



The Role of Product Awareness In Creating The Brand Value of Local Gastronomic Items: Example of Water Buffalo Products From Balıkesir Region

* Gözde KUMAŞ^a , Cevdet AVCIKURT^a , Mehmet SARIOĞLAN^a , Bilsen BİLGİLİ^b , Esat SAÇKES^c 

^a Balıkesir University, Faculty of Tourism, Department of Tourism Management, Balıkesir/Türkiye

^b Kocaeli University, Faculty of Tourism, Department of Tourism Guidance, Kocaeli/Türkiye

^c Balıkesir University, Sındırgı Vocational School, Department of Tourism and Hotel Management, Balıkesir/Türkiye

Abstract

The primary objective of this study is to determine the role of product awareness in determining the brand equity of local gastronomic elements. To this end, the impact of local product perception on local product purchasing behavior and the moderating role of local product awareness on this potential effect will be determined. The sub-objective of this study is to determine how local product perception, local product awareness, and local product purchasing behavior differ according to demographic variables. For these purposes, data were collected from local residents of villages in Balıkesir where water buffalo are raised and buffalo products are produced, as well as from local tourists. Convenience sampling was employed in the study. Following the pilot study, robust data obtained from 393 individuals was analyzed. SPSS software was used for data analysis. The research results were explained using Social Exchange Theory. The study results showed that local product perception has an impact on local product purchasing behavior. Local product awareness was found not to moderate this effect. Local product perception, local product awareness, and local product purchasing behavior were found to differ significantly by gender. Women were found to be more sensitive to these differences than men. The results indicate that Balıkesir is still in the early stages of achieving brand value due to the lack of awareness of local buffalo products. Effective marketing strategies should be implemented to target the region's target audience.

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* Corresponding Author

E-mail: gozde.kumas@balikesir.edu.tr (G. Kumaş)

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INTRODUCTION

Eating and drinking is a basic need for living beings. Strengthening this basic need with the ingredients used, special production methods and rich flavors causes it to become popular among people for consumption motivation. As a result of this popularity, experiencing the local foods and beverages of different regions and having an idea about them adds social and cultural richness to people. According to Yüncü (2010), food and beverage activities can be a guide in learning the cultural structure of a society. For example, the diversity of local flavors shows that there is a rich culinary culture (Pektaş & Demirtaş, 2021, p.101). Gastronomic items also play an effective role in the formation of attractiveness by being included in the tourism product of a destination (Savaşkan & Kınır, 2020, p.940). In fact, local products of a city not only contribute to gastronomy tourism (Eryılmaz, Demir, & Pektaş, 2019, p.190) but also add distinctiveness to the city (Pektaş & Demirtaş, 2022, p.9). In this context, buffalo products are one of the local gastronomic items that add distinctiveness to Balıkesir. In Balıkesir, buffalo breeding constitutes the main source of livelihood for locals. Buffalo breeding has been practiced for generations in various regions of the region for many years. Sustainable buffalo production methods have an important role in the transfer of buffalo products to future generations.

In order to increase the demand for local gastronomic items, quality production and qualified promotional efforts should be maintained together (Ertuğrul & Demirkol, 2007). Because local gastronomic items have an important role in preserving the traditional structure and naturalness of a region (Suna & Uçuk, 2018, p.101). Promoting local foods produced in rural areas and finding a place among popular gastronomic items supports local development and contributes to the international recognition of countries (Wolf, 2006). For customer satisfaction and economic gain to be achieved as a result of the promotion efforts of local gastronomic items, it is necessary to pay attention to the benefit of consumers (Erdem & Swait, 1998). In other words, consumers should have easy access to local products and be able to purchase them at affordable prices. At the same time, with the purchase of local products, consumers should be aware of the potential development in the region where they live. Since the brand value of the products that are promoted in a healthy way for consumers will be high, the local people will gain profit with repeated purchases, while consumer satisfaction will be ensured. Promotion of local gastronomic products makes it possible to sustain cultural values by transferring them to future generations. Within the scope of this research, local buffalo products of Balıkesir region are discussed.

