Beyond quality and income: Poultry products preferences and food values in urban area of Chhattisgarh

Pankaj Kumar Bahety
Research Scholar, Faculty of Management Studies,Shri Shankaracharya
Technical Campus Bhilai, C.G. India.
Email:bahetypankaj@gmail.com

Dr. Souren Sarkar
Professor and Head, Faculty of Management Studies,Shri Shankaracharya
Technical Campus Bhilai, C.G. India.
Email:drsourensarkar@gmail.com

Dr. Tanmoy De
Associate Professor, Symbiosis Institute of Business Management, Symbiosis
International University Hyderabad India
Email: tanmoyde@gmail.com

Dr. Biswajeet Bhattacharjee
Asst.Professor, Faculty of Management Studies,Shri Shankaracharya Technical
Campus   Bhilai, C.G. India.
Email: bhbishwajeet@gmail.com

Dr. Abhishek Chakravorty
Asst.Professor, Department of Management Bhilai Institute of Technology, Durg,
C.G. India.
Email: abhi2106@gmail.com

> ***Abstract*---**The demographic for the answer is made up of Indian customers, namely those from the state of Chhattisgarh, which has a diversified population. Though the study discloses Indian consumers' views, it restricts the likelihood of the western world adopting them. Several poultry products have yet to be discovered due to a paucity of resources. The research data is examined using ANOVA, although there is space for further analysis using several alternative statistical tools.
>
> ***Keywords*---**income, food values, quality.

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1. Introduction

With the advent of plant based protein source, poultry products are getting a great set back. From farm to fork, global food systems face a complex and multi-faceted set of issues in terms of human and environmental health. Based on the interplay between individual characteristics on food choices and obesogenic settings, the high prevalence of overweight and obesity, especially in metropolitan areas, might be linked to a change in lifestyle, low levels of physical activity, and poor diets.

Individual dietary preferences, which are rooted in food consumption patterns, have evolved in response to changes in the natural environment, biological base, physical necessity, lifestyle, and technological advancement.The intrinsic and extrinsic properties of poultry products, as well as socio-cultural influences, drive consumer preferences. While pricing is critical, particularly in penurious nations, (Benda-Prokeinová & Hanová, 2016)the manner of production in affluent countries is a significant sub-factor from which customers infer the health, safety, and sensory attributes of eggs(Rondoni et al., 2020). Kuwait's chicken business is one of the country's most important food industries. It is made up of a number of poultry firms ranging in size from large to medium to tin (AL-NASSER, 2006). Several factors were identified as influencing the decision to acquire indigenous chicken products and the willingness to pay a higher price(Bannor et al., 2022). Increased demand for processed chicken products, as a result of the proliferation of home meal replacements and ready-to-eat goods, presents an opportunity for new value-added poultry products to be developed (Michel et al., 2011). (Vukasovič, 2010),(Shan et al., 2017) Consumers' growing attention and concern about how food is produced has necessitated divergence in production methods in directions that consumers value.

This research aims to identify the elements that influence customer preferences for poultry products. This will aid in the development of marketing strategies aimed at increasing consumer acceptance of poultry products. The focus of this review is threefold:
1) To determine the major influences on consumer behaviour, attitudes, and preferences regarding poultry products;
2) To talk about the ramifications for businesses and policymakers; and
3) To find research gaps that can be filled in future studies

The paper's structure is divided into the following sections. Section 2 contains the literature review and theoretical framework followed by the research methodology in section 3, discussing research design and questionnaire design. Section 4 outlines the results and discussion followed by the conclusions, limitations and future scope in section 5.

2. Literature Review and Theoretical Framework

The continual rise in customer demand for convenience and ready-to-eat foods has driven poultry manufacturers' interest in developing value-added chicken products that meet market demand. (Ofuoku & Akusu, 2016) used a conjoint analysis to evaluate consumers' preferences and willingness to pay (WTP) for

various chicken attributed parts, production method, processing method, storage method, the presence of flavour, and cooking method.(de Oliveira Padilha et al., 2022a) employed multinomial logistic regressions to explain factors related with customers' propensity to accept lab-grown beef products. Positive perceptions about eating experience (enjoyment), safety, animal welfare, and healthiness were linked to readiness to consume lab-grown meat products. Other factors included familiarity, higher consumption frequency of conventionally farmed chicken meat, university education, and younger age. (Niva & Vainio, 2021) explored consumers' self-reported historical changes and future intents to switch from beef to alternative, plant- or insect-based protein.(Reithmayer & Mußhoff, 2019) examined customer attitudes toward discrete choice experiment on eggs with various production qualities.

