

CONSUMER PURCHASING INTENTION AND BEHAVIOUR TOWARD CHICKEN MEAT IN SULAYMANIYAH CITY: EMPIRICAL EVIDENCE FROM A FIELD SURVEY

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Abstract. Consumer behavioural study is an important determinant factor in food marketing for the value chain of agribusiness and poultry production development strategies. The aims of this study were to determine the consumer purchasing behavioural intention of chicken meat within the application of planned behavioural control toward the food purchasing framework developed by Ajzen (2015). This study was carried out in Sulaymaniyah city, Kurdistan Region of Iraq (KRI). The data were collected via a structured questionnaire form indicating the respondents' choice and decision-making process while purchasing chicken meat and the reasons behind its consumption based on a 5-point Likert Scale. The major questions were focused on purchasing places and preferred chicken meat types and cuts and consumption and purchasing frequency, as well as determining the effectors for the purchasing decision of the respondents and the TPB's three constructs: attitude (ATT), subjective norm (SN) and perceived behavioural control (PBC) that form a behavioural intention (BI). The findings from this study showed a positive consumer attitude and perceived behavioural control (p-value = 0.000, $\beta = 0.469$; p-value = 0.000, $\beta = 0.704$, respectively) towards chicken meat purchase and consumption in Sulaymaniyah city. However, the subjective norms had negative significant influences (p-value = 0.000, $\beta = -0.261$) compared to ATT and PBC of consumers in purchasing and consuming chicken meat. It was also found that 89.4% of the respondents consume chicken at home once a week or more. This study renders valuable guidance for further development in the agribusiness sector and marketing strategies in the KRI.

Keywords: chicken meat, consumer behaviour, attitude, subjective norm, behavioural intention

INTRODUCTION

Consumers are the individuals who recognize their needs or desires, make a purchase, and then dispose of the product in the consumption process. The consumption of agricultural and industrial goods, services, housing, and wealth all affect the utility of a typical consumer (Grundey, 2009). Therefore, a consumer is considered a central point of all supply and value chain activities with different behaviours that need to be studied and understood. According to Loudon and Della Bitta (1984), consumer behaviour is "the decision process and physical activity, which individuals engage in when evaluating, acquiring, using or disposing of goods and services", and Engel et al. (1995) defined consumer behaviour as "the action and decision processes of people who buy products and services for personal consumption".

Consumer behaviour can be influenced by several factors, which are grouped in three captions; economic, psychological, and sociological. The producers and marketers can reach to a vital scope to effectively target their products and services in relevant market segments through understanding the purchase and consumption behaviour of consumers. Establishing and maintaining

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exchange relationships that satisfy consumer needs and wants are also critical for the enhanced functioning of commodity value chains (Kotler and Armstrong, 2013). Thus, in the countries where consumer's buying behaviour is well understood, the quality of products is good. This increases the competitiveness of their products and services in the international market and the country's export potential. At the same time, high-quality domestic products and services lead to a sophisticated domestic consumer base (Blackwell et al., 2006).

The Kurdistan Region of Iraq (KRI) as a part of the Republic of Iraq went through a tough time of food crises during the imposed blockade in the 1990s when fewer people could afford to purchase meat. After the blockade lifted and the economy thrived, the demand for meat, especially chicken meat, has increased in the KRI in the last two decades (USDA, 2010; Alazawi and Aljumaili 2020). The highest food consumption expenditure was recorded in the Sulaymaniyah governorate with 318,710 Iraqi dinars (about 270.90 USD) in 2011. The average spending valued at market price was 180,673 Iraqi Dinar (about 153.74 USD) per person per month in Iraq (IAUIraq, 2011). According to KRSO (2012), the highest household expenditure share on food and non-alcoholic beverages from the family total disposable income was recorded in the Sulaymaniyah governorate at an estimated 26.589% in 2012. Chicken meat is among the most highly consumed foods in the KRI. Poultry products, mainly meat and eggs, are the main source of animal protein in an Iraqi individual's diet, which has led poultry production to become one of the most dynamic agricultural subsectors in the last few decades. In the KRI, poultry production is entirely dominated by private sector entrepreneurs. The projects of poultry production in general and mainly broiler chicken production have significantly grown in the last two decades; for example, about 1,544 broiler chicken production projects with a capacity of producing 23,055,245 chickens per a year were registered in 2019 (KRSO, 2021). This increase is assumed to be associated with the rise in demand for poultry products and other parts of Iraq, besides the increase in chicken meat import from abroad, which may affect the continuity of the growth in the sector (Rudaw, 2018). Meanwhile, the growth in food imports has also led to the local consumers becoming acquainted with the international standards of food product quality, safety, and design, which could have changed consumer behaviour and preference

in the KRI. Because of its economic contribution to the regional economy, it is vital to identify the determinants, problems, and constraints of the poultry sector development in the KRI.

