in the UK coined a new word - vegan - and formed a separate organization, The Vegan Society. The cornerstone of the argument of the new society concerned the cruelty caused by all kinds of farming using animals and the belief that vegetarianism is not enough to alleviate this suffering (Leneman, 1999).

Later vegan societies were founded in other countries, for example in the US in 1960 (American Vegan Society), in Sweden in 1976 (Veganföreningeni Sverige) and in Finland in 1993 (Vegan Society of Finland). In Finland for example, in the 1990s, the vegan movement was a part of the “fourth wave” of environmental protest, characterized by eco-centrism and post-materialistic values, and concretized in attacks on fur farms and the liberation of animals there (Konttinen, 1999).

Currently, the wide coverage from the media facilitates recurring exposure to both vegan cooking, health, and lifestyle, as well as the realities of how animals are treated (GlobalData, 2017).

Today, veganism is considered to be a philosophy entailing a “way of life concerned with living without hurting others [...] which avoids exploitation whether it be of our fellow men, the animal population, or the soil upon which we all rely for our very existence” (Vegan Society, 2021). Vegans can be concerned with animal-derived products in all arenas of consumption, from medicine and cosmetics to clothing and building materials (Meindertsma, 2008; Greenebaum 2012), and veganism can promote a philosophical worldview emphasising a more egalitarian relationship between human and non-human animals (Francione, 2010).

The UK has the largest number of vegans (Chef’s Pencil, 2019).A shift by the UK’s population to a plant-based diet could liberate approximately 15 million hectares of land that are currently used for livestock and feed crops (Fairlie 2009).

In 2020, Singapore passed legislation approving cultured meat production, commonly referred to as lab-grown meat (BBC, 2020).

The Internet and social media have a central role in shaping the cultural contents of the ‘veggie trend’. Due to the social media phenomenon, veganism has turned from a poorly known vegetarian sub-movement into a way of life praised by some of the world’s top celebrities, business people and politicians (Joy &Tuider, 2016; Doyle, 2016)

Vegan eating takes place as an assemblage of several actors and platforms, such as consciousness-raising campaigns, vegan bloggers, pledges and festivals and new vegan foods marketed as ‘cool’ and suitable for everyone (Jallinoja, 2019). Veganism has been conceptualized variously as political consumerism (Stolle &Micheletti, 2013), as a part of a contemporary celebration of consumer choice (Guthman, 2008), alternative hedonism (Soper, 2008) and cross -national food communities (Bildtgård, 2008) enabled by social media connectivity (van Dijk &Poell, 2013).

Historically, there have been negative connotations of vegetarianism in Western countries. In the US in the 19th century, it was believed that vegetarianism might make one go insane, become emaciated or die (Iacobbo&Iacobbo, 2004). Negative images of vegetarians as ascetics, weaklings, self- depriving neurotics, food cranks and freaks prevailed in the early 20th century (Iacobbo&Iacobbo, 2004). Analyses of newspaper reporting on veganism in the UK in 2000-2005 (Lundahl& Henkel, 2017) and in 2007 (Cole & Morgan, 2011) show several negative stereotypes of vegans as ascetics , faddists, sentimentalists and hostile extremists . In France, until recently, vegans were regarded as “ascetics who belong to cults and live almost exclusively on soy burgers and sprouts” (Véron, 2016, 290). Similar attitudes have been revealed in television series positioning vegetarians as killjoys (Grant &MacKenzie-Dale, 2016) and marginalized and potentially amusing characters, although more positive characters, such as Lisa on The Simpsons, have been reported, too (Freeman, 2014).

In spite of such negativity surrounding vegetarianism, some factors have led to its increased acceptance. Several food scandals in recent years, such as foot-and- mouth disease, bovine spongiform encephalopathy, dioxin in milk, eggs and meat have shaken consumers’ confidence in the healthiness and reliability of animal-derived products (Herrera, 2017). Due to these negative effects, plant-based eating has been proposed as a solution (Nordic Nutrition Recommendations, 2012). Vegetable-based meals on average have lower greenhouse gas emissions and lower overall environmental impact compared to animal-derived foods (Virtanen et al., 2011; van Dooren et al., 2014) and smaller water footprints (Makonnen & Hoekstra, 2012).

Activists have filmed at animal production facilities, showing poor living conditions and maltreatment of animals and distributed these videos on the Internet (Véron, 2016; Vinnari& Laine, 2017). Anti-branding campaigns by PETA (People for the Ethical Treatment of Animals) against Kentucky Fried Chicken and Burger King (“Kentucky Fried Cruelty” and “Murder King”) (Seijts& Sider, 2006) have had similar aims. Similarly, an outdoor poster campaign by the Finnish animal protection organization Animalia in 2005 illustrating the cruelty to farm animals caused by over-efficient methods in livestock farming is an example of the “scare” and “shame” tactics (Kuoppamäki, 2008).

Vegan food bloggers and vloggers have been central mobilizers in cultivating a new image of veganism and plant-based eating as part of a desirable lifestyle, building new competences in plant-based cooking and extending the consumer communities interested in vegan food. Many blogs also spread vegan recipes and ideology to readers not committed to a vegan lifestyle, and some vegan bloggers have explicitly aimed to reach society beyond the vegan readers (Véron, 2016).

