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Leave the Milk for the Calf and Spread the Word: Exploring Factors Determining US Consumers' Willingness to Try Plant-Based Milk Alternatives and Their Word-of-Mouth Sharing about Plant-Based Milk Alternatives

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Abstract: Plant-based milk alternatives are important beverages in US consumer markets. Sustainability, consumer awareness, lifestyle changes, and other value-based reasons are why these beverages are increasing in popularity. The present study is focused on plant-based milk alternatives. It builds on an online consumer survey that explores the factors explaining US consumers' willingness to try plant-based milk alternatives and their word-of-mouth sharing about these beverages. Animal welfare concerns, environmental concerns, health consciousness, and dairy preferences are the factors under investigation. Results show that animal welfare, dairy preference, environmental concerns, and plant-based milk enthusiasm are significant predictors for willingness to try plant-based milk alternatives. Dairy preferences, environmental concerns, and plant-based milk enthusiasm predict the word-of-mouth factors. Overall, plant-based milk enthusiasm is the strongest driver for both consumer behaviours. Best practice recommendations address marketers in the US food and beverage industry and provide suggestions on how to target different consumer groups based on nutritional preferences and needs and on value-based product characteristics.

Keywords: animal welfare; consumers; plant-based milk enthusiasm; PLS-SEM

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1. Introduction

Milk production and consumption is an important part of food culture in the United States of America (US) [1–3]. Major milk and dairy production areas are in the country's north and west [4]. In the US dairy industry, farm numbers have been declining, along with regular milk consumption in US households [2,4]. This decline can be attributed to the widespread availability of alternative milk products in US food retail [5,6]. Plant-based milk alternatives are non-dairy beverages that resemble regular dairy milk in their sensory characteristics such as appearance, mouthfeel, and taste [1,2]. Food and beverage consumption, including dairy milk and plant-based milk alternatives, is grounded in familiarity and habit [7]. Studies emphasise that repeated food exposure leads to the development of preferences for these beverages and may even drive loyalty for the product [7]. Almond, oat, and soy milk are the most popular plant-based milk varieties. These varieties generate annual sales of USD 1.930 million, whereas almond milk is the leading milk variety contributing a lion's share of USD 1.277 million. Blue Diamond Almond Breeze is the most popular alternative milk brand in the US, followed by products from Danone and Cafia Farms. Upcoming products on the alternative milk market are made from pea, rice, hemp, and other blend products [8,9]. Pea and rice milk contribute USD 97 million to the US milk market in annual sales [9].

The market for plant-based milk alternatives is steadily growing and worth over USD 3.6 billion [8]. On average, plant-based milk alternatives are significantly more expensive than dairy milk [10,11]. However, US consumers seem to be prepared to pay price premiums for plant-based milk alternatives, due to health-related, religious, or other value-based reasons, alongside vegetarian or vegan lifestyles [12].

The recent body of literature on plant-based milk alternatives covers various consumer behaviours such as willingness to buy, willingness to pay a price premium, and consumer segments [1,2,13–15], with studies dedicated to consumer attitudes and preferences [16–19]. Understanding how consumers perceive food and beverages is important for creating new products, diversifying product assortments, meeting the needs of different consumer groups, and generating their loyalty [19–21]. In this light, insights into consumers' willingness to try plant-based milk alternatives are as essential as understanding their word-of-mouth sharing. For plant-based milk alternatives, the topic area "word-of-mouth" is not yet widely explored, even though it appears to be important as many consumers of plant-based milk alternatives are active on social media and in other communication channels [22–24] where they seek dialogue about brands, product experiences, and lifestyle [22,25]. Recent works related to willingness to try plant-based milk alternatives in a US context are equally scant, despite the importance the products hold in US consumer markets [9].

Therefore, the present study aims to explore factors impacting both types of consumer behaviour and include them in one model. Animal welfare, dairy preferences, environmental concerns, health consciousness, and plant-based milk enthusiasm are thought to be relevant attitudinal and preferential predicators relevant for the model. The rationale behind these choices are as follows. Attitudinal factors such as animal welfare are widely discussed in relation to alternative food and beverage consumption. These factors have also been addressed in social media studies in relation to word-of-mouth for plant-based milk products; however, they have not yet been studied or verified in one model. Product enthusiasm is a concept that has not been widely researched in the context of plant-based milk alternatives, even though it is of particular importance when studying consumer behaviour, particularly with high involvement behaviours such as word-of-mouth sharing. Including this predictor into the model contributes to the originality and merit of this work. Lastly, dairy preference is included in the model as it presents a contrast to plant-based milk enthusiasm. Understanding the importance of both ends of the continuum provides a more comprehensive picture of both types of consumer behaviour under investigation. These predictors are covered in the following section of this manuscript, which focuses on presenting the state-of-the-art and hypothesis development (Section 2). Section 3 presents the online consumer survey, sampling procedures, research approach, and partial least square structural equation modelling analysis. Section 4 presents the results and their discussion. Section 5 completes the paper, with conclusions covering best practice recommendations, suggestions for future studies, and limitations.

2. Conceptual Framework

2.1. Animal Welfare Concerns

Various consumer and farming studies and reports have been dedicated to the animal welfare concerns of US consumers [26–28]. Animal welfare concerns are one of the primary reasons consumers avoid dairy milk consumption and choose plant-based milk alternatives [29–31]. Inappropriate husbandry and cattle management practices such as cruelty in transportation, small stall size, limited access to pasture and fresh water, feeding of diets that animals would not consume naturally, limited or no ability to interact with other animals, tail docking, and dehorning are points of concern [26]. For instance, tail docking is only banned in four US states, namely California, Ohio, Rhode Island, and New Jersey. Similarly, keeping calves for veal production is not permitted in Arizona, California, Colorado, Kentucky, Maine, Michigan, Ohio, or Rhode Island [27]. While the Humane Methods of Slaughter Act requires livestock to be prevented from needless suffering and does not permit stunning for religious or ritualistic purposes, the legislation suffers from

a lack of enforcement and penalties for violations [27]. The extant literature shows that animal welfare labels provide important product information for consumers as they help mitigate information asymmetry. Positive animal welfare information has been shown to impact consumer's willingness to try plant-based milk alternatives and influence their evaluation of the sensory characteristics of plant-based milk alternatives [32]. Further studies indicate the importance of animal welfare within social media discussions around plant-based milk alternatives. Certain brands advertise themselves as cruelty-free or sustainable and are therefore endorsed by consumers [22,25,33,34]. Considering this research background, the following hypotheses are proposed:

H1: *US consumers' animal welfare concerns positively impact their word-of-mouth sharing about plant-based milk alternatives.*

H2: *US consumers' animal welfare concerns positively impact their willingness to try plant-based milk alternatives.*