Respondents with a limited desire to replace animal-based meals placed a high value on future pulse-based products being natural, whereas those who already use pulses in place of animal-based foods expected convenient, minimally processed foods. Respondents who have already substituted meat with pulses or who have showed a low readiness to do so in the future stated that they prefer plain pulses over processed and meat-like pulse-based items as a replacement to meat (Henn et al., 2022).

(de Oliveira Padilha et al., 2022b) examined consumer attitudes toward various protein products as well as the elements that influence consumer acceptance of lab-grown chicken and beef. The most common beliefs were about the health and affordability of conventionally reared chicken.

(Indrawan et al., 2018) examined Indonesian consumers' choice of market channels for purchasing chicken, as well as consumer concerns about food scares and food safety in their consumption due to the highly pathogenic avian influenza (HPAI) outbreak. The model's significant findings in the choosing of the modern poultry market channel are the price/quality relationship, the safety feature, and the level of consumer trust, according to the logistic regression analysis.

(Van Loo et al., 2020) examined the various factors that influence the determinism of poultry meat properties and has broken down quality into six properties; commercial, organoleptic, nutritional, technological, sanitary, and image, with the latter covering the ethical, cultural, and environmental dimensions associated with how meat is produced, as well as its origin, and being highly valued in many quality labels.

(Bradford et al., 2022) Consumer views of the "raised without antibiotics" label can be used to identify whether or not they are aware of the label and what motivates them to buy antibiotic-free products. (Bett et al., 2013) determined how consumers would react to a price rise for indigenous chicken products and how much they would be ready to pay in the market. Consumer decisions and the amount they were willing to pay were studied using the two-step Heckman selection model.

(McCarthy et al., 2004) Health, eating pleasure, safety, and price were the most important predictors of attitude for poultry, whereas environmental and animal

welfare were less so. (Iris et al., 2018) attempted to define the links between dietary habits and preferences for ecologically friendly/unfriendly near-food goods. The final questionnaire results (N = 828) corroborate our hypothesis, suggesting a favourable association between consumer eating preferences and their preferences for ecologically friendly over environmentally unfriendly products. (Liu et al., 2022) Fortification with chicken protein powder resulted in sensory changes, particularly in texture, with rye bread having a less firm, elastic texture and a stronger floury mouthfeel; chocolate cakes having a less spongy, crumbly texture and a stronger dense, moist texture. Furthermore, there were strong associations between familiarity with protein fortified food products, the suitability of rye bread or chocolate cakes for protein fortification, and desire to purchase protein fortified food products.(Wilks, 2017)Concerned about naturalness, attraction, and price are highlighted as impediments to involvement with the product , provoke conflicting reactions to the concept.

Consumers' environmental judgments may not be improved by expensive labelling. Rather, it is critical to address consumer concerns and identify solutions to promote environmentally friendly food purchasing. (Lazzarini et al., 2018). (Yi et al., 2021) identified that older persons pay more attention to nutrition as a result of their existing health concerns than as a preventive measure. (Teixeira & Rodrigues, 2021)summarised the most recent studies on consumer perceptions of healthier meat products and, by spreading the available information, contribute to a greater understanding and social awareness of the healthiness of meat products.

(Gómez-Luciano et al., 2019) revealed that, rather than environmental, convenience, or healthy purchasing decisions, or a low level of neophobia, respondents perceive alternative features and/or attributes compared to meat as the most important variables influencing their desire to purchase. (Profeta & Hamm, 2019) demonstrated that a product differentiation strategy in the local supply chain has a large market potential. (Verbeke & Viaene, 1999)stated the ability of the beef and pork sectors to develop, supply, and guarantee goods that are inherently safe, as well as perceived as such by consumers, will determine the future of fresh meat consumption.(Claret et al., 2012) effective information tactics appear to be required, lowering the effects of unsustainable fishing techniques and confronting overexploitation of natural fish resources.(Benda-Prokeinová & Hanová, 2016)identified trends and variations in consumer demand for food in Slovakia and used Model AIDS to compute elasticity coefficients. All foodstuff products had a positive income elasticity of demand, according to computed elasticities.(da Rosa et al., 2019) revealed that four factors; Animal welfare, pricing, quality, and the transmission of meat's benefits were sufficient to quantify the essential qualities that industries and breeders should consider in marketing efforts to boost capybara meat consumption.