Although chicken meat is regularly consumed in the KRI, consumer behaviour towards purchasing and consumption demands have not been considerably quantified yet. Only a few studies have been carried out regarding consumer behaviour and choice for agri-food consumption in the KRI, such as Neima et al. (2021), Ali (2021); and Hasan et al. (2019). Understanding consumer behaviour assists in formulating food production, price, distribution channels, and sale promotion policies. Additionally, awareness of consumer buying behaviour is a positive contribution to the country's economic state.

This study is based on the Theory of Planned Behaviour TPB used for food consumption decisions developed by Ajzen (2015) as the basic theory. It describes human behaviour in three main constructs: first, attitude, second, subjective norms, and third, perceived behavioural control as predictors of intention towards an individual behaviour (Fig. 1).

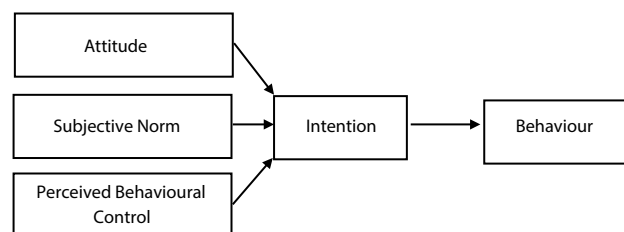


Fig. 1. Theory of planned behaviour framework (Ajzen, 2015)

The TPB framework has not previously been used in the KRI for meat purchasing and consumption behavioural studies, but it was tested elsewhere (Bilbiie et al., 2021; Abdullahi et al., 2020; Khattak and Khattak, 2018; Sherwani et al., 2018; Weng et al., 2017; Kumar and Smith, 2017; Huang et al., 2014; Ahmed et al., 2014; Jusmaliani and Nasution, 2013; Khalek, 2014; Mari et al., 2012).

Thus, this research aims to study consumer behaviour regarding variety, frequency, the timing of consumption, and other critical aspects of consumers when buying and consuming chicken.

The hypotheses of this study are: H1: Attitude (ATT) has a positive influence on chicken meat purchasing behavioural intention, H2: Subjective norm (SN) has a positive influence on chicken meat purchasing behavioural intention, and H3: Perceived behavioural control (PBC) has a positive influence on chicken meat purchasing behavioural intention.

MATERIALS AND METHODS

Descriptive research was conducted in Sulaymaniyah city, Kurdistan Region of Iraq (Fig. 2) between November 2020 and January 2021. Focus group methodology was used in this research to understand consumer behaviour toward chicken meat and what affected their decisions making for chicken meat purchasing and consumption in Sulaymaniyah city.

Three hundred (300) respondents were asked to fill in a structured questionnaire indicating their choice and decision-making process while buying chicken meat and the reasons behind its consumption based on a 5-point Likert scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). The questionnaire was mainly divided into four major sections: the first section, socio-demographic and socio-economic characteristics of the respondents; the second section, to separate chicken meat-eaters and non-eaters; the third section, purchasing places and preferred chicken meat types and cuts, and consumption and purchasing

frequency; and the fourth part, determining the effectors of the purchasing decision of the respondents and the TPB's three constructs: attitude (ATT), subjective norm (SN) and perceived behavioural control (PBC) that form a behavioural intention (BI).

After the completed forms were checked, 23 forms were taken out, and only 277 forms were taken into account for final data analysis with a confidence level of 95%; the margin of error of 5 was raised to 5.89. This value reflects one standard rule for sample size in SEM (minimum of 200 cases) (Kline, 2011).