Vegan pledges, organized by vegan and animal rights organizations (e.g., PETA, the Vegan Society in the UK, The Vegan Society of Finland) have encouraged consumers to try vegan eating for a certain period of time, provided peer support and platforms for community building, increased competence in vegan cooking, shopping and lifestyle and reshaped the public image of veganism. There was an increase in the number of people signing the online pledge to go vegan for a week or a month, a rise in footfall at VegfestUK (a festival dedicated to presenting vegan food, products and lifestyle) from previous years, and the national and international press was covering veganism more often and more positively than in the past in 2013 in the UK (de Boo, 2014).

There are many compelling reasons for veganism: to end the exploitation of billions of nonhuman animals killed for human use year after year; to reverse the environmental devastation consequent to that exploitation; to avoid the associated personal and societal costs to human health.

Impact of veganism

Research shows various reasons to cut down on meat in terms of animal welfare, environment protection and financial advantages (Marthur et al. , 2020)

The development of vegan habits and cooking skills could help reduce perceptions that a vegan diet is more expensive or difficult. Those practicing veganism are found to be less likely to view vegan diets as more expensive after six months, while meat reducers were more likely to do so.

Having access to other vegans and, in particular, communitieswhere veganism was normalized, could provide essential support and access to resources for new transitioners. Access to communities and other reducers could help to overcome stigmas, provide opportunities to acquire essential skills and in formation, and create supportive settings around common norms and ethics. However, social distancing from omnivorous norms and individuals, in conjunction with the formation or growth of vegan communities, could further contribute to difficulties encountering omnivorous behaviour.

Avoiding all products obtained from animals has become a growing phenomenon in modern life-styles (Davis and Melina, 2000; Radnitz et al., 2015). Millennials are among the most significant market segments for vegan foods and represent a dominant consumer sector demanding alternative healthy eating habits than past generations (Massaglia et al., 2018).

The results indicated that both altruistic beliefs (health awareness, perceived values) and product attributes significantly influence millennial attitudes towards vegan and vegan dietary consumption. The perceived value has a more significant impact on the attitude towards veganism than all other research variables. Veganism is a function of belief and attitudes towards nature, animals and the environment. (Tobias-Mamina et al., 2021)

It was discovered that perceived value has a stronger impact on attitudes towards veganism when compared to health consciousness, subjective norms and product attributes (Tobias-Mamina et al., 2021)

Vegan and vegetarian diets are exploding in popularity, with fast-food restaurants from Burger King to Dunkin' Donuts serving plant-based burgers and breakfast sausages; and the newest generation of consumers, Generation Z (those born between approximately 1995 and 2010), is buying 57% more tofu and 550% more plant-based milk compared to previous generations (Robinson, 2017)

Some research reports that up to 70% of the world's population is either reducing meat consumption or forgoing meat al together (Rowland, 2018).

A 2019 report commissioned by *The Lancet*stated that cutting meat consumption is an important facet of cutting harmful emissions and curbing the current trajectory of global climate change. The report maintained that human diets would need to shift drastically by 2050 and this would require substantial dietary shifts. Global consumption of fruits, vegetables, nuts and legumes will have to double, and consumption of foods such as red meat and sugar will have to be reduced by more than 50%. A diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits. (Summary Report of the EAT-Lancet Commission, 2019)

Beyond medical advice about vegan and vegetarian diets (or lack thereof), the influence of marketing messages needs to be considered. For generations, manufacturers and advertisers of animal products have focused on the health benefits of animal-based products (i.e., milk and calcium/strong bones; meat as a primary source of dietary protein). In recent years, studies have illustrated that many of the benefits advertised are weak or often conflicting (Hammond, 2019).

Economics effects of veganism

GlobalData cites an estimated 600% increase in veganism in the United States between 2014 and 2017, with now nearly 6% of U.S. consumers claiming to be vegan (Global Data , 2017). Other parts of the world are following suit, with the Vegan Society stating that veganism has quadrupled in the last few years in the U.K., now up to over 1% of the population. This may be attributed to an increase in public awareness of health issues associated with meat-heavy diets, such as elevated blood pressure, diabetes, cardiovascular disease, and cancer (Tuso et. al. , 2016)

It has been estimated the average meat/dairy consumer will use 4,200 gallons of water per day through its consumption of foods, while the average vegan requires just 300 gallons of water per day (Cronin, 2016). The Mayo Clinic (2019), among other primary United States medical establishments, has recently encouraged a vegan diet, touting the diet's ability to reduce risks for diabetes, heart disease, and many cancers.

A 2015 Journal of Hunger and Environmental Nutrition study found that a plant-based diet which uses olive oil as its source of fat (as opposed to ani- mal protein) and otherwise uses federal MyPlate nutritional guidelines would save the average consumer on a 2000-calorie diet nearly $750 per year (Flynn & Schiff, 2015). In a similar vein, a study by UK-based Thinkmoney found that UK consumers could save around £600 per year on a meatless diet (Larbi, 2019).