2.2. Diary Preferences

The extant literature indicates that dairy preference is a significant obstacle to consumer acceptance of plant-based milk alternatives [7,15,35,36]. Studies suggest that consumers, regardless of gender or dietary restrictions, tend to prefer dairy milk over plant-based alternatives [35]. The dissatisfaction with plant-based milk alternatives stems from a discrepancy of expected taste and texture and specific product-related smell, taste, or mouthfeel coming from the main ingredient of the beverage [35]. Compared with dairy milk, consumers perceive oat milk as bitter, nut-based milk as thicker and saltier, and soymilk as having an earthy smell. Even though sensory profiles of plant-based milk alternatives are improving over time, past stigmas still partially affect them [35]. From a nutritional perspective, plant-based milk alternatives are lower in protein than regular milk [36]. Consumer familiarity and taste can explain rationalisation for the preferences for dairy milk. Regular milk is described as natural, necessary, normal, and nice. Nice refers to the consumption experience and taste and is found to be the strongest consumer association with regular milk [36]. Given that nutrition and sensory product experience can lead to a preference for dairy milk and influence word-of-mouth sharing and willingness to try, the following hypotheses are proposed:

H3: *Dairy preferences impact word-of-mouth sharing about plant-based milk alternatives.*

H4: *Dairy preferences negatively impact willingness to try plant-based milk alternatives.*

2.3. Environmental Concerns

Consumers appreciate plant-based milk alternatives as these beverages are perceived as superior to regular milk in terms of environmental friendliness [16,37]. The production of regular milk and other dairy products is associated with adverse environmental externalities [38]. Examples of these externalities include high water usage, loss of biodiversity and species, and greenhouse gas production. The recent body of the literature indicates that regular milk's ecological and water footprint is higher than that of plant-based milk alternatives [39]. However, critical discussion acknowledges that factors such as geographic location in calculating global warming potential make the comparison between regular and plant-based milk alternatives inconclusive [39]. Following Haas et al. (2019) [16], consumer discussions on the internet actively address the environmental externalities with polarising headlines, e.g., "Milk Life? How about milk destruction: The shocking truth about the dairy industry and the environment" [16]. Therefore, the following hypotheses are proposed:

H5: *US consumers' environmental concerns positively impact their word-of-mouth sharing about plant-based milk alternatives.*

H6: *US consumers' environmental concerns positively impact their willingness to try plant-based milk alternatives.*

2.4. Health Consciousness

Consumers expect palatable, nutritious, and healthy plant-based milk alternative products [40]. Some consumers are shifting from regular milk to plant-based milk alternatives because of milk allergies and lactose intolerance [41]. Further, consumers are concerned about the fat content of regular milk, which is associated with high cholesterol [2,42]. Respectively, plant-based milk alternatives are low in saturated fatty acids, and cholesterol is absent from the product. The recent body of literature outlines that those consumers with vegan, vegetarian, and flexitarian lifestyles are major consumers of plant-based milk alternatives and are often very health conscious [1]. Having a higher education and income and having children in the household are found to be reasons for health consciousness and consuming plant-based milk alternatives [1,2]. Considering this discussion, it is assumed that health consciousness affects both consumer behaviours under investigation.

H7: *US consumers' health consciousness positively impacts their word-of-mouth sharing about plant-based milk alternatives.*

H8: *US consumers' health consciousness positively impacts their willingness to try plant-based milk alternatives.*

2.5. Plant-Based Milk Enthusiasm

The recent body of literature regarding the transition to alternative meat and milk products reports consumer enthusiasm [43]. This enthusiasm is reflected in prioritising loyalty to plant-based products. Moreover, businesses selling plant-based milk or meat products are becoming increasingly popular [33,43]. Oatly is an example of successful branding and online marketing leading to consumer enthusiasm. Transparency and brand transformation contribute to Oatly's success [44]. Regular consumers and influencers endorse the product and praise product taste and business values [44,45]. Anchored in these findings, the following hypotheses are proposed:

H9: *US consumers' plant-based milk enthusiasm positively impacts their word-of-mouth sharing about plant-based milk alternatives.*

H10: *US consumers' plant-based milk enthusiasm positively impacts their willingness to try plant-based milk alternatives.*

Grounded in the extant literature, a conceptual model is proposed (see Figure 1).

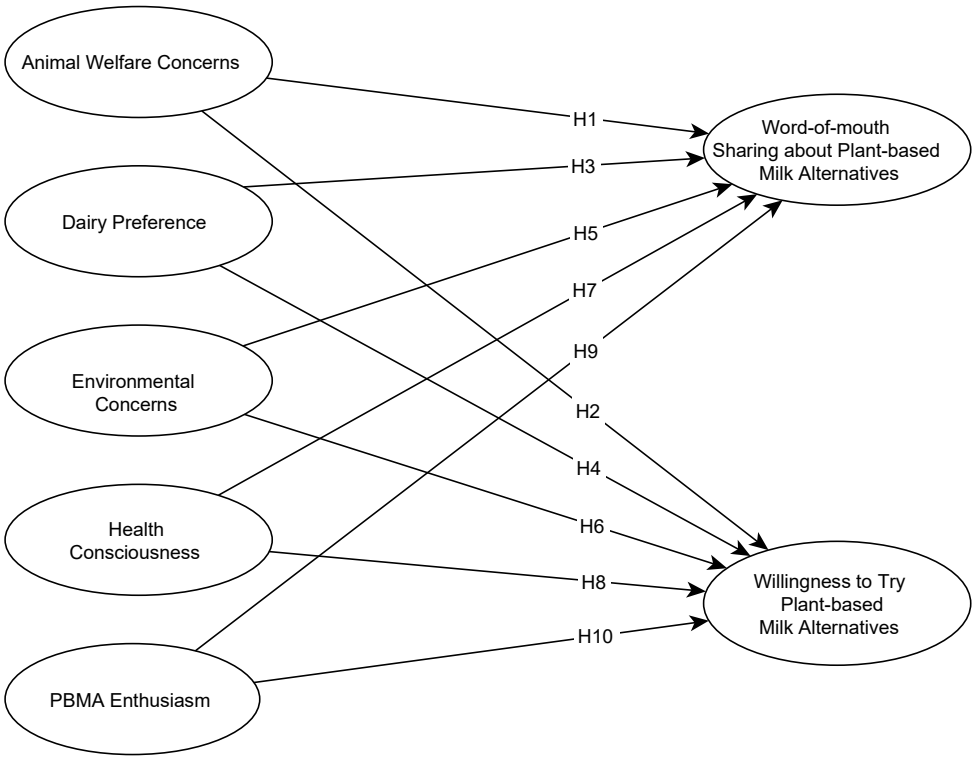

Figure 1. Proposed conceptual model.

3. Materials and Methods

3.1. Survey Instrument and Sample Description

In December 2022, an online survey with US consumers was administered and disseminated through the crowdsourcing platform Amazon Mechanical Turk [46]. Survey participants had to have the following characteristics: be at least 18 years old, reside in the US, and have an interest in plant-based milk alternatives or have consumed them. The survey instrument was pre-tested to determine an accurate completion time and check comprehension and flow of the survey. Fifteen people who were registered at MTurk pre-tested the survey and allowed the researchers to make improvements to the survey order, items, and scales, along with minor changes to the question instructions [46,47]. In crowdsourcing platforms, pre-testing is of great importance to guarantee a smooth procedure and counteract interactions with dissatisfied participants [47]. A total of 486 completed survey responses were included in the present analysis. An additional 14 responses were complete but had to be deleted from the dataset as they were suspected of fraudulent respondent behaviour [48]. These 14 participants had either not read or completed the survey carefully or their responses were well below the average completion time of 15 min.