Brand Value

Brand equity as an intangible asset is created through marketing activities, and the value of goods and services offered to consumers through the brand name and symbols can increase or decrease (Aaker, 1991). Brand equity is also created by changes in consumers' responses to brand information (Keller, 1993). Because brand equity increases in direct proportion when brand awareness increases (Lamb et al., 2018, p.108). In fact, according to consumer-based brand equity, in order to ensure brand awareness, it is necessary to ensure brand awareness, position the brand in the mind, consumers' responses to this brand perception, and establish a bond between the brand and the consumer (Keller, 2001). Therefore, brand equity includes four dimensions: brand loyalty, brand awareness, brand associations and perceived quality (Aaker, 1991).

In order to create brand equity, it is necessary to create associations in the minds of consumers that the brand is strong, unique and of high quality in line with the consumer's expectations (Hoeffler & Keller, 2002). According to

Zeithaml (1988), perceived quality is different from objective or actual quality, as quality is shaped by the consumer's own expectations and tastes. Therefore, brand awareness should be increased by improving the consumer's ability to recognize the brand under different conditions (Keller, 1993). As a result, brand loyalty should be created with positive associations and repeated purchasing behaviors should be created (Chaudhuri, 1999). This is because brand awareness positively affects the purchase intention towards products with brand equity (Moreira et al., 2017), while higher prices can be paid for these products (Kerin & Hartley, 2018, p.272). Therefore, products that have a positive value for consumers in the subconscious mind are more easily preferred by consumers.

Buffalo Breeding

There are 74 different breeds of buffaloes, which can be of domestic and wild origin. Buffaloes are bi-hoofed and belong to the ruminant cattle family. As shown in Figure 1, buffaloes are basically divided into two as African and Asian buffaloes. Within the scope of this research, the domestic river buffalo (*bubalus bubalis*) species from the Asian buffalo population will be examined. River buffaloes contribute to their breeders mostly in terms of meat and milk (Soysal, 2006).

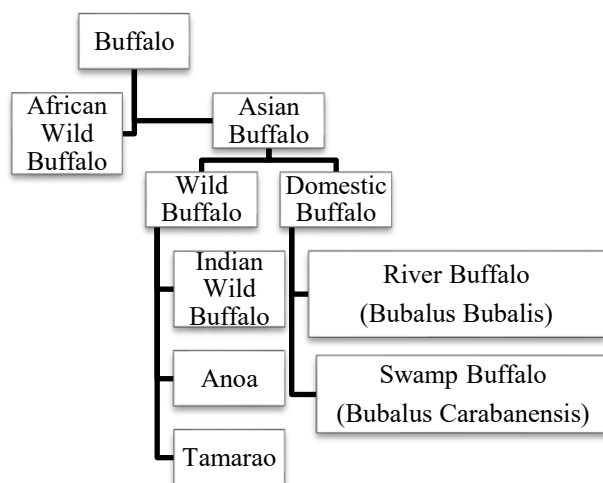


Figure 1. General Grouping of Buffalo Breeds (Ligda, 1998).

Since buffaloes can stay in pastures for 8-9 months starting from March-April every year, they are a suitable breed for pasture animal husbandry. However, buffaloes have very inadequate sweat glands. For this reason, it is vital that they live in wetlands. Otherwise, while the stress level increases in animals due to extreme heat, a decrease in milk yield is observed (Şahin, 2015). Unlike cattle, buffaloes can provide high quality meat and milk products because they can consume roughage with high cellulose content (Kök, 1996, p.46). In order to support cattle breeding in our country, roughage production capacities are prioritized in order to maintain the productive life span of breeding cattle (Republic of Turkey Ministry of Agriculture and Forestry, Cattle Import and Export Report, 2024). In addition, according to the report, attention is paid to details such as the location of animal shelters on a sloping land so that they can be easily cleaned, the permeability of the soil structure to protect animal health after defecation, and the availability of areas where animals can comfortably shelter and move freely (Republic of Turkey Ministry of Agriculture and Forestry, Bovine Animal Import and Export Report 2024). Support for animal breeding is an example of sustainability in rural development.