On a smaller scale, a predictive model used in a Belgian and U.K. study found that if just 10% of the population committed to eating a Mediterranean diet, which consists of many vegetables and little red meat, societal cost savings totalled 1.55 billion Euros and 7.53 billion Pounds over the next 20 years, respectively (Schepers & Annemans, 2018)

The Plant-Based Food Association reported that plant-based foods, such as dairy and meat alternatives, generated $13.7 billion in revenue and could generate $13.3 billion in tax revenue over the next decade at current growth rates (Plant-based foods association, 2016)

Thus, a plant-based economic approach could save billions of dollars for countries and people could be healthy as well as thrive without eating animal products (Annemans & Schepars, 2018). Shepon (2018) shows how the additional food that would be produced as a result of a shift to a vegan diet in the US alone could feed 350 million additional people

Thus, the literature review shows that there is growing interest in veganism all over the world, which is reflected in the large number of studies on veganism globally. However, there is not much existing research on the attitudes and preferences for veganism in the Indian context. Therefore, this paper aims to fill the gap in the existing research by studying the attitudes towards and preference for veganism among the people of Gujarat, India.

III. Research Methodology

As mentioned earlier, this research paper deals with the following research questions:
RQ1: Is there an awareness about veganism in the Indian state of Gujarat?
RQ2. What are the attitudes of people in the Indian state of Gujarat towards veganism?
RQ3: Is there a relationship between age, education and income levels and their attitudes towards veganism?

It uses a descriptive research design to answer these research questions. A survey of people in the state of Gujarat was carried out to answer these research questions. The sample size for the survey was 200, out of which 185 responses were received, leading to a response rate of 92.5%. The research instrument for the surveys was a structured interview with close-ended questions that was administered electronically. The sampling method used was convenience sampling.
The findings of the survey were analyzed using descriptive statistics, cross-tabulation, correlation and regression analysis.

IV. Findings

(A) Descriptive Statistics
The following tables show the descriptive statistics of the sample.

Table 1: Breakup of the Sample according to Gender

Particulars	**Frequency**	**Percentage**
Male	89	48.1
Female	96	51.9
Total	185	100.0

Majority of the respondents (51.9 percent) were female and rest of the respondents (48.1 percent) were male candidates.

Table 2: Breakup of the Sample according to Age

Particulars	**Frequency**	**Percent**
Below 17 years	40	21.6
18-24 years	37	20.0
25-40 years	49	26.5
41 to 60 years	57	30.8
Above 60 years	2	1.1
Total	185	100.0

Majority of the respondents (30.8 percent) were aged between 41-60 years, followed by (26.5 percent) with age between 25-40 years, (21.6 percent) with age having below 17 years, and (20.0 percent) falling in the age group 18-24 years.

Table 3: Breakup of the Sample according to Diet

Particulars	**Frequency**	**Percent**
Vegan	5	2.7
Non- Vegan	40	21.6
Vegetarian	95	51.4
Ovo – vegetarian	45	24.3
Total	185	100.0

Of the total respondents, majority of the respondents (51.4 percent) were following vegetarian diet.

Table 4: Breakup of the Sample according to Religion

Particulars	Frequency	Percent
Hindu	146	78.9
Muslim	4	2.2
Jain	28	15.1
Other	7	3.8
Total	185	100.0

Majority of the respondents out of 185, i.e., 78.9% were from the Hindu religion, followed by Jain (15.1%), other religion (3.8%) and Muslims (2.2%)

Table 5: Breakup of the Sample according to Proportion of Meat and Vegetables in Diet

Particulars	Frequency	Percent
0% meat and 100% of vegetables	140	75.7
25% of meat and 75% of vegetables	38	20.5
75% of meat and 25% of vegetables	2	1.1
50% of meat and 50% of vegetables	5	2.7
Total	185	100.0

Out of 185 respondents, majority i.e., 75.7% of the respondents had a weekly diet fully based on vegetables followed by 20.5% of the respondents who had 25%of meat and 75% of vegetables in their diet. 2.7% of the respondents had a diet comprising of equal portion of meat and vegetables and only 1.1% of them had a diet of 75% of meat and 25% of vegetables.

(B) Survey Findings

Table 5: Willingness of Respondents to Shift to Plant-based Diet

Particulars	Frequency	Percent
Yes	96	51.9
No	89	48.1
Total	185	100.0

Out of 185, majority i.e., 51.9% of the respondents were ready to change and shift to a plant-based diet while 48.1% of the respondents weren't ready for the same.

Table 6: Willingness of Respondents to Cook Vegan Food

Particulars	Frequency	Percent
Yes	48	25.9
No	65	35.1
No, but I am willing to learn about it	46	24.9
I don't know how to cook food	26	14.1
Total	185	100.0

Out of 185 majority of the respondents i.e., 35.1% of the respondents were not comfortable to cook vegan food while almost same number of respondents i.e., approximately 25% of respondents each were cooking vegan food or were willing to learn the same, only 14,1% of the respondents didn't know how to cook and were not eager to learn the same.