The sample was appropriate for the partial least square structural equation modelling analysis following Hair's ten times rule [49]. The sample can be described as slightly skewed in terms of gender representation, as 46.7% of the respondents identified as female and 53.1% as male. Further, the sample can be described as well educated, as over 78% of the survey participants had obtained an undergraduate or postgraduate degree. In terms of household income, USD 25,000–75,000 described 57.6% of the sample. Compared with the US Census, the sample was better educated but with lower household income (see Table 1).

Table 1. Sample description.

	Freq	%	2019 Census %
Age			
18 to 24	19	3.9	12
25 to 34	192	39.5	18
35 to 44	154	31.7	16
45 to 54	50	10.3	16
55 to 64	51	10.5	17
65 and higher	20	4.1	21
Total	486	100	100
Education			
Failed to finish high school	3	0.6	11
Finished high school	52	10.7	27
Attended university	50	10.3	20
Bachelors degree	263	54.1	29
Postgraduate degree	118	24.3	13
Total	486	100	100
Annual Household Income			
USD 0 to under USD 25k	74	15.2	18
USD 25k to under USD 50k	140	28.8	20
USD 50k to under USD 75k	140	28.8	18
USD 75k to under USD 100k	92	18.9	13
USD 100,000 or higher	40	8.2	31
Total	486	100	100
Gender Identification			
Male	258	53.1	49
Female	228	46.9	51
Total	486	100	100
Residence			
Northeast	105	21.6	17
South	230	47.3	38
Midwest	86	17.7	21
West	65	13.4	24
Total	486	100	100

Note: the table presents sample demographics and the 2019 US Census for comparison.

In terms of dietary preferences, 49.17% of the sample indicated to be meat eaters, while 2.05% classified as pescetarian or vegetarian. The second group in the sample, roughly 20.37%, indicated they consumed neither meat nor any animal products as they followed a vegan diet. Approximately 5.5% lived dairy free due to lactose intolerance or other health reasons. The remaining 4.32% of the sample did not wish to indicate their dietary preferences.

The survey items used for the present analysis were adapted and created following the existing body of literature on plant-based food and beverage consumption [1,2,15–17,33] and included items measuring socio-demographics, animal welfare [25], environmental concerns [16], health consciousness [50], dairy preferences, enthusiasm for plant-based milk alternatives, willingness to try plant-based milk alternatives, and consumers' word-of-mouth sharing [13,14,51]. Survey respondents were asked to indicate agreement and answer all questions following a seven-point Likert scale (1 = 'strongly disagree' to 7 = 'strongly agree').

3.2. Data Analysis

The PLS-SEM analysis was executed with SmartPLS 4 and followed the recommendations of Hair et al. (2022) [49]. These recommendations included the outer model analysis reliability and validity checks. Following Hair et al. (2022), the evaluation of item/scale

factor loadings for scale item/scale contribution was required [49]. All loadings should exceed the minimum threshold value of 0.4. In addition, Cronbach's alpha and composite reliability should exceed the threshold value of 0.6 to confirm scale reliability [52]. To understand whether scale convergence is appropriate, the average variance extracted (AVE) should exceed the threshold value of 0.5 [49,50]. The heterotrait–monotrait criterion of correlation (HTMT) and the Fornell–Larker criterion and cross-loading are used to evaluate discriminant validity [49,53,54]. For the Fornell–Larcker criterion, the square root of each construct's AVE should be greater than correlations with other constructs (see diagonal) [53]. The HTMT values should not exceed the threshold value of 0.9. Lastly, to ensure that excessive correlations among predictor variables are not negatively affecting the model, the variance inflation factors should not exceed the threshold value of 5, and, to confirm the absence of common method bias, the average variance inflation factor should not exceed the threshold value of 3.2 [49,54].

For the inner model analysis, structural fit evaluation is required. This includes the overall goodness of fit (GoF); normed fit index (NFI), standardised root mean square residual (SRMR), explanatory power (R^2), and predictive relevance (Q^2) [49]. Even though Hair et al. (2022) caution against model fit indices, they are commonly reported following convention within the PLS-SEM community [49]. GoF and NFI values range from 0 to 1, where being closer to 1 implies a better model fit. An SRMR value of lower than 0.08 indicates an acceptable fit. R^2 values need to be interpreted as follows: 0.75 (substantial), 0.5 (moderate), and 0.25 (weak). Q^2 values larger than >0, 0.25, and 0.5 indicate acceptable, medium, and large predictive relevance, respectively [49,52].

4. Results

The results from the measurement model analysis are displayed in Table 2. This includes criteria for reliability and convergent validity. For construct reliability, Cronbach's alpha and composite reliability were considered. Item-scale convergent validity was evaluated through factor loadings and AVE values. All values can be described as appropriate because they were well above the required threshold values [49].

Table 2. Scale loadings, reliabilities, and convergent validity.

Scales and Items	Factor Loadings	Cronbach's Alpha	CR	AVE
Environmental Concerns		0.814	0.863	0.518
Purchasing plant-based milk alternatives saves valuable environmental resources	0.816			
I can help protect the environment by purchasing plant-based milk alternatives	0.803			
I can help decrease environmental problems by purchasing plant-based milk alternatives	0.829			
The production of plant-based milk alternatives is concerning because of the high water footprint	0.595			
The production of plant-based milk alternatives is concerning because of the high usage of agro-chemicals	0.597			
The production of plant-based milk alternatives is concerning because of the poor treatment of labour	0.636			

Table 2. *Cont.*

Scales and Items	Factor Loadings	Cronbach's Alpha	CR	AVE
Animal Welfare		0.89	0.913	0.600
I am highly concerned about animal welfare and factory farming	0.861			
I do not purchase products where the production process causes animals to suffer	0.717			
I am concerned about whether the animals were treated humanely and ethically throughout their lives	0.768			
I am concerned about whether the animals were given adequate food and sanitation	0.727			
I am concerned about whether the animals were raised as freely and naturally as possible	0.821			
Plant-based milk alternatives will increase the number of happy animals on earth	0.751			
The existence of plant-based alternative milks will improve animal welfare conditions	0.767			
Health Consciousness		0.818	0.879	0.645
My health is so valuable to me that I am prepared to sacrifice many things	0.765			
I think that I take my health into account a lot in my life	0.790			
I consider myself to be very health conscious	0.866			
I take care of my health	0.789			
Plant-Based Milk Enthusiasm		0.650	0.807	0.631
When I need to make a purchase, these plant-based milk alternatives are my first choice	0.958			
I try to use plant-based milk alternatives before regular products whenever I need to make a purchase	0.959			
I do not like to switch between plant-based milk alternatives and regular products	0.435			
Dairy Preference		0.872	0.907	0.66
Dairy products are necessary for obtaining beneficial nutrients	0.797			
Dairy products are an important part of a healthy and balanced diet	0.815			
The specific texture of dairy products is important to me	0.772			
The smell of dairy products is important to me	0.819			
The appearance of dairy products is important to me	0.857			
Willingness to try Plant-Based Milk Alternatives		0.817	0.879	0.646
Almond milk	0.733			
Rice milk	0.838			
Pea milk	0.813			
Hemp milk	0.826			
Word-of-Mouth Sharing about Plant-Based Milk Alternatives		0.846	0.907	0.765
I recommend plant-based milk alternatives to friends	0.860			
I recommend plant-based milk on social media	0.913			
I like to leave online reviews	0.850			