The obtained data through survey forms were recorded and processed in a database designed in MS Excel 2019 and SPSS 25.0 for Microsoft Windows 10. Descriptive statistics were used to analyze the data, and weighted scoring was used to rank the priority of answers relating to consumer choice and preferences. Furthermore, χ^2 tests were employed for the statistical comparison between some of the variable groups and the effectors. Pearson correlation and multiple linear regression were applied to determine the hypothesis of proposed relationships between the dependent variable (BI) and the independent variables (ATT, SN, and PBC).

The Cronbach's alpha values for the studied constructs (BI, ATT, SN, and PBC) (0.86, 0.67, 0.70, and 0.67, respectively) were deemed to have adequate reliability because they were above 0.6, which is considered high reliability and an acceptable index (Nunnally and Bernstein, 1994). In addition, the overall value of

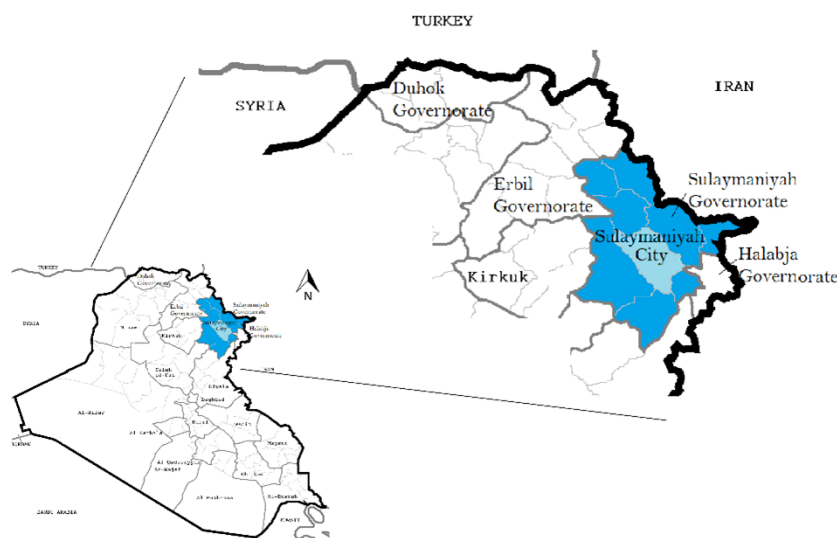


Fig. 2. The Study Location Map (Sulaymaniyah City)

Cronbach’s alpha reliability for this study was well above the limit and equal to (0.850).

RESULTS

Table (1) shows the socio-demographic and socio-economic characteristics of the respondents in this study. The respondents were 55.2% male and 44.8% female, and the age range was between 18 and 56 years and older. They were mostly younger: between 18 to 35 (65.3.8%) and middle age 36 to 55 years old (30.0%). The respondents were mostly married (67.1%) and graduated with a diploma (10.5%), Bachelor degree (50.2%), and higher (22.4%). Additionally, they were generally working in public sectors (71.5%). The respondents’ incomes were between middle low income with an average monthly income of 500,000 to 1,000,000 Iraqi Dinar (43.68%S), and middle income, that is, a monthly income of 1,000,000 to 1,500,000 Iraqi Dinar (23.47%).

Fig. (3) shows the percentages of the respondents who eat chicken meat (95.31%) and those who do not eat chicken meat (4.69%). The respondents were asked reasons for not eating chicken meat. In their response, 30.8% were answered “I am a vegetarian”, which is equal to 1.44% of all the respondents and 69.2%, which is equivalent to 3.25% of all the respondents had other reasons. The other reasons were: 66.67% of them “do not like the taste and prefer other types of meat” especially red meat, 22.22% referred to “Health issues and doctor’s advice” and “others” constituted 11.1%.