Buffalo Products

There are many meat, milk and leather products obtained from buffaloes raised in Turkey and in different geographies of the world. Thanks to the high fat content, protein, lactose, calcium, folate and soot (Abesinghe et al., 2020) in buffalo milk, products such as cream, cream, butter, ice cream, cheese, yogurt and milk powder can be produced from buffalo milk. (Yılmaz & Kara, 2019). Due to the high proportion of solid fats in buffalo milk and the larger structure of fat globules, it is possible to make butter (Ermetin, 2020). Moreover, there are also recipes in the literature where buffalo cream is used instead of oil (Yalçın, 2025). Thanks to the high milk fat content in buffalo milk; Turkish delight (Pamuk & Gürler, 2009) and kefir (Gül et al., 2015) can be made from buffalo milk. Buffalo milk is high in milk fat, making it suitable for making Turkish delight (Pamuk and Gürler, 2009) and kefir (Gül et al., 2015). Furthermore, buffalo milk, with its high milk fat content, can be used to make ice cream without the need for additional fat supplements (Bekiroğlu and Özdemir, 2020). Typically, buffalo yoghurt is made with non-homogenized milk (Abesinghe et al., 2020). On the other hand, products produced with buffalo milk and buffalo whey have better cooking properties than others and contain beneficial components for health (Yalçın et al., 2023). In India, buffalo milk is used to produce ghee oil, which is rich in vitamins and minerals and recommended for diets (Bhavaniramy et al., 2018). Buffalo cream is obtained by cooking buffalo milk at 92 degrees Celsius for at least 2 minutes and cooling it (Turkish Food Codex, TKG, 2003). For example, it is known that in Afyonarahisar, buffalo cream is used more than buffalo milk and yoghurt and is used for decoration in many desserts (Özer et al., 2022). In addition, there are cheeses obtained from buffalo milk in many regions of the world. Mozzarella Cheese in Southern Italy (Mauriello et al., 2003), Italian Ricotta cheese produced by using the whey of Mozzarella cheese (Tripaldi et al., 2020) and Paneer Cheese in India (Kumar et al., 2014), which is obtained by heating buffalo milk to a certain temperature and then coagulating it with various chemicals, are examples of cheeses obtained from buffalo milk. In addition to these, buffalo leather is especially sought after for the footwear and handbag industry due to its thick structure (Stoner et al., 2002). In addition to being processed into products such as sausage, salami, sausage and bacon, buffalo meat is also widely consumed as unprocessed meat (Anonymous, 2000). In many parts of the world, especially buffalo milk is used in various forms in the cuisines of different cultures.

Buffalo Breeding in Balıkesir Region

Buffalo breeding is of great importance mainly in Balıklı and Yakupköy neighborhoods of Altıeylül, the central district of Balıkesir. Buffalo breeding is one of the livelihoods of the people of the region. Buffalo breeding has been practiced in this region with state support since 2011 and sales of buffalo products reached the highest levels during the Covid-19 pandemic in 2020. Figure 1 below shows a cross-section of the Balıkesir Plain.



Image 1. Balıkesir Plain (NTV News, 2021).

As a result of preliminary interviews with village mukhtars before the research, it was determined that cheese, cream and yogurt are mostly produced from buffalo milk in this region. Even in the Balıklı neighborhood alone, according to data dated 2021, more than 500 buffaloes are raised. The producers of the region want to continue buffalo breeding by passing it on to future generations. Buffalo milk and products such as cream, yogurt and cheese obtained from buffalo milk are sold to neighboring districts and provinces (NTV News, 2021).

Methodology

Research Background

The main purpose of this study is to determine the role of product awareness in determining the brand value of local gastronomic items. In this direction, will be determined the effect of local product perception on local product purchasing behavior and will be determined the moderating role of local product awareness in this possible effect. The sub-objective of this study is to determine how local product perception, local product awareness and local product purchasing behaviors differ according to demographic variables. As a result of the research, this research is important in terms of increasing brand awareness of local buffalo products and gaining sustainability of local buffalo products. The fact that economic growth and social development can be achieved in the region by creating brand value of local buffalo products shows the importance of the research. When the literature is analyzed, the fact that there is no study on Balıkesir local buffalo products in the literature shows the originality of this study. Using a limited number of quantitative methods related to local products is another unique aspect of this research. As a result of the research; recommendations will be made for the promotion of buffalo products of Balıkesir region, which are one of the local gastronomic items, to locals and domestic tourists, to benefit the consumer and to increase consumer satisfaction and purchasing behavior. In the light of this research, the importance to be given to the promotion of buffalo products in Balıkesir will lead to an economic growth in the region. Because both the production of locals will be supported more and at the same time their income levels will increase. Thus, it is thought that an economic benefit can be obtained as a result of this research. In the light of the suggestions presented in the research, it is thought that domestic tourist visits to the region will be more frequent with the support of local production and the economic gain of the local people. In this way, it is also thought that the research will provide a social benefit as a cultural transfer will take place. Suggestions that can guide local administrators in supporting production activities, increasing product awareness and branding will be presented.