Table 3 shows the Fornell–Larcker and HTMT ratios. All cross-loadings were less than the square root of the individual constructs' AVE and, similarly, except for one HTMT ratio, all were smaller than 0.90 [49]. The exception was the ratio between word-of-mouth sharing and plant-based milk enthusiasm (HTMT: 1.004), which was higher than recommended [49]. The reasoning for this overlap could be attributed to both concepts falling within the umbrella construct of consumer/product involvement. Given that the largest VIF was 2.557 and the average VIF was 1.710, multicollinearity was also not an issue, and there was no evidence of common method bias with the data set. Both values

were well below the recommended threshold of 5 and 3.2, respectively. Therefore, it can be said that, apart from the one notable exception, discriminant validity was confirmed [49].

Table 3. Scale discriminant validity.

Fornell–Larcker Criterion	**A**	**B**	**C**	**D**	**E**	**F**	**G**
(A) Animal welfare concerns	0.775						
(B) Dairy preference	0.110	0.812					
(C) Environmental concerns	0.733	0.214	0.720				
(D) Health consciousness	0.443	0.238	0.397	0.803			
(E) Plant-based milk enthusiasm	0.567	0.106	0.612	0.443	0.794		
(F) Word-of-mouth sharing about plant-based milk alternatives	0.562	0.312	0.625	0.450	0.796	0.875	
(G) Willingness to try plant-based milk alternatives	0.47	−0.034	0.447	0.219	0.419	0.436	0.804
HTMT	**A**	**B**	**C**	**D**	**E**	**F**	**G**
(A) Animal welfare concerns							
(B) Dairy preference	0.126						
(C) Environmental concerns	0.797	0.278					
(D) Health consciousness	0.506	0.275	0.472				
(E) Plant-based milk enthusiasm	0.630	0.254	0.800	0.555			
(F) Word-of-mouth sharing about plant-based milk alternatives	0.619	0.360	0.734	0.526	1.004		
(G) Willingness to try plant-based milk alternatives	0.533	0.069	0.538	0.267	0.535	0.519	

The model can be considered to have an adequate fit due to having a GoF of 0.589, an NFI of 0.696, and an acceptable SRMS of 0.087. The model had weak-to-moderate explanatory power and medium-to-strong predictive relevance due to the average R^2/Q^2 values of 0.492/0.469; however, some parts of the model were stronger than others. The R^2/Q^2 scores of 0.707/0.694 for word-of-mouth sharing about plant-based milk alternatives would be considered to show substantial explanatory power and strong predictive relevance. The R2/Q2 scores of 0.227/0.243 for willingness to try plant-based milk alternatives would be considered to show weak explanatory power and acceptable predictive relevance. This confirmed that the model was appropriate for hypothesis testing. The results of the hypothesis testing are outlined in Table 4.

Table 4. Hypothesis testing results.

Hypothesised Relationship	**Coefficient**	**T Stat**	***p* Value**
H1: Animal Welfare -> Word-of-mouth sharing about plant-based milk alternatives	0.069	1.445	0.149
H2: Animal Welfare -> Willingness to try plant-based milk alternatives	0.256	2.907	**0.004**
H3: Dairy Preferences -> Word-of-mouth sharing about plant-based milk alternatives	0.201	5.059	**<0.001**
H4: Dairy Preferences-> Willingness to try plant-based milk alternatives	−0.115	2.308	**0.021**
H5: Environmental Concerns -> Word-of-mouth sharing about plant-based milk alternatives	0.123	2.316	**0.021**
H6: Environmental Concerns -> Willingness to try plant-based milk alternatives	0.178	2.038	**0.042**
H7: Health Consciousness -> Word-of-mouth sharing about plant-based milk alternatives	0.037	1.107	0.268
H8: Health Consciousness -> Willingness to try plant-based milk alternatives	−0.020	0.275	0.784
H9: Plant-Based Milk Enthusiasm -> Word-of-mouth sharing about plant-based milk alternatives	0.643	16.06	**<0.001**
H10: Plant-Based Milk Enthusiasm-> Willingness to try plant-based milk alternatives	0.186	2.788	**0.005**

Bold = Significant at $p \leq 0.05$.

Animal welfare concerns significantly impacted willingness to try plant-based milk alternative products, indicating support for hypothesis H2; however, it did not significantly impact word-of-mouth sharing about plant-based milk alternatives, indicating no support for hypothesis H1. Hypotheses H3 and H4 found support, as dairy preferences significantly impacted both word-of-mouth sharing about plant-based milk alternatives and willingness

to try plant-based milk alternatives. Hypothesis 4 was found to have a negative significant association. A positive significant association was found between environmental concerns and US consumers' word-of-mouth sharing about plant-based milk alternatives, supporting Hypothesis H5. Hypotheses H6, H7, and H8 were not found to be significant. For both H9 and H10, positive significant associations between plant-based milk enthusiasm and both word-of-mouth sharing about and willingness to try plant-based milk alternatives were found.

5. Discussion

These animal welfare results align with the recent body of literature. Marketing and economic studies show that animal welfare concerns impact consumption behaviour for plant-based milk alternatives [1,2,5,55–57] However, this has only been confirmed for low commitment behaviour like willingness to try. Tonsor et al. (2019) [57] found clear evidence that concern for farm animals is not translated into higher commitment consumer behaviour such as paying a price premium. Given that word-of-mouth is also a high commitment behaviour, perhaps non-translation of attitudes to high commitment behaviour also applies to word-of-mouth sharing. For willingness to try, different consumer groups—plant-based and regular milk consumers alike—animal welfare impacts the consumption experience. The level of consumption and information positively affects consumer approval of products, their willingness to try them, and their agreement with positive animal welfare [15,58]. Plant-based milk consumers specifically regard their value-based consumption choices as a moral response to animal treatment and cruelty [15]. Other studies indicate that consumers know little about agricultural husbandry practices [59], citing politics and media as additional influences on plant-based milk consumption trends [34,60].