In order to create individualised nutrition interventions, it is necessary to first understand the variability of consumer food preferences. To demonstrate this, (Custodio et al., 2021) conducted a survey of low- and middle-income consumers in eastern India to uncover five sources of heterogeneity. (Kumar, 2011) For two reasons, the practical application of rural consumer behaviour studies in Indian marketplaces has long been a challenge for marketers. To begin with, most rural

market consumer research has taken a piecemeal approach. Second, there has been no comprehensive review of the situation. (Ahmed, 2013) The availability, accessibility, and affordability of the rural markets should be the emphasis of any macro-level policy for the markets. At all times, constant scanning and filtering of ideas and plans is required.(Shukla & Tandon, 2011)Today's non-consumers, who make up the rural poor, will enter the market as first-time purchasers. (Mishra, 2011) Through a bottom-up approach and ongoing engagement with rural enterprise stakeholders, a process is required to investigate market connections and capacity building for SHGs. This approach should ensure rural people's involvement in the globalisation mechanism as consumers and producers, with better livelihoods and global access to markets.

2.1 Research Gap

According to the survey of accessible literature and published work, the majority of consumer preference research is undertaken in Western and industrialised countries, whereas developing countries remain underserved. Despite the fact that being the largest producer of poultry , accounting for more than 18.50 percent of worldwide output(Shan et al., 2017), research on consumer preferences for poultry products has received very little attention in India. Furthermore, the available literature focuses on the entrepreneurial perspective, while the customer perception is overlooked. This study aims to fill the gap between the existing literature and the industry's current requirement.

Based on the above discussions, the following hypotheses are listed below and the theoretical framework is shown in Figure 1.

H_1: Quality has a significant impact on consumer preference towards poultry products in the urban areas of Chhattisgarh

H_2: Price has a significant impact on consumer preference towards poultry products in the urban areas of Chhattisgarh.

H_3: Availability has a significant impact on consumer preference towards poultry products in the urban areas of Chhattisgarh.
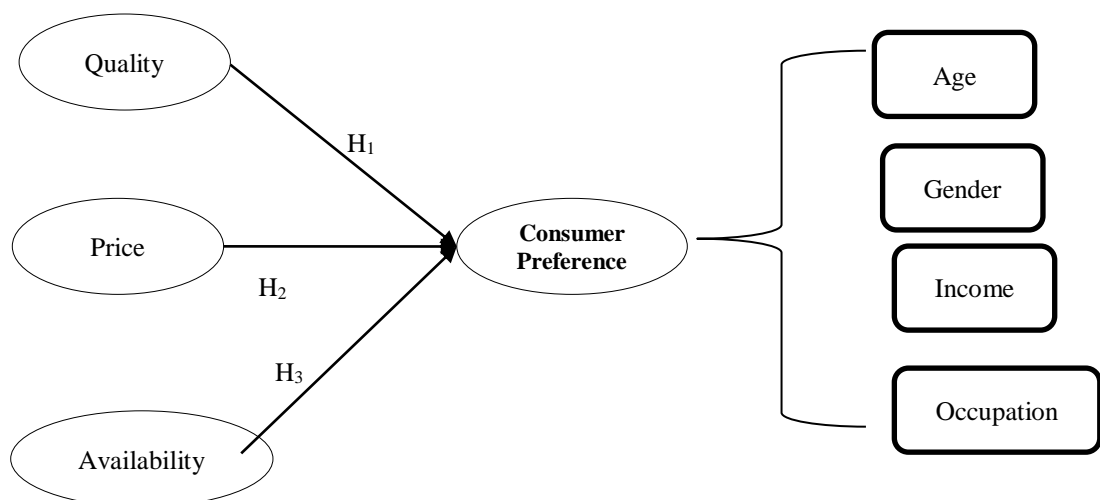