Table 7: Willingness to Turn Vegan Due To Concern Towards Animals

Particulars	Frequency	Percent
Yes	130	70.3
No	55	29.7
Total	185	100.0

70.3% of the respondents out of 185 respondents were ready to turn vegan owing to their concern towards animal rights or cruelty.

Table 8: Willingness To Turn Vegan Due To Concern Towards Environment

Particulars	Frequency	Percent
Yes	158	85.4
No	27	14.6
Total	185	100.0

Out of 185 respondents 85.4% of them are willing to follow a plant-based diet if it preserves the ecosystem and reduces carbon footprint and 14.6% of the respondents were not willing to do the same

Table 9: Likelihood of Turning Vegan

Particulars	Frequency	Percent
I plan to consume plant-based products	74	40.0
I am not ready to consume plant-based products	20	10.8
likelihood that i will consume plant-based products is high	55	29.7
likelihood that i will consume plant-based products is less	36	19.5
Total	185	100.0

From the above table it can be observed that 40% of the respondent's plan to consume plat-based products while 29.7% of the respondents said that they may highly prefer to have a plant-based diet. 19.5% of the respondents said they had a very low chance of having plant-based products while 10.8% of them strictly did not want to consume plant-based products

Correlation Analysis

Table 10: Correlation between the Age, Religion and Willingness to follow a plant-based diet of the respondent on the proportion of meat in the diet

Discriminant Validity	Proportion of Meat	Age of Respondent	Religion of Respondents
Proportion of Meat	1	.191**	-0.031
Age of Respondent	.191**	1	-0.02
Religion of Respondents	-0.031	-0.02	1

There is low positive correlation between the proportion of meat and the ageof the respondents. There is low negative correlation between the proportion of the meat and the religion of the respondents.

Regression Analysis

Table 11: Impact of Age, Religion and Willingness to follow a plant-based diet of the respondent on the proportion of meat in the diet

Independent Variable	Model 1	
	Unstandardized Coefficients	***p*-value**
Constant	0.721	0.000
Religion of the Respondent	0.023	0.007
Age of the Respondent	0.097	0.517
Willingness of the respondent to follow a plant-based diet	0.239	0.042
Observations	185	
R	0.245	
R Squared	0.060	

Adjusted R Squared	0.044
P (F statistic)	3.854

Here, the Model checks the impact of independent factors i.e., age of the respondents, religion of the respondents and the willingness of the respondents to follow a plant-based diet on the dependent factors which i.e., proportion of meat in the diet of the respondents. From the above table, we may interpret that Religion of the respondent (p=0.000) and Willingness of the respondents to follow a plant-based diet (p=0.042) are less than the significance level of 0.05 and thus we may conclude that the above said independent variables are accepted as a useful predictor of proportion of meat in the diet of the respondents. Also, the R^2 is 0.06 which means that this model predicts 6% of the meat proportion in the diet. Thus, this model may be useful for the current dataset but provided a larger sample the results of the regression may change.

V. Discussion

The findings of this research study indicate a reasonably positive attitude towards veganism among the people of the Indian state of Gujarat with a large majority showing current and future willingness to move to a plant-based diet. The strongest driver for the willingness to turn vegan was found to be concern for the environment, followed by concern for animal life.

One of the major challenges to the adoption of veganism was found to be lack of comfort in cooking vegan food that was cited by a majority of the respondents. However, around one-fourths of the respondents were cooking vegan food or were willing to learn the same.

In terms of demographic factors, age was found to have a positive correlation with the proportion of meat in diet. As expected in a state like Gujarat with a high incidence of Jainism, there was a negative correlation between religion and proportion of meat in the diet.

The regression analysis findings show that religion of the respondent and willingness of the respondents to follow a plant-based diet are useful predictors of whether a respondent will follow plant-based or animal-based diet.

Apart from these, gender, education or income levels did not have any relationship with the decision of following plant-based or animal-based diet.

VI. Limitations

The study has some limitations. The sample size is small, and the results may not be generalized to a larger population. Additionally, the respondents were from the state of Gujarat in India, and their views may not be the same as those of respondents in other Indian cities. There may be a bias related to the sampling method. The sample was non-random and focused on people with a basic understanding of the concept of veganism. It is possible that respondents from a large city and with a high level of education and income would be more positive in their answers towards willingness about veganism.

Scope for Future Research

Future research could compare the awareness levels of people in cities to those in rural areas. It would also be interesting to compare the attitudes of people towards veganism across various states in India.

Implications

The findings of this study make several contributions to the existing literature on awareness about veganism. First, it offers insight into the level of awareness about a rising food trend among Indian urban population, addressing the dearth of such studies in the existing literature. Secondly, this study attempts to find out the effect of factors such as age, educational qualifications, income levels, religion and willingness on the attitudes of people towards veganism.

In terms of practical implications, the findings of this study can help the food industry understand the preferences of people regarding veganism. This is especially important for India which has a large population that is interested in following a plant-based diet due to religious, environmental or animal-concern reasons, but does not have access to good quality vegan food options. This study shows how religion, willingness due to environment and animal concern and age, but not gender, education and income levels, affect the attitudes of people towards veganism, thus highlighting the importance of these factors for the promotion of veganism and vegan food products among the Indian population.