The results for dairy preferences show that both word-of-mouth sharing about plant-based milk alternatives and willingness to try plant-based milk alternatives are impacted by this factor. The reason for the negative association between dairy preference and willingness to try plant-based milk alternatives is often associated with the taste profile of plant-based milk alternatives, which have not been able to accurately match the specific taste of regular milk [15,31,61,62]. Given that the main consumer group in the sample of this investigation are omnivores, these results can be explained. A recent study found that consumers who classify as omnivore often prefer the taste of regular dairy, and do not appreciate the mouthfeel of plant-based milk alternatives [63]. Further, they describe the taste of plant-based milk as either sour or bitter [64]. Other than taste preferences, consumption habits and pleasure are other potential explainations of these results [62]. Raszap et al. (2022) emphasise that consumers may appreciate both products or prefer dairy, but some switch back and forth between products depending on price points [65]. From a word-of-mouth perspective, consumers having dairy preferences may be willing to share their negative or positive experiences with plant-based milk alternatives online as word-of-mouth, although not necessarily in favour of the product [66].

The results for environmental concerns and US consumers' word-of-mouth sharing about plant-based milk alternatives confirm findings in previous studies. Specific milk brands actively use marketing messages and influencers to impact online word-of-mouth. In addition, advertisements and business concepts are adjusted to environmental sustainability [33,44,45]. The use of influencers enables businesses selling plant-based milk alternatives to reach wider audiences and allow some form of control over word-of-mouth [22,67]. Other studies analyse dialogue in social media forums that, even without the impact of influencers and environmental concerns (including water and carbon foot prints), are widely discussed among plant-based milk consumers [34,68]. The non-significant relationship between environmental concerns and willingness to try plant-based milk alternatives differs from recent studies in the extant literature. A potential reason may be the minority of vegetarian and vegan consumers in the sample. These consumers view dietary choices as part of their lifestyle and make more frequent value-based choices than other consumers who are more dominant in the sample.

Health consciousness was not a significant influence on willingness to try plant-based milk alternatives. Perhaps this is because plant-based milk alternatives have both health benefits and drawbacks. As some consumers seek product cues or information for the products they consume, health drawbacks and differences between regular products become more apparent to them. Plant-based milk alternatives are different to regular milk. From a nutrition and health perspective, there are trade-offs to consider [61]. It needs to be considered that, from a macronutrient perspective, plant-based milk alternatives are lower in protein than regular milk [59]. Conversely, plant-based milk alternatives include more fibre and unsaturated fatty acids. In addition, plant-based milk alternatives commonly include added sugar to make up for the absence of lactose and imitate the specific taste of regular milk [59]. With respect to the development of new plant-based milk alternative products, Jaeger et al. (2024) critically remark that sugar and salt additions to products need to be carefully considered, as they negatively impact the healthiness of the product but are seen as a necessity to achieve palatability and consumer approval [69]. Shiano et al. (2022) actively discuss bias when it comes to plant-based milk alternatives and health consciousness [7]. Their study indicates that consumers who have favourable attitudes to plant-based milk alternatives perceive them as superior in health and are more likely to try to purchase them [7].

For both H9 and H10, positive significant associations between plant-based milk enthusiasm and both word-of-mouth sharing and willingness to try plant-based milk alternatives have been found. The results are unsurprising, as product enthusiasts are excited, curious, and involved in the products they support [69]. Product enthusiasts actively search for information and contribute to opinion leadership and product nurturance [68]. The strong affinity with the products explains why these types of consumers are willing to try and willing to share their experiences.

6. Conclusions

The results presented and discussed in this work are of relevance to marketing managers in the US food and beverage industry, suggesting tailored communication and promotion strategies to capitalise on the identified influencing factors. The consumer attitudes and preferences can be used for targeting purposes and engaging consumers with plant-based milk alternatives. For consumers following a vegan or vegetarian diet, it may be suitable to advertise that new plant-based milk products are cruelty-free and adhere to animal welfare standards, and clearly outline the health benefits related to the product. To these consumers, richness in fibre and reduced fat content are surely appealing, but the lower protein content is important to address, as consumers with such dietary requirements or preferences need to consider alternative protein sources to complement their diet [69–71]. However, the reduced protein content holds significant appeal for some consumer segments. For instance, individuals contending with specific health conditions, such as renal or metabolic disorders, necessitate stringent restrictions on protein intake [72]. For these consumers, low-protein plant-based milk alternatives present a prudent dietary option, facilitating the moderation of protein intake and aiding in the management of their respective ailments. Additionally, individuals endeavouring to manage weight may seamlessly incorporate low-protein plant-based milk alternative products into their dietary plans. Characterised by heightened fibre content and diminished fat levels, these offerings are perceived as lighter dietary alternatives, aligning with the preferences of health-conscious individuals. Our research underscores the positive role of health consciousness in shaping consumers' receptiveness to trying plant-based milk alternatives. As such, marketers are advised to meticulously consider the unique needs of diverse consumer segments and tailor their promotional strategies accordingly, aligning with the specific preferences of their target demographics. Moreover, irrespective of the driving factors, whether rooted in considerations of nutrition, environmental consciousness, or animal welfare, plant-based milk enthusiasts constitute the most active group in promoting plant-based milk alternatives. They should be regularly updated and offered samples of new products, as this

target group leverages social approval and is likely to create positive social media buzz. Marketers should be allowed to involve product enthusiasts in brand storytelling, as this allows them to connect to other consumers, not only factually but on a visual and emotional level [73].

For consumers who drink both dairy and plant-based milk, possible messages could emphasise sensory profile characteristics that are similar to dairy milk. Of these similarities, marketers may want to focus on tastes that mirror those of lactose, which is a preferred dairy taste profile for many consumers. Addressing this taste difference could avoid consumer disappointment and negative word-of-mouth [64]. From another perspective, the results of this study highlight both dairy preference and enthusiasm for plant-based milk alternatives as significant influencers of consumer behaviour, whether the influence is positive or negative, impacting their word-of-mouth sharing and willingness to try plant-based milk alternatives. This dichotomy appears to position dairy milk and plant-based milk in opposition. Supporters of dairy products tend to reject plant-based milk alternatives, exhibiting reluctance to try them and often providing negative feedback on social media platforms. Conversely, advocates of plant products show a strong affinity towards such alternatives. However, it prompts a reconsideration of how we position plant-based milk alternatives. Traditionally, milk has been synonymous with nutrition and viewed as a high-quality source of essential nutrients [74]. Consequently, the most common approach to promote plant-based liquid products has been to promote them as milk substitutes, fostering a binary perception among consumers. However, because global resources have become increasingly limited, traditional methods of dairy production may struggle to meet the growing demand from consumers [75]. In this context, plant-based alternatives can be served as vital supplementary beverages rather than outright replacements for milk, fulfilling not only protein requirements but also offering additional nutritional benefits such as lower fat content, absence of cholesterol, and rich fibre and vitamin content. Moreover, their environment and animal-friendly characteristics align with growing concerns for environmental conservation and animal welfare. Thus, positioning plant-based milk alternatives as complementary beverages offers a novel approach to not only appeal to loyal consumers of plant-based alternatives but also help mitigate antagonistic sentiments among dairy enthusiasts.