The frequencies and percent of the respondents regarding place, type, and preferred cut are shown in (Fig. 4, 5, and 6). The data showed that the respondents were mostly buying chicken at the wet markets at 73.9%

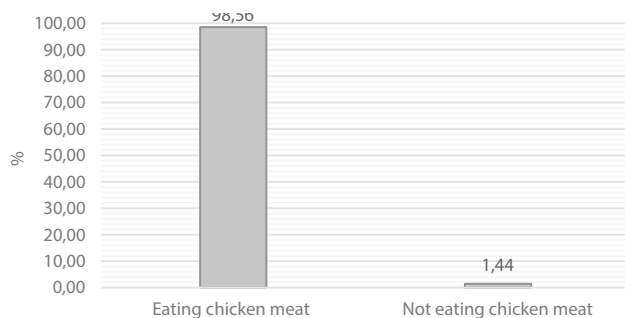


Fig. 3. Distribution of respondents by level of chicken meat consumption

Table 1. Socio-demographic and socio-economic profile of respondents

Variables	Category	Fre- quen- cies	Per- cent- age	
Gender	Male	153	55.2	
	Female	124	44.8	
	Total	277	100	
Age	18–35	181	65.3	
	36–55	83	30.0	
	56 years and older	13	4.7	
	Total	277	100	
Marital status	Married	186	67.1	
	Single	85	30.7	
	Others	6	2.2	
	Total	277	100	
Educa- tional back- ground	Illiterate	1	0.4	
	Read and write only	3	1.1	
	Primary school	9	3.2	
	Secondary school	10	3.6	
	High school	24	8.7	
	Diploma	29	10.5	
	Bachelor degree	139	50.2	
	Postgraduate degree	62	22.4	
	Total	277	100	
	Occupation	Student	6	2.0
Public service		198	71.5	
Private sector		20	7.2	
Self-employed		33	11.9	
Retired		3	1.1	
Unemployed		17	6.1	
Student		6	2.0	
Total		277	100	
Monthly Income in Iraqi Dinar (IQD)		Low: less than 500,000	51	18.4
		Middle low: 500,000–1,000,000	121	43.7
	Middle: 1,000000–1,500,000	65	23.5	
	Middle high: 1,500,000–3,000,000	36	13.0	
	High: More than 3000000	4	1.5	
	Total	277	100	

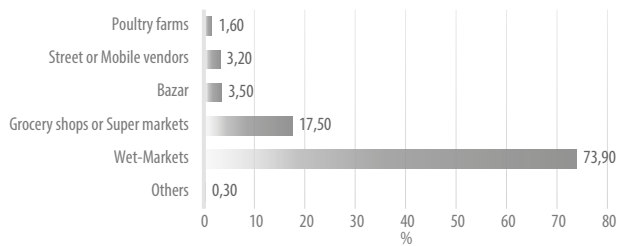


Fig. 4. Places of purchase of chicken meat

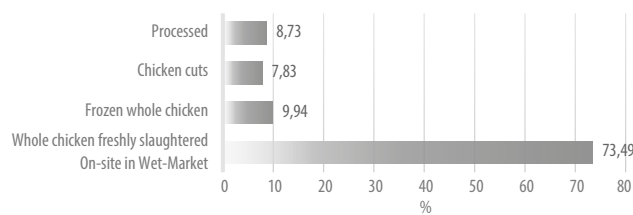


Fig. 5. Consumption of favoured types of chicken meat products

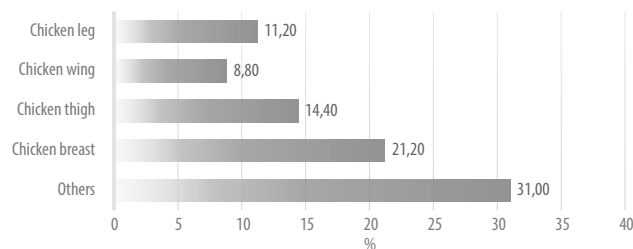


Fig. 6. Consumption of favoured cuts of chicken

(Fig. 4), and whole chicken freshly slaughtered on-site in the wet markets was bought by 73.49% (Fig. 5).

It can be seen clearly that fewer people buy at the grocery shops and markets (17.5%) where mostly the processed meat, chicken cuts and frozen chicken are sold, which are less favourably bought (8.73%, 7.83%, and 9.94%, respectively) by the respondents (Fig. 5).

Regarding the question “What part of chicken cuts do you like to eat the most?”, the chicken breast was the most liked part by 31.00%, then thigh by 21%, and other parts (Fig. 6).