Figure 1: The Theoretical framework

3. Research Methodology

A quantitative survey-based descriptive research design was utilized in this study. This section presents the sampling, data collection, questionnaire design and mathematical framework. Figure 2 proposed the research framework employed in this study.
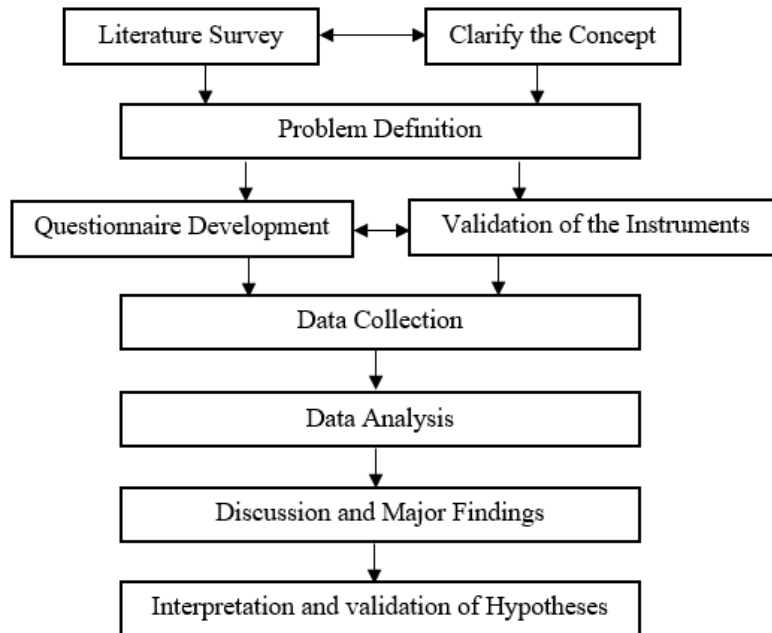
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│ Literature Survey │ ◄─────► │ Clarify the Concept │
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│              Problem Definition               │
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│ Questionnaire Development │ ◄─► │ Validation of the Instruments │
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Figure 2: Proposed research framework employed in this study

3.1 Sampling and Data Collection

After extensive desk research, an exploratory survey was done using the qualitative research method of Focus Group Discussion (FGD) to understand general perceptions about the urban consumer preference towards poultry products, and the issues involved and to seek implementable suggestions. It's an excellent tool for creating hypotheses, examining undiscovered areas of consumer experience, and clarifying ambiguous ones when dealing with a complex issue. The participants in the Focus Group Discussion included the general public consisting of a heterogeneous mix of consumers, government representatives for non-agricultural products, local people of destinations dealers, distributors, retailers, agents, customers, and service providers.

3.2 Survey Instrument

A close-ended structured questionnaire was designed and used to collect data on views and perceptions from the stakeholders of various destinations that were tested for understanding and comprehensiveness. Table 1 explain the summary of the research design

Table 1: The summary of research design and descriptive study

Research Design	Descriptive Study
Data Source	Primary Data
Instrument Used	Questionnaire
Sample Unit	Chhattisgarh
Population	Consumers of Chhattisgarh
Sampling Design	Non Probability Sampling-Convenience Sampling
Data Analysis	Regression and ANOVA

3.3 Mathematical Framework

On the basis of the literature review, the following variables have been identified viz. Independent Variables include quality, Health Consciousness, Price, and Availability, whereas Demographics include Age, Monthly Income, and Family Size, Occupation; Dependent variables include only Consumer Preference. Consumer Preference as an endogenous variable against Quality, Health Consciousness, Price, Availability is taken to be the exogenous variables. Besides, the demographics like Age, Monthly Income, and Family Size are considered controlling variables.

Mathematical Framework

$$Y = \beta 0 + \beta 1 X01 + \beta 2 X02 + \beta 3 X03 + \beta 4 X04$$

$$\widehat{Y} = \beta_0 + \sum_{i=1}^{7} \beta_i X_{it}$$

3.4 Data Analysis

Table 2: Reliability Testing

1st Method			
k/k-1	1.011235955	Sum Variance	53.52173913
Variance Total	885.1748792	Cronbach's Alpha = (k/k-1) (1- Sum Variance/ Variance Total)	0.950091984
2nd Method (ANOVA TABLE)			
Cronbach Alpha= 1- (Mean Square Error/ Mean Square Rows)			0.952168534
Interpretation: Excellent Data Consistency			

Table 3: Demographic Profile (Age Wise Distribution)

Age	Male(A)		Female(B)		A+B		x^2	Probability value
Range	N	%	N	%	N	%		
21-35	276	59.50	297	66.30	573	62.80		
36-50	107	23.10	79	17.60	186	20.40	Pearson x^2: 122.01	0
51-65	70	15.10	60	13.40	130	14.30		
65+	11	2.40	12	2.70	23	2.50		
Total	464	100	448	100	912	100		

An effort has been made to collect information without any biases, as the male-female ratio was approximately 50%. Since the result could vary based on age differences of the respondents. Table 4 presents the demographic details (income wise distribution of all males and females).