A critical reflection on the recruitment of survey participants and the sample is required for the present study. Given that the survey was administered via a crowd-sourcing platform, the sample is not nationally representative of the US population, but it is likely to be superior to online samples generated through social media or samples targeting students [46]. Major differences can be seen in the areas of education, income, and age. Compared with the US population, the sample of the present study is overall younger, and consumers in the age group 65 and older are underrepresented. The sample is also more educated and is strongly underrepresented in the annual household income bracket of USD 100,000 or higher. Another difference is the region of residence. In future studies, this drawback could be mitigated through using additional quota criteria. An opt-in panel provider would be preferred over Mturk, as opt-in panel providers have better access to elderly consumers and those with higher incomes. Access to these groups is a limitation of many crowd-sourcing consumer studies. Quota criteria should follow the most recent US census. However, since younger consumers like millennials and GenZs are more likely to share word-of-mouth online and are enthusiastic plant-based milk consumers, the findings of this study are still of merit, despite these limitations.

Future work may focus on plant-based milk consumption, willingness to pay, and loyalty among US consumers. A cross-region investigation (area of residence) for plant-based milk brands is suggested. Such an investigation may be grounded in marketing and food science and include a sensory evaluation of plant-based milk products. To achieve this, a mixed-method research design executing focus groups followed by survey work is suggested. This approach would offer additional depth and representativeness of the findings. Investigations in other countries would also be beneficial, so that findings could

be compared across US, European, and Asian consumer markets. It is expected that animal welfare regulations may vary in terms of strictness and their enforcement and, respectively, this may have an impact on consumer concerns in these markets. Further, it can be assumed that health consciousness, dairy preferences, and plant-based milk enthusiasm may be stronger in Asian markets, as lactose intolerance and consumption of alternative milk products are more rooted in their culture. In addition, work that focuses on older consumers or children would be valuable, as the interests and preferences of these groups have not been as widely explored. Understanding the milk preferences of Generation Alpha would also be of interest as they are often children of millennials who have pro-social attitudes and are more likely to favour plant-based milk alternatives.

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References

1. Wolf, C.A.; Malone, T.; McFadden, B.R. Beverage milk consumption patterns in the United States: Who is substituting from dairy to plant-based beverages? *J. Dairy Sci.* **2020**, *103*, 11209–11217. [CrossRef] [PubMed]
2. Bir, C.; Widmar, N.O.; Wolf, C.; Delgado, M.S. Traditional attributes moo-ve over for some consumer segments: Relative ranking of fluid milk attributes. *Appetite* **2019**, *134*, 162–171. [CrossRef] [PubMed]
3. Khanal, B.; Lopez, R. Demand for Plant-Based Beverages and Market Competition in Fluid Milk Markets. In Proceedings of the 31st International Conference for Agricultural Economists, Online, 17–31 August 2021; Available online: https://ageconsearch.umn.edu/ (accessed on 22 February 2024).
4. USDA-Economic Research Service. Overview Dairy. Available online: https://www.ers.usda.gov/topics/animal-products/dairy/ (accessed on 22 February 2024).
5. Slade, P.; Markevych, M. Killing the sacred dairy cow? Consumer preferences for plant-based milk alternatives. *Agribusiness* **2024**, *40*, 70–92. [CrossRef]
6. Slade, P. Does plant-based milk reduce sales of dairy milk? Evidence from the almond milk craze. *Agric. Resour. Econ. Rev.* **2023**, *52*, 112–131. [CrossRef]
7. Schiano, A.N.; Nishku, S.; Racette, C.M.; Drake, M.A. Parents' implicit perceptions of dairy milk and plant-based milk alternatives. *J. Dairy Sci.* **2022**, *105*, 4946–4960. [CrossRef] [PubMed]
8. Statista. Almond Dominates U.S. *Milk Substitute Market*. Available online: https://www.statista.com/chart/17981/sales-of-alternative-to-dairy-products/ (accessed on 22 February 2024).
9. Statista. Revenue of the Milk Substitute Market in the United States from 2018 to 2028. Available online: https://www.statista.com/statistics/1238235/forecast-of-the-retail-sales-of-milk-alternatives/ (accessed on 22 February 2024).
10. Ramsing, R.; Santo, R.; Kim, B.F.; Altema-Johnson, D.; Wooden, A.; Chang, K.B.; Love, D.C. Dairy and Plant-Based Milks: Implications for Nutrition and Planetary Health. *Curr. Environ. Health Rep.* **2023**, *10*, 291–302. [CrossRef] [PubMed]
11. Redan, B.W.; Zuklic, J.; Hryshko, J.; Boyer, M.; Wan, J.; Sandhu, A.; Jackson, L.S. Analysis of Eight Types of Plant-based Milk Alternatives from the United State Market for Target Minerals and Trace Elements. *J. Food Compos. Anal.* **2023**, *122*, 105457. [CrossRef] [PubMed]
12. Baptista, I.Y.; Schifferstein, H.N. Milk, mylk or drink: Do packaging cues affect consumers' understanding of plant-based products? *Food Qual. Prefer.* **2023**, *108*, 104885. [CrossRef]
13. Rombach, M.; Dean, D.L.; Gan, C. "Soy Boy vs. Holy Cow"—Understanding the Key Factors Determining U.S. Consumers' Preferences and Commitment to Plant-Based Milk Alternatives. *Sustainability* **2023**, *15*, 13715. [CrossRef]