Within the scope of the research, Balıkesir is considered because it has a favorable climate and fertile soils in terms of agriculture and animal husbandry. Within the scope of the research, Balıkesir is considered because it has a favorable climate and fertile soils in terms of agriculture and animal husbandry. The scope of the research is also limited to Balıkesir region and local buffalo products. The reason why the scope of the research is limited to buffalo products among the local products in Balıkesir is that buffalo products are consumed in Balıkesir region and throughout the country and constitute an important source of livelihood for the local people.

In this study, it is possible to reconcile the role of product awareness in the creation of brand value of buffalo products of Balıkesir region in the context of local gastronomic elements with the Social Exchange Theory. According to this theory pioneered by George Homans (1958) and Peter Blau (1964), which emphasizes that there is a social benefit rather than an economic benefit in both individual and collective communication between people and societies (Aydın, 2017; Özkalp, 2005), there is an exchange in the social relationship between people. Criteria such

as respect, valuing, consideration and honoring play a role in this exchange (Wallace & Wolf, 2004). According to the theory; when the benefit between people decreases, the negative costs of the relationship increase and the relationship is about to end (Gonzalez, Coromina, & Gali, 2018). In addition, rational behavior, utility and fairness criteria are considered in relationships. Therefore, for a healthy social exchange to take place, the costs of the relationship should not exceed the benefits and these should be mutually observed.

The ethics committee permission request for the research was evaluated at the Balıkesir University Social Sciences and Humanities Research meeting and approved with the decision numbered E-19928322-050.04-391711.

Population and Sample

The population of the study consists of residents of the neighborhoods of Balıklı, Halalca, Yakupköy, Karaman and Ayşebacı, who are engaged in buffalo breeding in Balıkesir Province. Population information is as follows according to 2019 data (Balıkesir Metropolitan Municipality, Neighborhood Based Population Census Information, 2019). A total of 8452 people, including 1630 residents of Balıklı neighborhood, 1402 residents of Halalca neighborhood, 1508 residents of Yakupköy neighborhood, 2192 residents of Karaman neighborhood, and 1720 residents of Ayşebacı neighborhood, constitute the universe of this research. The participants consist of locals and domestic tourists. The sample consists of people who responded positively to the request to fill out the questionnaire. In the data collection phase, a pilot study was conducted before going out to the main field. With the results of the pilot study; whether each statement in the scales has a clear expression, length and brevity, general format and other details can be evaluated (Churchill & Iacobucci, 2002). Within the scope of the research, 55 people were reached in the pilot research conducted in the first stage and the analysis continued with 50 questionnaire forms due to incomplete markings found in 5 questionnaire forms. In the final research phase, 410 people were reached and the analysis was carried out with 393 questionnaires, 17 of which were excluded from the analysis due to the deficiencies found in the questionnaire forms obtained. Data were collected between July 18, 2024 and August 26, 2024.

Formulation of Research Hypotheses and Research Model

In the light of the literature, the research question: "Is it possible to address the role of product awareness in the creation of brand value of local gastronomic items within the scope of buffalo products of Balıkesir region?". Within the scope of this general research question, hypotheses were developed based on the literature. In a study conducted by Kardeş Delil and Yılmaz (2023) to determine local food awareness, it was determined that the participants include local food in their homes, learn recipes from their elders and try to teach them to the next generation. Therefore, according to this study, it was determined that the participants' awareness of local products was high. According to Küçükylmaz (2019), a positive relationship was determined between the perception and awareness of geographically marked products. In the light of the researches conducted; H1 hypothesis was formed in this research. Jensen et al. (2019) argue that geographical indication studies will be useful in increasing added value in organic food products. In a 2017 study, it was aimed to determine the perception of local products by tourists visiting Safranbolu region and the demand for these products (Kara & Gürbüz, 2017). According to the results of this research, although the number of local and foreign visitors to the region is close to each other, the traditional products of the region are Turkish delight, halva and jam. It was determined that the demand for these products was higher among local visitors compared to foreign visitors. Toklu, Ustaahmetoğlu and Küçük (2016) found that the perception of geographically marked products increases the tendency to pay more. Meral and Şahin (2013) aimed to determine the geographically