Table 4: Demographic Profile (Income Wise Distribution)

Income per Month	Male(A)		Female(B)		A+B		x^2	Probability value
	N	%	N	%	N	%		
<₹20,000	112	24	150	33	262	28.7	Pearson x^2: 81.2	0
₹20,001 – 40,000	154	33	114	25	268	29.4		
₹40,001 – 60,000	76	16	120	26	196	21.5		
>₹60,000	122	26	64	14	186	20.4		
Total	464	100	448	100	912	100		

Income-wise distribution of data analysis reveals that 29.4% of the population belongs to ₹20,001 – 40,000. This age group is the true reflection of Indian behavior as they have experienced both richness and poverty. Simultaneously, an effort has been made to collect facts from every aspect of life including the respondent belonging to below <₹20,000 to the income greater than ₹60,000. In order to derive the true picture of consumer behavior towards poultry products, Pearson x^2 reflects the value of 81.2. The high positivity degree among the different income-wise populations brings the result worth full.

Table 5: Descriptive Statistics

Mean	Quality				Price				Availability				Consumer Preference			
	6	4.7	4.74	4.98	4.82	5.01	4.81	4.63	4.7	4.77	2.9	2.86	2.67	2.94	2.83	2.9
Standard Error	0.03	0.08	0.09	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.07	0.07	0.07	0.06	0.07	0.07
Median	6	4	4	5	5	5	4	4	4	4	3	3	2	3	2	2
Mode	6	3	3	7	5	7	3	3	7	3	1	1	1	1	1	1
Standard Deviation	0.8	2.51	2.59	2.62	2.57	2.69	2.44	2.58	2.8	2.72	2.09	1.98	2.1	1.89	2.11	2.11
Sample Variance	0.65	6.31	6.72	6.89	6.62	7.24	5.94	6.64	7.86	7.38	4.38	3.91	4.4	3.58	4.44	4.43
Kurtosis	-1.5	-1	-1.1	-1.2	-1.1	-1.4	-1	-1.1	-1.4	-1.3	1.11	1.18	1.63	1.12	1.08	0.7
Skewness	0.01	0.36	0.3	0.11	0.27	0.12	0.41	0.34	0.25	0.28	1.19	1.15	1.43	1.02	1.22	1.06
Range	2	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Minimum	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Maximum	7	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Sum	5468	4287	4322	4538	4398	4571	4383	4226	4284	4352	2645	2612	2435	2678	2585	2648
Count	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912	912
Confidence Level(95.0%)	0.05	0.16	0.17	0.17	0.17	0.17	0.16	0.17	0.18	0.18	0.14	0.13	0.14	0.12	0.14	0.14

Multiple Regression Model

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_t$$

In order to estimate the associations between the dependent variable "Consumer Preference" and independent variables as explored Quality, Health Consciousness, Price, Availability. The multiple regression analysis approach is employed to measure these variables (Kumar and Sharma, 2018). The analysis of multiple regression is shown in Table 4.

Table 6: Regression Model

Model Summary [b]										
Model	R (multiple regression coeff.)	R² (coeff. of determination)	Adjusted R²	S.E. of estimate	R² change	F-change	df1	df2	Sig.	Durbin-Watson
1	0.736[a]	0.542	0.395	0.98643	0.542	268.088	3	907	0.000	2.063

The model was constituted for dependent variables into predictor variables such as Quality, Price, and Availability, measured by ANOVA (Kumar and Sharma, 2017b; Kumar et al., 2018) and shown in Table. These four constructs explain

54.2% variance of the model. There is no sign of auto-correlation as Durbin-Watson statistics is 2.063 as the value is between a range of 0 to 4 (Durbin and Watson, 1950).

Table 7: ANOVA

ANOVAa					
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1043.448	3	260.862	268.088	0.000b
Residual	882.552	907	0.973		
Total	1926.000	911			

The association is statistically significant at the 95 percent confidence level since the p-value is less than or equal to the significance level. It is assumed that the independent variable and the dependent variable (i.e. Quality, Price, and Availability) have a statistically significant connection. Table shows the regression coefficients.

Table 8: Regression Coefficients

Coefficients a							
S. No.	Dependent Variable	Independent Variable	β	T	Sig.	Co linearity Statistics	
1	Consumer Preference	(Constant)		3.696	0.000	Tolerance	VIF
		Quality	0.730	31.491	0.000	0.937	1.067
		Health Consciousness	0.137	6.044	0.000	0.986	1.014
		Price	0.096	3.982	0.000	0.867	1.154
		Availability	0.020	0.873	0.043	0.925	1.081

Out of the three explanatory factors, Quality, Price, and Availability, all of the independent variables have a positive coefficient, according to the coefficients in the table above. As a result, the hypothesis is accepted because the significant value at a 95 percent confidence interval is significantly below 0.05. Because the highest Variance inflation factor value of independent variables in the model fit is 1.154, the co-linearity index indicates that there are no chances of co-linearity.