The respondents’ responses to the questions on purchasing frequency and quantity of chicken meat consumption are shown in (Fig. 7, 8, 9, and 10). Regarding

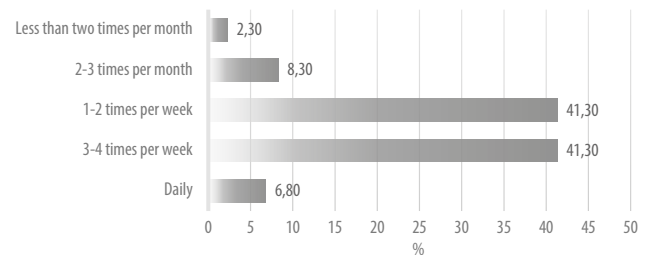


Fig. 7. Distribution of respondents on the basis of the frequency of chicken meat consumption at home

the frequency of chicken meat consumption at home, about 6.8% of the respondents had chicken at home every day; about 41.3% of the respondents reported that their eating frequency was 3 to 4 times a week at home; and similarly, about 41.3% consume chicken meat once or twice a week. This means the most significant percentage, 82.6%, of the respondents consume chicken meat at least once a week, while 6.8% eat chicken meat almost every day. About 8.3% only eat chicken meat twice or three times per month, and only 2.3% eat chicken less than two times per month or occasionally (Fig. 7).

Chicken consumption per meal per family was reasonably divided between 2–3 kg per meal by 33.3%, 1–2 kg by 30.30%, less than 1kg by 25.38%, while a minority (10.98%) consume more than 3 kg per meal per family (Fig. 8).

The frequency of purchasing chicken meat among the respondents is mostly once a week, 28.40%, while the minimum rate of 2.7% purchase daily. 23.5% purchase chicken meat once a month, while 22.7% purchase once in two to three days and 22.7% once in two weeks (Fig. 9). The Pearson Chi-square (X^2) test was applied to find the differences among socio-demographic and

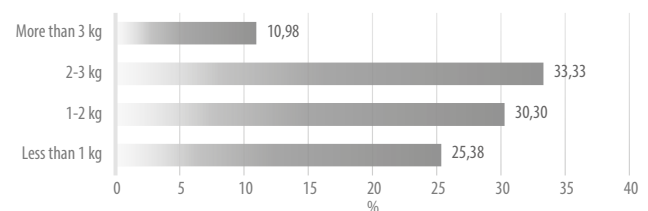


Fig. 8. Distribution of respondents on the basis of amount of chicken meat consumption (kg) per meal per household at home

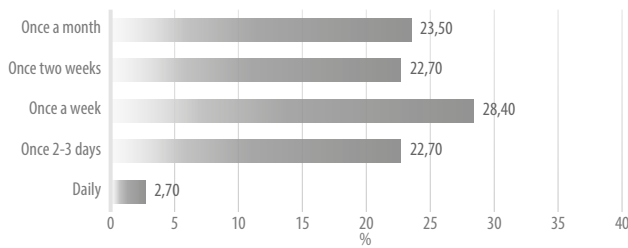


Fig. 9. Distribution of respondents on the basis of frequency of purchasing chicken meat

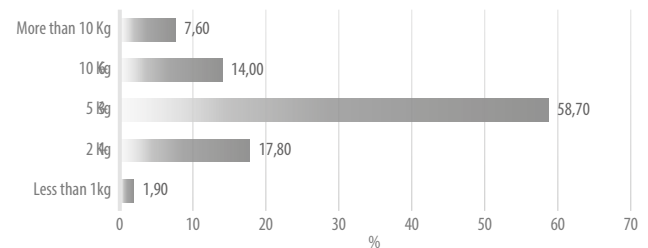


Fig. 10. Distribution of respondents on the basis of amount of chicken meat purchase (kg) per each shopping times

socio-economic characteristic groups of the respondents with the purchasing and consumption quantity and frequencies. The X^2 test showed that significant differences were found between household size groups with buying frequency ($X^2 = 29.345$, p-Value = 0.022*), showing that smaller household groups purchase less frequently than bigger households. Married respondents' purchasing frequency was significantly less with a greater amount ($X^2 = 16.130$, p-Value = 0.041*) than single respondents with a smaller amount. Among sex groups, female respondents were significantly purchasing less frequently ($X^2 = 17.211$, p-Value = 0.002**), with a bigger amount ($X^2 = 9.469$, p-Value = 0.05*), and more frequently having chicken meat per week than male respondents.