VII. Conclusion

This quantitative study investigates the level of awareness about veganism, the factors that shape willingness towards a plant-based diet, and the challenges associated with following a plant-based diet. The study also examines the effect of age, gender, religion, educational qualifications, income levels and willingness out of concern towards environment and/or animals on their attitudes towards veganism, and reveals a positive relationship between the age and religion and the adoption of a vegan diet.

References

[1]. Annemans L. &Schepers J. (2018). The potential health and economic effects of plant-based food patterns in Belgium and the United Kingdom. Nutrition
[2]. Bakker, Erik, and Dagevos, Hans. (2012). Reducing meat consumption in today’s consumer society: Questioning the citizen-consumer gap. Journal of Agricultural and Environmental Ethics 25(6), 877–894. doi:10.1007/s10806-011-9345-z
[3]. Barrett E. Kirwan (2017) U.S. farm dynamics and the distribution of U.S. agricultural subsidies, Applied Economics Letters, 24:3, 207-209, DOI: 10.1080/13504851.2016.1178837
[4]. Bellemare, M. F., Fajardo-Gonzalez, J., &Gitter, S. R. (2018) Foods and fads: The welfare impacts of rising quinoa prices in Peru , *World Development*, *112*. https://doi.org/10.1016/j.worlddev.2018.07.012\
[5]. Bildtgård, Torbjörn. (2008). Trust in food in modern and late-modern societies. Anthropology of Food 47(1), 99-128. doi: org/10.1177/0539018407085751
[6]. Chef’s Pencil (2019),The 20 Most Vegan Countries in Europe, https://www.chefspencil.com/the-20-most-vegan-countries-in-europe
[7]. Cherry, E. (2006). Veganism as a cultural movement: A relational approach. *Social Movement Studies*, 5 (2), 155-170.
[8]. Cronin, Aisling. (n.d.). You can save over 200,000 gallons of water a year with one simple choice. *One Green Planet.* https://www.onegreenplanet.org/environment/how-to-save-water-with-one-simple-choice/
[9]. Cole, M., & Morgan, K. (2011),Vegaphobia: derogatory discourses of veganism and the reproduction of speciesism in UK national newspapers 1. *The British Journal of Sociology*, *62*(1), 134-153. https://doi.org/10.1111/j.1468-4446.2010.01348.x
[10]. Davis, B., Melina, V. (2000), Becoming Vegan. Summertown, TN: Book Publishing Company. P122.
[11]. Dharmasena, S., & Capps, O. J. (2014). Unravelling Demand for Dairy-Alternative Beverages in the United States: The Case of Soymilk. *Agricultural And Resource Economics Review*, *43*(1), 140-157.
[12]. European Environment Agency (2016). Consumption of meat, dairy, fish and seafood. Copenhagen. Retrieved from https://www.eea.europa.eu/data-and-maps/indicators/13.2- development-in-consumption-of/assessment-1
[13]. Fairlie, S. (2007). Can Britain feed itself? *The Land, 4*(8)
[14]. Fiddes, N. (1991). Meat. A Natural Symbol. London: Routledge
[15]. Flynn, M. & Schiff, A. R. (2015). Economical healthy diets (2012): Including lean animal protein costs more than using extra virgin olive oil, *Journal of Hunger & Environmental Nutrition*, *10*(4), 467–482
[16]. Francione, G. (2010). The animal rights debate: Abolition or regulation. New York: Columbia University Press.
[17]. Freeman, . (2014). Lisa and Pheobe, lone vegetarian icons: at odds with television’s carnonormativity. In Deborah Macey, Kathleen Ryan and Noah Springer (Eds.), How television shapes our worldview: Media representations of social trends and change (pp. 193-212). Lanham, MD: Lexington Books.
[18]. Frontier economics (2020). Rise of veganism and its impact on meat spending, https://www.frontier-economics.com/media/3648/the-rise-of-veganism-and-its-impact-on-spending-on-meat.pdf
[19]. Fuentes, C., and Fuentes, M. (2017). Making a market for alternatives: marketing devices and the qualification of a vegan milk substitute. Journal of Marketing Management 33(7-8), 529 555doi.org/10.1080/0267257X.2017.1328456\
[20]. Giddens, A. (1991). *Modernity and self-identity: Self and society in the late modern age*. Stanford, CA: Stanford University Press
[21]. Grant, J., and MacKenzie-Dale, B. (2016). Lisa Simpson and Darlene Conner: Television’s favorite killjoys. In JodeyCastricano and Rasmus R. Simonsen (Eds.), Critical perspectives on veganism (pp. 307-329). London: Palgrave Macmillan
[22]. Guthman, J. (2008). Neoliberalism and the making of food politics in California. Geoforum 39(3), 1171-1183. Doi.org/10.1016/j.geoforum.2006.09.002
[23]. Hadjikakou, M., Chenoweth, J., & Miller, G. (2013). Estimating the direct and indirect water use of tourism in the eastern Mediterranean. *Journal of Environmental Management*, 114, 548-556
[24]. Hammond, C. (2019). Should we drink milk to strengthen bones? *BBC Future*. https://www.bbc.com/future/article/20190408-should-we-drink-milk-to-strengthen-bones
[25]. Iacobbo, K., and Iacobbo, M. (2004). Vegetarian America. A history. Westport: Praeger.
[26]. James, B. (1999). Overcoming the ‘value-action gap’ in environmental policy: Tensions between national policy and local experience, *Local Environment*, 4:3, 257-278, DOI: 10.1080/13549839908725599