ANOVA between socio-demographic variables and consumer preference

SUMMARY	Count	Sum	Average	Variance
Managerial	4	187	46.75	278.917
Professional	4	245	61.25	1972.25
Clerical	4	84	21	164.667
Student	4	123	30.75	90.9167
Retired	4	28	7	8.66667
Unemployed	4	36	9	68.6667
Home maker	4	96	24	304.667
Business	4	113	28.25	632.25
Quality	8	280	35	1386.29
Health Consciousness	8	263	32.875	722.696
Price	8	230	28.75	414.214
Availability	8	139	17.375	105.411

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	9319	7	1331.29	3.07854	0.02143	2.48758
Columns	1481.75	3	493.917	1.14216	0.35506	3.07247
Error	9081.25	21	432.441			
Total	19882	31				

The ANOVA test is used to see if there is a significant relationship between socio demographic variables and consumer preferences for Poultry products. To create an ANOVA test with customer choice, consumer occupation was used as a socio demographic variable. According to the ANOVA table, differences in socio demographic variables are insignificant at the 5% level because the calculated F-ratio of 1.14216 is less than the table value of 3.07, but differences in consumer preference factors are significant because the calculated F-ratio of 3.07 is greater than the table value of 2.48.

4. Results and Discussion

Various studies have identified urban consumers' preferences for poultry products. The current study found a number of elements that might be viewed as drivers of consumer choice for poultry products. The comments collected from customers show that they are knowledgeable about poultry products. The factors impacting poultry product purchase decisions were gathered from multiple literature reviews from prior work and expert comments through a pilot survey, yielding four independent variables.

The results of the two-way ANOVA test show that there is a significant difference between the identified variables of consumer perception of poultry products, despite the fact that the difference has nothing to do with their work, i.e. the socio demographic variable. As a result, the marketer does not need to be concerned about the consumer's desire for their particular employment.

In terms of business, the study will aid in the development of a marketing strategy for greater acceptability of poultry products among urban consumers. The current study will reveal a strategy for attracting new clients while also

retaining existing ones. Because it has influence over the factors that influence customer demand for poultry products.

4.1 Theoretical Implications and managerial contributions:

This study will be useful to marketing managers in framing marketing strategies based on customer preferences for a specific variable. Once the feature that attracts the most customers is identified, it will be easier for managers to make decisions based on that information. In addition, the consumer will receive the desired product in accordance with their expectations. While manufacturing poultry goods, the production manager will concentrate on the elements that consumers demand. As a result, the research findings will be beneficial not just from an entrepreneurial standpoint, but also from a consumer standpoint.

5. Conclusions, Research Limitations, and Future Scope

The demographic for the answer is made up of Indian customers, namely those from the state of Chhattisgarh, which has a diversified population. Though the study discloses Indian consumers' views, it restricts the likelihood of the western world adopting them. Several poultry products have yet to be discovered due to a paucity of resources. The research data is examined using ANOVA, although there is space for further analysis using several alternative statistical tools. We can conclude from the above list of constraints that the research has numerous future scopes, which are as follows:
Respondents to the survey may belong to a variety of demographic groups, each with its own set of tastes and preferences. Similar studies could be conducted with other unexplored poultry products in conjunction with the change in demographic profile. Other statistical applications with various techniques could be used to analyse the provided data. As a result of the preceding remark, it is clear that future research with relevant changes in product, place, and customer behaviour, as well as analysis techniques, has a lot of potential.

References

Ahmed, A. (2013). Rural Marketing Strategies for Selling Products & Services: Issues & Challenges. *Jbm&Ssr*, *2*(1), 55–60. http://www.ijtbm.com/webmaster/upload/Sep_2013_Vikas Singh.pdf

AL-NASSER, A. (2006). Poultry industry in Kuwait. *World's Poultry Science Journal*, *62*(4), 702–708. https://doi.org/10.1017/S004393390600122X

Arnawa, I.K., Sapanca, P.L.Y., Martini, L.K.B., Udayana, I.G.B., Suryasa, W. (2019). Food security program towards community food consumption. *Journal of Advanced Research in Dynamical and Control Systems*, *11*(2), 1198-1210.