The chicken meat purchase quantity of the majority of respondents (58.7%) was 3–5 kg for each time shopping, and the minority of the respondents, 1.9%, purchase less than 1kg, and 7.60% purchase more than 10 kg per each time shopping (Fig. 10).

From the Pearson Chi-square test statistical analysis, it was found that among sex groups, female respondents were significantly purchasing less frequently

($X^2 = 17.211$, P-Value = 0.002**), with a bigger amount ($X^2 = 9.469$, P-Value = 0.05*), and more frequently having chicken meat per week than male respondents. No significant differences were found among either age groups nor occupation groups in relation to the purchasing and consumption quantity and frequencies shown on (Figs. 4, 5, 6, 7, 8, 9 and 10) above.

The results from the Table (2) show that the respondents were almost strongly agreed with the studied effectors: freshness ranked first with 56.20%, delicacy and easiness to cook ranked second with 41.90%, taste ranked third with 44.50%, and appearance ranked fourth with 40.80%, except for the price which was ranked 5 with neutral by 43.00%. Moreover, the Pearson Chi-square test was applied to find the differences among socio-demographic and socio-economic characteristic groups of the respondents in relation to the studied effectors. Only significant differences were found between household size and delicacy and easiness to cook ($X^2 = 30.380$, P-value = 0.016**) when the bigger families found the chicken meat easier to cook in comparison to smaller size families. Additionally, significant differences were

Table 2. The ranking of some effectors in determining consumer purchasing decisions

Effectors	Percent					Mean	Rank	SD
	1	2	3	4	5			
Freshness	2.30%	3.40%	9%	28.70%	56.20%	4.33	1	0.94
Delicacy and Easiness to cook	1.50%	1.10%	17.40%	38.10%	41.90%	4.18	2	0.86
Taste	3.00%	4.20%	12.50%	35.80%	44.50%	4.15	3	0.99
Appearance	3.40%	2.30%	20.40%	33.20%	40.80%	4.06	4	1.00
Price	15.10%	11.30%	43.00%	24.20%	6.40%	2.95	5	1.10

5-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

Table 3. Descriptive statistics and Pearson correlations coefficients of the variables

Variables	Descriptive statistics		Pearson correlations coefficients			
	mean	std. deviation	BI	ATT	SN	PBC
BI	3.21	1.06	1.00			
ATT	3.45	0.91	0.66**	1.00		
SN	2.90	1.33	0.42**	0.50**	1.00	
PBC	3.05	1.07	0.70**	0.60*	0.76**	1.00

5-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

* The significant level at $p < 0.05$.

** The significant level at $p < 0.01$.

found between age groups with relation to price ($X^2 = 41.832$, P-Value = 0.003**); the younger group of the respondents found price an effective attribute of chicken meat popularity. Surprisingly, no significant differences were found between income group variables with relation to price variable, which was expected to be a key determinant of the popularity of chicken meat among lower-income groups. However, the results rejected this hypothesis ($X^2 = 23.489$, P-value = 0.708^{n.s}).

Table (3) shows the descriptive analysis of the variables Attitude and Pearson correlation coefficient analysis results with the existence of positive significant correlation levels between all the variables. All the variables have a positive impact on chicken meat purchasing and consumption behavioural intention. It is observed from this study that PBC had the strongest relations among the variables, ATT in the studied model came second, and SN was the last.

Multiple linear regression analysis was applied to find the level of relationship between the variables and test the hypothesis of determining the behavioural

intention to purchase chicken meat through the applied Theory of Planned Behaviour TPB framework among the respondents in Sulaymaniyah city. The result indicated that the Theory of Planned Behaviour TPB could explain 62.8% of the variance in the intention to purchase chicken meat. Additionally, the results reveal that for attitude (ATT) the model coefficient is significant (p-value = 0.000) and had a positive influence ($\beta = 0.469$) on chicken meat purchasing and consumption behavioural intention of the studied population. The subjective norms (SN) has shown a significant model coefficient (p-value = 0.000) with a negative influence ($\beta = -0.261$) on chicken meat purchasing and consumption behavioural intention of the studied population. On the other hand, perceived behavioural control (PBC) has shown a significant model coefficient (p-value = 0.000) with a positive influence ($\beta = 0.704$) on chicken meat purchasing and consumption behavioural intention of the studied population (Table 4).