[27]. Joy, M., and Tuider, J. (2016). Foreword. In JodeyCastricano and Rasmus R. Simonsen (Eds.), Critical Perspectives on Veganism (pp. v-xv). London: Palgrave Macmillan.
[28]. Kateman, B. (2017). The reducetarian solution. New York: TarcherPerigee Book.
[29]. Keshari (2021), Is vegan food successfully penetrating the Indian market?
[30]. https://bwhotelier.businessworld.in/article/Is-vegan-food-successfully-penetrating-the-Indian-market-/01-10-2021-406974/
[31]. Kesko. (2017, June 9). Kasvipohjaistentuotteidenmyyntikasvaaedelleenvoimakkaasti – vegehyllylöytyy jo 200 K-ruokakaupasta. Retrieved from https://www.kesko.fi/media/uutiset-ja-tiedotteet/uutiset/2017/kasvispohjaisten-tuotteiden-myynti-kasvaa-edelleen-voimakkaasti--vegehylly-loytyy-jo-200-k-ruokakaupasta/
[32]. Konttinen, Esa. (1999). Four waves of environmental protest . In EsaKonttinen, Tapio Litmanen, Matti Nieminen and MarjaYlänen (Eds.), All shades of green. The environmentalizastion of Finnish society (pp. 20-46). Jyväskylä: University of Jyväskylä, SoPhi.
[33]. Kuoppamäki, Markku. (2008). Using advertising techniques for effective civic communication. Animalia posters. Retrieved from http://www2.amk.fi/digma.fi/eetu/www.amk.fi/opintojaksot/0702010/1204101708753/1204101956215/1204102189163/1204103175462.html Cited 22.8.2017.
[34]. Larbi, Miranda. (2019, January 26). A meat-free diet is cheaper by more than £600 a year, says report. *Plant Based News*. https://plantbasednews.org /opinion/meat-free-diet-cheaper-ps600-year/
[35]. Lea, E., Crawford, D. & Worsley, A. "Public views of the benefits and barriers to the consumption of a plant-based diet." Eur J Clin Nutr 60, 828–837 (2006). https://doi.org/10.1038/sj.ejcn.1602387)
[36]. Leneman, Leah. (1999). No animal food: The road to veganism in Britain, 1909-1944. Society and Animals 7(3), 219-228.
[37]. Lindeman, M. & Stark K. (1999). Pleasure, pursuit of health or negotiation of identity? Personality correlates of food choice motives among young and middle-aged women, *Appetite*, 33 (1), 141- 161.
[38]. Loughnan (2010) Objectification leads to depersonalization: The denial of mind and moral concern to objectified others, European journal of social psychology, DOI: https://onlinelibrary.wiley.com/doi/abs/10.1002/ejsp.755
[39]. Lundahl, Outi, and Henkel, Alexander. (2017). Celebrities in the co-optation of veganism. In OutiLundahl, From a moral consumption ethos to an apolitical consumption trend. The role of media and celebrities in structuring the rise of veganism (pp. 174-204). Vaasa: University of Vaasa.
[40]. Martinelli, D., &Berkmanienė, A. (2018), The Politics and the Demographics of Veganism: Notes for a Critical Analysis. *International Journal on the Semiotics of Law, 31*, 501. https://doi.org/10.1007/s11196-018-9543-3
[41]. Massaglia, S., Merlino, V., Borra, D. (2018), Marketing Strategies for Animal Welfare Meat Identification: Comparison of Preferences between Millennial and Conventional Consumers.
[42]. Matei, Adrienne (2020). Laugh if you want, but the 'McPlant' burger is a step to a greener world. *The Guardian*, 18 November 2020. Accessed 5 December 2021 at: https://www.theguardian.com/commentisfree/2020/nov/18/laugh-if-you-want-but-the-mcplant-burger-is-a-step-to-a-greener-world.
[43]. Mathur, M.B., Robinson, T.N., Reichling, D.B. *et al.* Reducing meat consumption by appealing to animal welfare: protocol for a meta-analysis and theoretical review. *Syst Rev***9,** 3 (2020). https://doi.org/10.1186/s13643-019-1264-5
[44]. Meindertsma, Christien. (2008) PIG 05049. Rotterdam: Flocks.
[45]. Melanie joy, (2010) WhyWe Love Dogs, Eat Pigs, and Wear Cows*: An Introduction to Carnism,* Conari Press
[46]. Melucci, A. (1985). The symbolic challenge of contemporary movements. *Social Research,* 52 (4), 789-816.
[47]. Morris, Carol. (2018). 'Taking the politics out of broccoli': Debating (de)meatification in UK national and regional newspaper coverage of the Meat Free Mondays Campaign. SociologiaRuralis. 58(2), 433-452 doi:10.1111/soru.12163
[48]. Natural Resources Institute Finland (2017). Balance sheet for food commodities 2016, preliminary, 2015 final figures. Retrieved from http://stat.luke.fi/en/balance%20sheet%20for%20food%20commodities
[49]. Naqvi, S.M.K. &Sejian, V. (2011). Global climate change: role of livestock. *Asian Journal of Agricultural Sciences*, 3(1), 19-25
[50]. Nguyen, T. M. (2019). Veganism and its influences on travellers' destination choice. (Bachelor's Thesis). Lapland University of Applied Sciences, Finland.
[51]. Noah J. Wescombe. (2019), **Communicating Veganism: Evolving Theoretical Challenges to Mainstreaming Ideas**, Studies in Media and Communication, Redfame publishing, vol. 7(2),