marked product perception of individuals living in Kahramanmaraş city center within the scope of Bursa Gemlik olive. Within the scope of this research, it was determined that 76.3% of the participants had a lack of knowledge about geographically marked food, but 86.2% of them consumed Gemlik olives. In other words, consumers engage in purchasing behavior without having sufficient awareness. In addition, it was determined that 58.9% of the participants would pay more for products with geographical indication, while 29.8% of the participants would pay more for gemlik olives with geographical indication. Based on the researches conducted, the hypothesis H 2 was formed. In the study conducted by Muti Tabanlı and Akdoğan (2022), local product perception was tested using a demographic variable. Based on these researches, hypotheses H3, H4, H5, H6, H7, H8, H9, H10, H11 were formed.

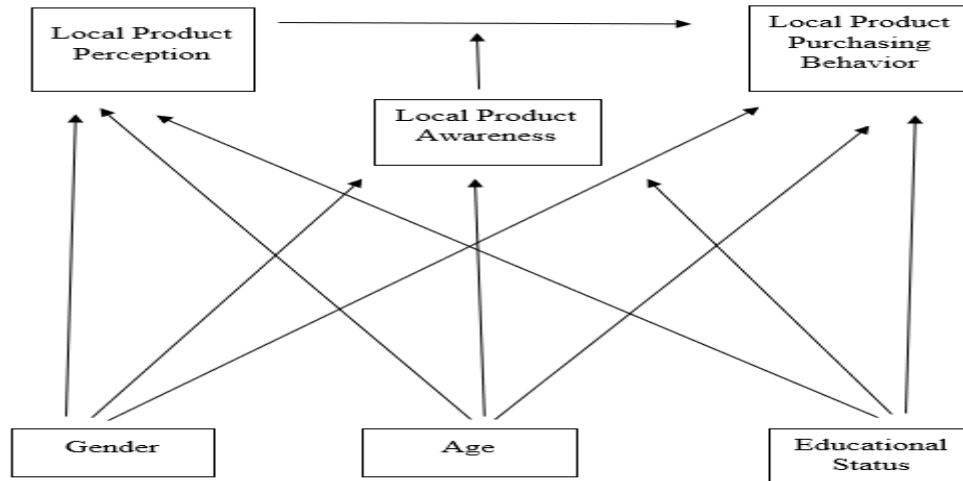


Figure 2. Research Model

The following hypotheses are formulated in the light of the research model shown in Figure 2 above. The hypotheses expressing the main purpose of the research are as follows:

- H1: Perception of local regional products has a significant effect on purchase behavior of local products.
- H2: Local product awareness has a moderating role in the effect of perception of local products on purchase behavior of local products.

The hypotheses expressing the sub-objective of the research are as follows:

- H3: Local product perception differs significantly according to age groups.
- H4: Local product awareness differs significantly according to age groups.
- H5: Local product purchasing behavior differs significantly according to age groups
- H6: Local product perception differs significantly according to education levels.
- H7: Local product awareness differs significantly according to education levels.
- H8: Local product purchasing behavior differs significantly according to education levels.
- H9: Local product perception differs significantly according to gender.
- H10: Local product awareness differs significantly according to gender.
- H11: Local product purchasing behavior differs significantly according to gender.

Studies in which a cause-and-effect relationship is established between variables have explanatory research characteristics (Coşkun, Altunışık, & Yıldırım, 2017; Lin, 1976, p.137). Since a cause-and-effect relationship was

established with the hypotheses designed within the scope of this research, this research has the characteristics of an "explanatory research".

Scales Used in the Study

In the research, a quantitative survey will be conducted to examine local product perception, local product awareness and purchasing behaviors. A survey will be applied to the participants determined by convenience sampling technique. Convenience sampling technique is the most widely used sampling technique (Suri, 2011) and it is possible to reach participants in an easy and cost-effective way (Benoot, Hannes, & Bilsen, 2016). The statements between 1- 12 in the scale to be used within the scope of the research were adapted from the scale on product perception developed by Teuber (2011). Statements between 13-18 were adapted from the product awareness scale developed by Verbeke et al. (2012). Statements 19 to 22 were adapted from the purchase behavior scale developed by Aprile, Caputo and Nayga (2016). In total, a unique scale with 22 statements was created. The scale to be used in this study was used by Küçükyılmaz (2019) and Sefa (2023) in studies on determining the perception and awareness of geographically marked products with the same dimensions but with different numbers of statements between dimensions. In these studies, these scales were translated into Turkish and validity and reliability tests were conducted. Although an original scale has been created in the research, the research carries the deductive logic at this point since the existing scales in the literature are utilized.