Table 4. Multiple regression results for the TBS variables

Variables	Unstandardized coefficients		Standardized coefficients	t-value	p-value	R ²
	β	std. error	Beta			
Constant	0.199	0.156	–	1.274	0.204	0.628
ATT	0.469	0.053	0.404	8.825	0.000**	
SN	-0.261	0.046	-0.327	-5.721	0.000**	
PBC	0.704	0.061	0.712	11.633	0.000**	

DISCUSSION AND CONCLUSION

This study investigated the purchasing intention and behaviour of consumers with regard to their knowledge and perception of chicken meat in Sulaymaniyah city. The data from this study showed that the respondents mostly purchase and consume whole chicken freshly slaughtered on-site in the wet markets, which can be related to the consumers' taste and freshness preference that has previously been shown by Neima et al. (2021); and Abdalla et al. (2021) by finding positive and statistically significant relationships between the taste of chicken and white meat consumption in Sulaymaniyah City. This can prove the success of the wet market as a common small business found in almost every quarter in Sulaymaniyah city. However, the data from this study shows that consumer purchasing behaviour in Sulaymaniyah city differs from the Habib et al. (2020) results, which showed 58.8% of their respondents preferred frozen chicken meat rather than wet markets in Thi-Qar city, which is located in the south of Iraq.

According to Polian (2012) and Elsesy et al. (2015), despite the fact that chicken feet are considered a rich source of protein, collagen, and calcium, chicken feet were less purchased or consumed (8.7%) in comparison to other chicken cuts. The results from this study agreed with the results found in Mosul province (Thulfiqar et al., 2020).

The planned behavioural control toward the food purchasing framework developed by Ajzen (2015) was applied to determining the effectors of the purchasing decisions of the respondents and the TPB's three constructs: attitude, subjective norm, and perceived behavioural control that form a behavioural intention. The findings from this study revealed that attitude and perceived behavioural control PBC significantly and positively affected broiler chicken meat purchase, which agrees with (Ajzen, 1996), who stated that the attitudes are positively correlated to the intention of purchase. Additionally, this result also agreed with (Abdullahi et al., 2020; Khattak and Khattak, 2018; Sherwani et al., 2018; Kumar and Smith, 2017; Huang et al., 2014; Ahmed et al. 2014; Jusmaliani and Nasution, 2013; Khalek, 2014; Mari et al., 2012), who reported a positive relationship between attitude, perceived behavioural control, and intention to purchase meat while disagreeing with regard to subjective norms. In contrast, there was a significantly negative relationship between broiler chicken meat

consumption and subjective norm that disagreed with (Janssen, 2018; Khalek and Ismail, 2015), who found subjective norm to be a vital factor in meat consumption behaviour, while agreeing with the findings of (Khattak and Khattak, 2018; Yang et al., 2018), who found subjective norm to be a less important factor in meat purchasing and consumption behaviour. The findings from this study explicate that assessment of ATT, SN, and PBC of consumers is an important predictive of their behavioural intention to support the upcoming change in the supply chain and value chain of chicken meat.

According to NUMBEO (2021), the residents of Sulaymaniyah city spend about 33.5% of their income on food, beverages, and cigarettes, and 14.8% spend it on restaurants that include expenditure on chicken meat. Additionally, it was found from this study that 89.4% of the respondents consume chicken at home at least once a week and mostly consume more than 1 kg per meal per family. Chicken meat can be considered an important source of protein that is highly and frequently consumed in the KRI. This study provides valuable guidance for further improvement and development in marketing strategies and chicken production in the Kurdistan Region of Iraq.

In conclusion, the findings from this study showed that TPB can be a helpful framework to explain and determine the factors that influence chicken meat purchasing behavioural intention of the respondents in Sulaymaniyah city. It can also be applied in other parts of the Kurdistan region of Iraq but rather with an extended TPB, which would be more appropriate. Therefore, based on the findings from this study extending the TPB for further accuracy in investigation and determining behavioural intention for agri-food purchase and consumption is recommended. This study provides awareness on how the consumers deal with their food resources and how consumers place value on food quality attributes that directly affect their intention to purchase. This can contribute to a better understanding of consumers and improve the supply and value chain of agribusiness sectors in KRI and Iraq.

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