[52]. Nordic Nutrition Recommendations, Part 1. Summary, Principles and Use. (2012). Copenhagen: Nordic Council of Ministers.

[53]. oxford university (2021) , sustainable eating is cheaper and healthier -https://www.ox.ac.uk/news/2021-11-11-sustainable-eating-cheaper-and-healthier-oxford-study#:~:text=Vegan%20diets%20were%20the%20most,costs%20by%20up%20to%202%25

[54]. Petre, (2022) What is veganism, and what do vegans eat,Healthlinehttps://www.healthline.com/nutrition/what-is-a-vegan

[55]. Plant based foos association , (2016) The Plant Based Foods Industry Contribution to the U.S. Economy https://www.plantbasedfoods.org/wp-content/uploads/2016/09/PBFA-Econ-Report-2016.pdf

[56]. Report buyer, (2017). Top Trends in Prepared Foods 2017: Exploring trends in meat, fish and seafood; pasta, noodles and rice; prepared meals; savory deli food; soup; and meat substitutes https://www.reportbuyer.com/product/4959853/top-trends-in-prepared-foods-exploring-trends-in-meat-fish-and-seafood-pasta-noodles-and-rice-prepared-meals-savory-deli-food-soup-and-meat-substitutes.html

[57]. ricker, M. (2007). *Hermeneutical Injustice*. In (Ed.), *Epistemic Injustice: Power and the Ethics of Knowing*, Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198237907.003.0008

[58]. Rodgers (2021)., Find out how the health of our vegan customers weighed up against the health of our non-vegan customers in our 2021 veganalysis. , medichecks

[59]. Roberts, J. A., Yaya, L. H. P., &Manolis, C., (2014) The invisible addiction: Cell-phone activities and addiction among male and female college students", Journal *of Behavioural Addictions, 3*(4), 254–265. https://doi.org/10.1556/JBA.3.2014.015

[60]. Robinson, M. (2017). Generation Z is creating a $5 billion market for fake meat and seafood. *Business Insider*. https://www.businessinsider.com/generation-z -is-eating-fake-meat-2017-10

[61]. Rowland, Melia. (2018, March 23). Millennials are driving the worldwide shift away from meat. *Forbes*. https://www.forbes.com/sites/michaelpellman-rowland/2018/03/23/millennials-move-away-from-meat/#7cbf b42a4a49

[62]. Sanon, E. (2017). The Economic Impact of Non-Dairy Alternative Milk Beverages on the United States Dairy Industry - claremont college libraries

[63]. Saul, Heather. (2013, November 20). Norwegian army placed on strict vegetarian diet. Independent. Retrieved from http://www.independent.co.uk/news/world/europe/norwegian- army-placed-on-strict-vegetarian-diet-8951722.html

[64]. Schepers, Janne&Annemans, Lieven. "The potential health and economic effects of plant-based food patterns in Belgium and the United Kingdom." *Nutrition*, Volume 48, 2018, Pages 24-32, ISSN 0899-9007, https://doi.org/10.1016/j.nut.2017.11.028. https://www.sciencedirect.com/science/article/pii/S0899900717302861

[65]. Schwartz. E, (2017) *The Mystery of the Disappearing Avocado*, Econlife , https://econlife.com/2017/05/rising-avocado-prices/

[66]. Seijts, Gerald, and Sider, Michael (2006) "PETA's 'Kentucky Fried Chicken, Inc' Campaign," Case Study. Richard Ivey School of Business, 903C45.

[67]. Selwyn (2022). Towards a Sustainable Food System in the UK: Consumer-Driven Veganism or the Right to Food? doi: https://www.sozialpolitik.ch/fileadmin/user_upload/user_upload/2022-1-forum-selwyn.pdf

[68]. Selwyn, Benjamin (2020a). *Vegans should target the corporate food system, not just dairy and meat!*. Ac- cessed 4 December 2021 at: https://www.aqs.org.uk/vegans-should- target-the corporate-food-sys-tem-not-just-dairy-and-meat/.