Findings

The reliability analysis results of the pilot study for the scales in the study were determined. In addition, the correlation values of the items were analyzed. According to the reliability results of the local product perception scale, an increase in reliability was observed if the item LPP2 was removed from the scale, according to the reliability results of the local product awareness scale, according to the reliability results of the LPA18 item and according to the reliability results of the local product purchase behavior scale, according to the reliability results of the LPPB20 item. therefore, these items were removed from the scales. The fact that the correlation values of all other items remaining in the scales are positive is sufficient to conclude that there is no correlation except for scale development or adaptation studies.

Table 1. Scales and Cronbach's Alpha (Reliability) Values at the End of the Pilot Study

Scales	Cronbach's Alpha
Local Product Perception Scale	0.800
Local Product Awareness Scale	0.647
Local Product Purchasing Behavior Scale	0.554

According to Table 1, a Cronbach's Alpha (α) value in the range of $0.80 \leq \alpha < 1.00$ indicates that a scale is highly reliable (Kalaycı, 2017, p.405). Reliability values up to 0.50 can also be considered acceptable (Coşkun et al., 2017, p.133). As a result of this research, the reliability value of 0.800 for the "local product perception scale", the reliability value of 0.647 for the "local product awareness scale" and the reliability value of 0.554 for the "local product purchase behavior scale" show sufficient reliability. The results of the validity analysis of the scales in the study were determined after the pilot study.

Table 2. KMO Values and Exploratory Factor Analysis (EFA) Results of the Scales in the Pilot Study

Local Product Perception Scale Items (9 items)	KMO	Factor Loadings
	0.658	
LPP1		0.669
LPP3		0.757
LPP4		0.822
LPP6		0.750
LPP7		0.728
LPP8		0.696
LPP10		0.536
LPP11		0.823
LPP12		0.703
Local Product Awareness Scale Items (5 items)	0.667	
LPA13		0.761
LPA14		0.563
LPA15		0.664
LPA16		0.689
LPA17		0.630
Local Product Purchase Behavior Scale Items (3 items)	0.590	
LPPB19		0.648
LPPB21		0.802
LPPB22		0.729

According to the EFA results shown in Table 2' ; the values below (0.500) were excluded from the scale. Therefore, LPP5 and LPP9 were excluded from the scale. The minimum KMO value generally accepted in the literature was determined as 0.70 (Coşkun et al., 2017). However, the KMO value is considered acceptable up to 0.50. As a result of this research, it was determined that the KMO value of the "local product perception scale" was (0.658), the KMO value of the "local product awareness scale" was (0.667) and the KMO value of the "local product purchasing behavior scale" was (0.590). It is seen that Bartlett values are less than 0.05 in each scale. In this case, it was determined that all scales have sufficient validity. In the correlation table examined with the KMO value, the determinant value is 0.32, 0.44 and 0.76, respectively, and these values are greater than 0.00001, indicating that there is no multicollinearity between the items. In other words, it shows that the correlation between the items is at a sufficient level and the explanatory power of each item is sufficient.

Table 3. Reliability Analysis Results of the Scales in the Final Study

Scales	Cronbach's Alpha
Local Product Perception Scale	0.885
Local Product Awareness Scale	0.804
Local Product Purchasing Behavior Scale	0.760

Table 3 shows the data obtained from the final field research after the pilot study. The reliability of all the scales is respectively 0.885 0.804 0.760, indicating adequate reliability for each scale. A Cronbach's Alpha (α) value in the range of $0.80 \leq \alpha < 1.00$ indicates that a scale is highly reliable (Kalaycı, 2017, p.405). It is also known that the reliability value can be considered acceptable up to 0.50 (Coşkun et al., 2017, p.133).