Bannor, R. K., Abele, S., Kuwornu, J. K. M., Oppong-Kyeremeh, H., & Yeboah, E. D. (2022). Consumer segmentation and preference for indigenous chicken products. *Journal of Agribusiness in Developing and Emerging Economies*, *12*(1), 75–93. https://doi.org/10.1108/JADEE-08-2020-0162

Benda-Prokeinová, R., & Hanová, M. (2016). Consumer's Behavior of the Foodstuff Consumption in Slovakia. *Procedia - Social and Behavioral Sciences*, *220*, 21–29. https://doi.org/https://doi.org/10.1016/j.sbspro.2016.05.465

Bett, H. K., Peters, K. J., Nwankwo, U. M., & Bokelmann, W. (2013). Estimating

consumer preferences and willingness to pay for the underutilised indigenous chicken products. *Food Policy*, *41*, 218–225. https://doi.org/https://doi.org/10.1016/j.foodpol.2013.05.012

Bradford, H., McKernan, C., Elliott, C., & Dean, M. (2022). Consumers' perceptions and willingness to purchase pork labelled 'raised without antibiotics.' *Appetite*, *171*, 105900. https://doi.org/https://doi.org/10.1016/j.appet.2021.105900

Claret, A., Guerrero, L., Aguirre, E., Rincón, L., Hernández, M. D., Martínez, I., Benito Peleteiro, J., Grau, A., & Rodríguez-Rodríguez, C. (2012). Consumer preferences for sea fish using conjoint analysis: Exploratory study of the importance of country of origin, obtaining method, storage conditions and purchasing price. *Food Quality and Preference*, *26*(2), 259–266. https://doi.org/https://doi.org/10.1016/j.foodqual.2012.05.006

Custodio, M. C., Ynion, J., Samaddar, A., Cuevas, R. P., Mohanty, S. K., Ray (Chakravarti), A., & Demont, M. (2021). Unraveling heterogeneity of consumers' food choice: Implications for nutrition interventions in eastern India. *Global Food Security*, *28*(August 2020), 100497. https://doi.org/10.1016/j.gfs.2021.100497

da Rosa, P. P., Ávila, B. P., Costa, P. T., Fluck, A. C., Scheibler, R. B., Ferreira, O. G. L., & Gularte, M. A. (2019). Analysis of the perception and behavior of consumers regarding capybara meat by means of exploratory methods. *Meat Science*, *152*, 81–87. https://doi.org/https://doi.org/10.1016/j.meatsci.2019.02.011

de Oliveira Padilha, L. G., Malek, L., & Umberger, W. J. (2022a). Consumers' attitudes towards lab-grown meat, conventionally raised meat and plant-based protein alternatives. *Food Quality and Preference*, *99*(May 2021), 104573. https://doi.org/10.1016/j.foodqual.2022.104573

de Oliveira Padilha, L. G., Malek, L., & Umberger, W. J. (2022b). Consumers' attitudes towards lab-grown meat, conventionally raised meat and plant-based protein alternatives. *Food Quality and Preference*, *99*, 104573. https://doi.org/https://doi.org/10.1016/j.foodqual.2022.104573

Gómez-Luciano, C. A., de Aguiar, L. K., Vriesekoop, F., & Urbano, B. (2019). Consumers' willingness to purchase three alternatives to meat proteins in the United Kingdom, Spain, Brazil and the Dominican Republic. *Food Quality and Preference*, *78*, 103732. https://doi.org/https://doi.org/10.1016/j.foodqual.2019.103732

Henn, K., Bøye Olsen, S., Goddyn, H., & Bredie, W. L. P. (2022). Willingness to replace animal-based products with pulses among consumers in different European countries. *Food Research International*, 111403. https://doi.org/https://doi.org/10.1016/j.foodres.2022.111403

Indrawan, D., Tacken, G., & Hogeveen, H. (2018). What drives the choice of poultry market channel and the change of purchase behavior due to highly pathogenic avian influenza outbreaks? *Poultry Science*, *97*(10), 3652–3660. https://doi.org/https://doi.org/10.3382/ps/pey222

Iris, G., Abraham, H., & Doron, K. (2018). Examination of the relationship between dietary choice and consumer preferences for sustainable near-food products in Israel. *Journal of Cleaner Production*, *197*. https://doi.org/10.1016/j.jclepro.2018.06.267

Kumar, S. P. S. and M. (2011). CONSUMER BEHAVIOR IN RURAL MARKETING-A NEW PARADIGM Dr.Satya Prakash Srivastava 1 Manish Kumar 2. *Asian*

Journal of Technology and Management Research, 01(1), 1–14.