[69]. Selwyn, Benjamin (2020b). *The two souls of Veganism*. Accessed 4 December 2021 at: https://mondedi-plo.com/outsidein/the-two-souls-of-veganism

[70]. Shepon, A., Eshel, G., Noor, E. & Milo, R. (2018). The opportunity cost of animal-based diets exceeds all food losses. Proceedings of the National Academy of Sciences

[71]. Singer, Ross. (2017). Neoliberal backgrounding, the Meatless Monday campaign, and the rhetorical intersections of food, nature, and cultural identity. Communication, Culture & Critique 10(2), 344-364. doi:10.1111/cccr.12155

[72]. Stanley Cohen, (2001) *States of Denial: Knowing about Atrocities and Suffering* (Cambridge: Polity Press, 2001),

[73]. Stolle, Dietlind, and Micheletti, Michele. (2013). Political consumerism. Global responsibility in action. Cambridge: Cambridge University Press.

[74]. Summary Report of the EAT-Lancet Commission. (2019, July). Healthy diets from sustainable food systems: Food planet health. *Eat Forum*. **Error! Hyperlink reference not valid.** eatforum.org/content/uploads/2019/07/EAT-Lancet Commission _Summary Report.pdf

[75]. The Guardian (Fri 27 May, 2016). *The rise of vegan teenagers: 'More people are into it because of Instagram,* https://www.theguardian.com/lifeandstyle/2016/may/27/the-rise-of-vegan-teenagers-more-people-are-into-it-because-of-instagram

[76]. The Mayo Clinic. (2019, April 9). *The power of a plant-based diet for heart health.* https://www.mayoclinic.org/power-plant-based-diet-for-heart-health /art-20454743

[77]. Tobias-Mamina, Rejoice &Maziriri, Eugine. (2021). Transition into Veganism: Drivers of Vegan Diet Consumption. International Review of Management and Marketing. 11. 23-28.. 10.32479/irmm.11519.

[78]. Twigg, Julia. (1983). Vegetarianism and the meanings of meat. In Anne Murcott (Ed.), The sociology of food and eating. Essays on the sociological significance of food (pp.18-31). Aldershot: Gower Pub Co

[79]. Twine, Richard. (2014). Vegan killjoy at the table - Contesting happiness and negotiating relationships with food practices. Societies 4, 623-639. doi:10.3390/soc4040623

[80]. Undercurrent News (2019), UK consumers increasingly demand ethical, sustainable food from super-markets. *Undercurrent News*, 6 December 2019. Accessed 17 January 2022 at: https://www.under-currentnews.com/2019/12/06/report-uk-consumers-increasingly-demand-ethical-sustainable- food-from-supermarkets/.

[81]. van DoorenCorné, Marinussen Mari, Blonk, Hans, Aiking, Harry, and Vellinga, Pier. (2014). Exploring dietary guidelines based on ecological and nutritional values: A comparison of six dietary patterns. Food Policy 44, 36–46. doi: org/10.1016/j.foodpol.2013.11.002

[82]. Van Kernebeek, H. R., Oosting, S. J., Van Ittersum, M. K., Bikker, P., & De Boer, I. J. (2016). Saving land to feed a growing population: consequences for consumption of crop and livestock products. *The International Journal of Life Cycle Assessment*, 21(5), 677-687.

[83]. Vatan, A., &Türkbaş, S. (2018). Who is Vegetarian Tourist and Vegan Tourist? *Journal of Tourism and Gastronomy Studies*, 6(3), 24-39.

[84]. Vegan society (2014), Ripened by human determination. 70 years of the vegan society - https://www.vegansociety.com/sites/default/files/uploads/Ripened%20by%20human%20determination.pdf

[85]. The vegan society (2021) - https://trends.google.com/trends/explore?q=%2Fm%2F07_hy

[86]. Véron, Ophélie. (2016). From seitan bourguignon to tofu blanquette: Popularizing veganism in France with food blogs. In JodeyCastricano and Rasmus R. Simonsen (Eds.), Critical perspectives on veganism (pp.287-305). London: Palgrave Macmillan.

[87]. Villareal Herrera, Georgina. (2017). Sustainable dairy. Wageningen: Wageningen University

[88]. Vinnari, Eija, and Laine, Matias. (2017). The moral mechanism of counter accounts: The case of industrial animal production. Accounting, Organizations and Society 57, 1-17. doi.org/10.1016/j.aos.2017.01.002

[89]. Virtanen, Yrjö, Kurppa, Sirpa, Saarinen, Merja, Katajajuuri, Juha-Matti, Usva, Kirsi, Mäenpää, Ilmo, Mäkelä, Johanna, Grönroos, Juha, and Nissinen, Ari. (2011). Carbon footprint of food – Approaches from national input–output statistics and a LCA of a food portion. Journal Cleaner Production 19(16), 1849-1856. doi.org/10.1016/j.jclepro.2011.07.001

[90]. Warde, A. (2016) The practice of eating (Cambridge: Polity Press)

[91]. Weis, Tony (2013). *The ecological hoofprint: The global burden of industrial livestock*. Bloomsbury Pub-lishing.

[92]. Whipp, Lindsay. (2016, July 15). Big business identifies appetite for plant-based milk. Financial Times. Retrieved from https://www.ft.com/content/7df72c04-491a-11e6-8d68- 72e9211e86ab

[93]. Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., ... Murray, C. J. L. (2019,) Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems, *The Lancet*, *393*. https://doi.org/10.1016/S0140-6736(18)31788-4

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