14. Rombach, M.; Dean, D.L.; Bitsch, V. "Got Milk Alternatives?" Understanding Key Factors Determining U.S. Consumers' Willingness to Pay for Plant-Based Milk Alternatives. *Foods* **2023**, *12*, 1277. [CrossRef]
15. McCarthy, K.S.; Parker, M.; Ameerally, A.; Drake, S.L.; Drake, M.A. Drivers of choice for fluid milk versus plant-based alternatives: What are consumer perceptions of fluid milk? *J. Dairy Sci.* **2017**, *100*, 6125–6138. [CrossRef] [PubMed]
16. Haas, R.; Schnepps, A.; Pichler, A.; Meixner, O. Cow Milk versus Plant-Based Milk Substitutes: A Comparison of Product Image and Motivational Structure of Consumption. *Sustainability* **2019**, *11*, 5046. [CrossRef]
17. Boaitey, A.; Minegishi, K. Determinants of household choice of dairy and plant-based milk alternatives: Evidence from a field survey. *J. Food Prod. Mark.* **2020**, *26*, 639–653. [CrossRef]
18. Cardello, A.V.; Llobell, F.; Giacalone, D.; Chheang, S.L.; Jaeger, S.R. Consumer Preference Segments for Plant-Based Foods: The Role of Product Category. *Foods* **2022**, *11*, 3059. [CrossRef] [PubMed]
19. Moss, R.; Barker, S.; Falkeisen, A.; Gorman, M.; Knowles, S.; McSweeney, M.B. An investigation into consumer perception and attitudes towards plant-based alternatives to milk. *Food Res. Int.* **2022**, *159*, 111648. [CrossRef] [PubMed]
20. Aschemann-Witzel, J.; Varela, P.; Peschel, A.O. Consumers' categorization of food ingredients: Do consumers perceive them as 'clean label'producers expect? An exploration with projective mapping. *Food Qual. Prefer.* **2019**, *71*, 117–128. [CrossRef]
21. Moreira, M.N.B.; da Veiga, C.R.P.; Su, Z.; Reis, G.G.; Pascuci, L.M.; da Veiga, C.P. Social Media Analysis to Understand the Expected Benefits by Plant-Based Meat Alternatives Consumers. *Foods* **2021**, *10*, 3144. [CrossRef] [PubMed]
22. Basu, A.; Bishnu Murti, A.; Chandra Mandal, P. Plant-Based Milk Consumption in India: Motivators, Deterrents and Marketing Strategies in a Competitive Market. *J. Int. Food Agribus. Mark.* **2023**, 1–23. [CrossRef]
23. Zhang, M.; Lu, J.; Hallman, W.K. Sharing on Facebook and face-to-face what others do or approve: Word-of-mouth driven by social norms. *Front. Psychol.* **2021**, *12*, 712253. [CrossRef] [PubMed]
24. Li, T.; Wang, D.; Yang, Z. Inspiration or risk? How social media marketing of plant-based meat affects young people's purchase intention. *Front. Psychol.* **2022**, *13*, 971107. [CrossRef] [PubMed]
25. Kopplin, C.S.; Rausch, T.M. Above and beyond meat: The role of consumers' dietary behaviour for the purchase of plant-based food substitutes. *Rev. Manag. Sci.* **2022**, *16*, 1335–1364. [CrossRef]
26. Widmar, N.O.; Morgan, C.J.; Wolf, C.A.; Yeager, E.A.; Dominick, S.R.; Croney, C.C. US resident perceptions of dairy cattle management practices. *Agric. Sci.* **2017**, *8*, 645–656. [CrossRef]
27. Transatlantic Trade and Investment Partnership. EU and US Farm Animal Welfare Legislation. Available online: https://www.hsi.org/wp-content/uploads/assets/pdfs/ttip_briefing_eu_vs_us.pdf (accessed on 28 March 2024).
28. Bir, C.; Widmar, N.O.; Thompson, N.M.; Townsend, J.; Wolf, C.A. US respondents' willingness to pay for Cheddar cheese from dairy cattle with different pasture access, antibiotic use, and dehorning practices. *J. Dairy Sci.* **2020**, *103*, 3234–3249. [CrossRef] [PubMed]
29. Autio, M.; Sekki, S.; Autio, J.; Peltonen, K.; Niva, M. Towards de-dairyfication of the diet? Consumers downshifting milk yet justifying their dairy pleasures. *Front. Sustain.* **2023**, *4*, 975679. [CrossRef]
30. Mylan, J.; Morris, C.; Beech, E.; Geels, F.W. Rage against the regime: Niche-regime interactions in the societal embedding of plant-based milk. *Environ. Innov. Soc. Transit.* **2019**, *31*, 233–247. [CrossRef]
31. Lonkila, A.; Kaljonen, M. Promises of meat and milk alternatives: An integrative literature review on emergent research themes. *Agric. Hum. Values* **2021**, *38*, 625–639. [CrossRef]
32. Jiang, R.; Sharma, C.; Bryant, R.; Mohan, M.S.; Al-Marashdeh, H.R.; Torrico, D.D. Animal welfare information affects consumers' hedonic and emotional responses towards milk. *Food Res. Int.* **2021**, *141*, 110006. [CrossRef] [PubMed]
33. Krampe, C.; Fridman, A. Oatly, a serious 'problem' for the dairy industry? A case study. *Int. Food Agribus. Manag. Rev.* **2022**, *25*, 157–171. [CrossRef]
34. Clay, N.; Sexton, A.E.; Garnett, T.; Lorimer, J. Palatable Disruption: The politics of Plant Milk. In *Social Innovation and Sustainability Transition*; Springer Nature: Cham, Switzerland, 2022; pp. 11–28. [CrossRef]
35. Cardello, A.V.; Llobell, F.; Giacalone, D.; Roigard, C.M.; Jaeger, S.R. Plant-based alternatives vs dairy milk: Consumer segments and their sensory, emotional, cognitive and situational use responses to tasted products. *Food Qual. Prefer.* **2022**, *100*, 104599. [CrossRef]
36. Collier, E.S.; Harris, K.L.; Bendtsen, M.; Norman, C.; Niimi, J. Just a matter of taste? *Understanding rationalizations for dairy consumption and their associations with sensory expectations of plant-based milk alternatives. Food Qual. Prefer.* **2023**, *104*, 104745. [CrossRef]
37. Geburt, K.; Albrecht, E.H.; Pointke, M.; Pawelzik, E.; Gerken, M.; Traulsen, I. A Comparative Analysis of Plant-Based Milk Alternatives Part 2: Environmental Impacts. *Sustainability* **2022**, *14*, 8424. [CrossRef]
38. Reyes-Jurado, F.; Soto-Reyes, N.; Dávila-Rodríguez, M.; Lorenzo-Leal, A.C.; Jiménez-Munguía, M.T.; Mani-López, E.; López-Malo, A. Plant-based milk alternatives: Types, processes, benefits, and characteristics. *Food Rev. Int.* **2023**, *39*, 2320–2351. [CrossRef]
39. Pingali, P.; Boiteau, J.; Choudhry, A.; Hall, A. Making meat and milk from plants: A review of plant-based food for human and planetary health. *World Dev.* **2020**, *170*, 106316. [CrossRef]
40. Paul, A.A.; Kumar, S.; Kumar, V.; Sharma, R. Milk Analog: Plant-based alternatives to conventional milk, production, potential and health concerns. *Crit. Rev. Food Sci. Nutr.* **2020**, *60*, 3005–3023. [CrossRef] [PubMed]
41. Islam, N.; Shafiee, M.; Vatanparast, H. Trends in the consumption of conventional dairy milk and plant-based beverages and their contribution to nutrient intake among Canadians. *J. Hum. Nutr. Diet.* **2021**, *34*, 1022–1034. [CrossRef] [PubMed]