Lazzarini, G. A., Visschers, V. H. M., & Siegrist, M. (2018). How to improve consumers' environmental sustainability judgements of foods. *Journal of Cleaner Production*, *198*, 564–574. https://doi.org/https://doi.org/10.1016/j.jclepro.2018.07.033

Liu, J., Tetens, I., & Bredie, W. L. P. (2022). Consumer perception and sensory properties of bakery products fortified with chicken protein for older adults. *International Journal of Gastronomy and Food Science*, *27*, 100484. https://doi.org/https://doi.org/10.1016/j.ijgfs.2022.100484

McCarthy, M., O'Reilly, S., Cotter, L., & de Boer, M. (2004). Factors influencing consumption of pork and poultry in the Irish market. *Appetite*, *43*(1), 19–28. https://doi.org/https://doi.org/10.1016/j.appet.2004.01.006

Michel, L. M., Punter, P. H., & Wismer, W. V. (2011). Perceptual attributes of poultry and other meat products: A repertory grid application. *Meat Science*, *87*(4), 349–355. https://doi.org/https://doi.org/10.1016/j.meatsci.2010.11.010

Mishra, M. (2011). *Rural Products & its market in India : A literature Review. 9519*, 151–153.

Niva, M., & Vainio, A. (2021). Towards more environmentally sustainable diets? Changes in the consumption of beef and plant- and insect-based protein products in consumer groups in Finland. *Meat Science*, *182*(October 2020), 108635. https://doi.org/10.1016/j.meatsci.2021.108635

Ofuoku, A. U., & Akusu, M. O. (2016). Preference and Willingness of Consumers to Pay for Value-added Poultry Products in Niger Delta Region of Nigeria. *Journal of Northeast Agricultural University (English Edition)*, *23*(4), 82–92. https://doi.org/https://doi.org/10.1016/S1006-8104(17)30011-9

Profeta, A., & Hamm, U. (2019). Do consumers care about local feedstuffs in local food? Results from a German consumer study. *NJAS - Wageningen Journal of Life Sciences*, *88*, 21–30. https://doi.org/https://doi.org/10.1016/j.njas.2018.12.003

Reithmayer, C., & Mußhoff, O. (2019). Consumer preferences for alternatives to chick culling in Germany. *Poultry Science*, *98*(10), 4539–4548. https://doi.org/10.3382/ps/pez272

Rondoni, A., Asioli, D., & Millan, E. (2020). Consumer behaviour, perceptions, and preferences towards eggs: A review of the literature and discussion of industry implications. *Trends in Food Science & Technology*, *106*, 391–401. https://doi.org/https://doi.org/10.1016/j.tifs.2020.10.038

Shan, L. C., Regan, Á., Monahan, F. J., Li, C., Lalor, F., Murrin, C., Wall, P. G., & McConnon, Á. (2017). Consumer preferences towards healthier reformulation of a range of processed meat products. *British Food Journal*, *119*(9), 2013–2026. https://doi.org/10.1108/BFJ-11-2016-0557

Shukla, S., & Tandon, N. (2011). Rural Marketing-Exploring New Possibilities in the Rural India. *Gurukul Business Review-Gbr*, *7*(Spring), 125–130.

Teixeira, A., & Rodrigues, S. (2021). Consumer perceptions towards healthier meat products. *Current Opinion in Food Science*, *38*, 147–154. https://doi.org/https://doi.org/10.1016/j.cofs.2020.12.004

Van Loo, E. J., Caputo, V., & Lusk, J. L. (2020). Consumer preferences for farm-raised meat, lab-grown meat, and plant-based meat alternatives: Does information or brand matter? *Food Policy*, *95*, 101931. https://doi.org/https://doi.org/10.1016/j.foodpol.2020.101931

Verbeke, W., & Viaene, J. (1999). Beliefs, attitude and behaviour towards fresh meat consumption in Belgium: empirical evidence from a consumer survey. *Food Quality and Preference*, *10*(6), 437–445. https://doi.org/https://doi.org/10.1016/S0950-3293(99)00031-2

Vukasovič, T. (2010). Buying decision-making process for poultry meat. *British Food Journal*, *112*(2), 125–139. https://doi.org/10.1108/00070701011018815

Wilks, M. (2017). Consumer Attitudes and Acceptance of Clean Meat. In *Reference Module in Food Science*. Elsevier. https://doi.org/https://doi.org/10.1016/B978-0-08-100596-5.21892-1

Yi, H. T., Cha, Y. B., & Amenuvor, F. E. (2021). Effects of sales-related capabilities of personal selling organizations on individual sales capability, sales behaviors and sales performance in cosmetics personal selling channels. *Sustainability (Switzerland)*, *13*(7). https://doi.org/10.3390/su13073937