42. Antunes, I.C.; Bexiga, R.; Pinto, C.; Roseiro, L.C.; Quaresma, M.A.G. Cow's Milk in Human Nutrition and the Emergence of Plant-Based Milk Alternatives. *Foods* **2023**, *12*, 99. [CrossRef] [PubMed]
43. Tziva, M.; Negro, S.O.; Kalfagianni, A.; Hekkert, M.P. Understanding the protein transition: The rise of plant-based meat substitutes. *Environ. Innov. Soc. Transit.* **2020**, *35*, 217–231. [CrossRef]
44. Rrapa, D. The Influence of Milk Packaging in Consumer Buying Behaviour: Oatly Case. 2022, Thesis Submitted to Haaga-Helia University of Applied Sciences. Available online: https://www.theseus.fi/bitstream/handle/10024/781846/DENISA%20RRAPA.%20THESIS%20PLAN%20(2).pdf?sequence=2&isAllowed=y (accessed on 26 February 2024).
45. Sanborn, M.C. "You Can't Milk an Almond": America's Consumption of Milk and "Milk's" Consumption of America. 2020. Available online: https://digitalcommons.bard.edu/cgi/viewcontent.cgi?article=1288&context=senproj_s2020 (accessed on 26 February 2024).
46. Litman, L.; Robinson, J. *Conducting Online Research on Amazon Mechanical Turk and Beyond*; Sage Publications: Thousand Oaks, CA, USA, 2021.
47. Fowler, C.; Jiao, J.; Pitts, M. Frustration and ennui among Amazon MTurk workers. *Behav. Res. Methods* **2023**, *55*, 3009–3025. [CrossRef] [PubMed]
48. Kennedy, R.; Clifford, S.; Burleigh, T.; Waggoner, P.D.; Jewell, R.; Winter, N.J. The shape of and solutions to the MTurk quality crisis. *Political Sci. Res. Methods* **2020**, *8*, 614–629. [CrossRef]
49. Hair, J.E.; Hult, G.T.; Ringle, C.M.; Sarstedt, M.A. *Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 3rd ed.; Sage Publications: Los Angeles, CA, USA, 2022.
50. Chen, M.F. Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *Br. Food J.* **2009**, *111*, 165–178. [CrossRef]
51. Kataike, J.; Kulaba, J.; Mugenyi, A.R.; De Steur, H.; Gellynck, X. Would you purchase milk from a milk ATM? Consumers' attitude as a key determinant of preference and purchase intention in uganda. *Agrekon* **2019**, *58*, 200–215. [CrossRef]
52. Hair, J.F.; Risher, J.J.; Sarstedt, M.; Ringle, C.M. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev.* **2019**, *31*, 2–24. [CrossRef]
53. Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* **1981**, *18*, 39–50. [CrossRef]
54. Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *J. Acad. Mark. Sci.* **2015**, *43*, 115–135. [CrossRef]
55. Beacom, E.; Bogue, J.; Repar, L. Market-oriented development of plant-based food and beverage products: A usage segmentation approach. *J. Food Prod. Mark.* **2021**, *27*, 204–222. [CrossRef]
56. Su, W.; Zhang, Y.Y.; Li, S.; Sheng, J. Consumers' Preferences and Attitudes towards Plant-Based Milk. *Foods* **2024**, *13*, 2. [CrossRef] [PubMed]
57. Tonsor, G.T.; Wolf, C.A. US Farm Animal Welfare: An Economic Perspective. *Animals* **2019**, *9*, 367. [CrossRef] [PubMed]
58. Napolitano, F.; Pacelli, C.; Girolami, A.; Braghieri, A. Effect of information about animal welfare on consumer willingness to pay for yogurt. *J. Dairy Sci.* **2008**, *91*, 910–917. [CrossRef] [PubMed]
59. Ly, L.H.; Ryan, E.B.; Weary, D.M. Public attitudes toward dairy farm practices and technology related to milk production. *PLoS ONE* **2021**, *16*, e0250850. [CrossRef] [PubMed]
60. McKendree, M.G.; Croney, C.C.; Widmar, N.O. Effects of demographic factors and information sources on United States consumer perceptions of animal welfare. *J. Anim. Sci.* **2014**, *92*, 3161–3173. [CrossRef] [PubMed]
61. Aydar, E.F.; Tutuncu, S.; Ozcelik, B. Plant-based milk substitutes: Bioactive compounds, conventional and novel processes, bioavailability studies, and health effects. *J. Funct. Foods* **2020**, *70*, 103975. [CrossRef]
62. Rizzo, P.V.; Harwood, W.S.; Drake, M.A. Consumer desires and perceptions of lactose-free milk. *J. Dairy Sci.* **2020**, *103*, 6950–6966. [CrossRef] [PubMed]
63. Verduci, E.; D'Elios, S.; Cerrato, L.; Comberiati, P.; Calvani, M.; Palazzo, S.; Martelli, A.; Landi, M.; Trikamjee, T.; Peroni, D.G. Cow's Milk Substitutes for Children: Nutritional Aspects of Milk from Different Mammalian Species, Special Formula and Plant-Based Beverages. *Nutrients* **2019**, *11*, 1739. [CrossRef] [PubMed]
64. Pointke, M.; Ohlau, M.; Risius, A.; Pawelzik, E. Plant-Based Only: Investigating Consumers' Sensory Perception, Motivation, and Knowledge of Different Plant-Based Alternative Products on the Market. *Foods* **2022**, *11*, 2339. [CrossRef] [PubMed]
65. Raszap Skorbiansky, S.; Saavoss, M.; Stewart, H. Cow's milk still leads in the United States: The case of cow's, almond, and soy milk. *Agric. Econ.* **2022**, *53*, 204–214. [CrossRef]
66. Halim, R.E.; Rahmani, S.; Gayatri, G.; Furinto, A.; Sutarso, Y. The Effectiveness of Product Sustainability Claims to Mitigate Negative Electronic Word of Mouth (N-eWOM). *Sustainability* **2022**, *14*, 2554. [CrossRef]
67. Van Driel, J. The Effectiveness of Influencer Marketing on Intentions to Adopt a Plant-Based Diet. Thesis Submitted to the University of Tielburg, Netherland. Available online: https://arno.uvt.nl/show.cgi?fid=157953 (accessed on 1 March 2024).
68. Regusci, E.; Meyers, C.; Li, N.; Irlbeck, E. Exploring news coverage about plant-based milk: A content analysis. *J. Appl. Commun.* **2022**, *106*, 5. [CrossRef]
69. Jaeger, S.R.; de Matos, A.D.; Oduro, A.F.; Hort, J. Sensory characteristics of plant-based milk alternatives: Product characterisation by consumers and drivers of liking. *Food Res. Int.* **2024**, *180*, 114093. [CrossRef] [PubMed]

70. Hamed, H.A.; Kobacy, W.; Mahmoud, E.A.; El-Geddawy, M.M. Looking for a Novel Vegan Protein Supplement from Faba Bean, Lupine, and Soybean: A Dietary and Industrial Standpoint. *Plant Foods Hum. Nutr.* **2024**, *79*, 90–97. [CrossRef] [PubMed]
71. Martin, W.F.; Armstrong, L.E.; Rodriguez, N.R. Dietary protein intake and renal function. *Nutr. Metab.* **2005**, *2*, 25. [CrossRef] [PubMed]
72. Chakraborty, U.; Biswal, S.K. Amul's brand storytelling: From communicative narratives to action. In *Sage Business Cases*; SAGE Publications: Thousand Oaks, CA, USA, 2024. [CrossRef]
73. Bloch, P.H. The product enthusiast: Implications for marketing strategy. *J. Consum. Mark.* **1986**, *3*, 51–62. [CrossRef]
74. Pereira, P.C. Milk nutritional composition and its role in human health. *Nutrition* **2014**, *30*, 619–627. [CrossRef] [PubMed]
75. Martin, N.P.; Russelle, M.P.; Powell, J.M.; Sniffen, C.J.; Smith, S.I.; Tricarico, J.M.; Grant, R.J. Invited review: Sustainable forage and grain crop production for the US dairy industry. *J. Dairy Sci.* **2017**, *100*, 9479–9494. [CrossRef] [PubMed]