Table 4. Validity values of all scales - EFA Results - Normality Distribution Results

Scales and Their Expressions	KMO	Eigenvalue	Explanatory	Factor Loadings	Kolmogorov-Smirnov	Skewness	Kurtosis
Local product perception scale	0.904	4.712	52.354		0.000		
LPP12				0.805		-.531	-.525
LPP10				0.791		-.577	-.418
LPP8				0.778		-.537	-.783
LPP7				0.748		-.594	-.348
LPP11				0.732		-.468	-.611
LPP1				0.712		-.566	-.411
LPP6				0.708		-.523	-.537
LPP4				0.607		-.555	-.503
LPP3				0.601		-.661	-.311
Local product awareness scale	0.783	2.824	56.478		0.000		
LPA15				0.810		-.178	-.929
LPA14				0.790		-.226	-.606
LPA13				0.758		-.495	-.768
LPA16				0.706		-.251	-.840
LPA17				0.685		-.494	-.784
Local product purchasing behavior scale	0.690	2.029	67.647		0.000		
LPPB22				0.846		-.584	-.415
LPPB21				0.815		-.790	-.246
LPPB19				0.806		-.619	-.368

According to Table 4; the KMO value of the local product perception scale is (.904), the KMO value of the local product awareness scale is (.783) and the local product purchase behavior scale is (.690) and all scales have sufficient validity levels. Because the minimum KMO value generally accepted in the literature is determined as 0.70 and the KMO value is considered acceptable up to 0.50 (Coşkun et al., 2017). When the Bartlett Sphericity Test results of each scale are examined, it is seen that these values are less than 0.05. Therefore, it was concluded that the scales were sufficient for factor analysis.

In all scales, the eigenvalue was based on 1 during the EFA test and each of them was grouped under a single dimension. As a result of the final questionnaire analyses, there was no need to remove items from the scales due to the adequacy of the factor loadings as a result of the final questionnaire analyses, including local product perception scale with 9 items, local product awareness scale with 5 items and local product purchasing behavior with 3 items. The ratio of explaining the total variance of the dimension that constitutes the local product perception scale was determined as 52.354%. The ratio of the dimension that constitutes the local product awareness scale to the total variance was found to be 56.478%. The ratio of the dimension that constitutes the local product purchasing behavior scale explaining the total variance was determined as 67.647%. The explanatory rate of the total variance in the scales is expected to be 50% and above (Coşkun et al., 2017). Therefore, the explanatory rate of each scale is at a sufficient level.

According to the EFA (exploratory factor analysis) results of the scales, it was determined that each scale was grouped under a single dimension. Contrary to other studies using the "product perception" dimension (Küçükylmaz, 2019; Sefa, 2023), in this study, it was concluded that the dimensions of quality and reliability (LPP8,

LPP10, LPP11, LPP12), culture and tradition (LPP6, LPP7), and economic support (LPP1, LPP3, LPP4) were gathered under a single dimension. These results partially overlap with the results of Küçükyılmaz (2019) within the scope of product perception dimension (LPP1,3,4,8,10,11,12). Local product awareness and local product purchasing behavior were grouped in a single dimension as in other studies (Küçükyılmaz, 2019; Sefa, 2023). However, since LPA18 and LPPB20 did not have sufficient factor loadings within the groups, they were excluded from the analysis.

Before proceeding to the hypothesis tests, the normality distribution of the scales was examined to make sure which of the parametric or nonparametric tests should be used in the test analysis. In normality distribution, the Kolmogorov-Smirnov value should be $p > 0.05$. This condition is not met in all dimensions. However, in social sciences, it is not correct to say that this value is not significant and does not meet the condition of normal distribution. Therefore, it is recommended to look at the skewness and kurtosis values. Skewness and kurtosis values, which are considered valid for normal distribution, should be in the range of $(-1 < x < +1)$ (Kalaycı, 2017). However, according to Tabachnick and Fidell (2013), this range should be between $(-1.5 < x < +1.5)$, while values in the range $(-2 < x < +2)$ are also considered acceptable (George & Mallery, 2010; Yalız, 2013, p.100). Since the skewness and kurtosis values of all the statements in this study were within the adequate range, it was determined that normal distribution was realized and parametric analyzes could be performed. Therefore, the skewness and kurtosis values of each statement in the scales are within the sufficient range for hypothesis testing. Thus, the suitability for parametric tests was ensured. While analyzing the data, missing data were identified. Since the missing data value was not $p > 0.05$, missing data could not be assigned to the data. While there were 393 data in total, the analysis continued with 390 healthy data.

Table 5. Mean Values of Scale Items

Scales	Average Value
Local product perception scale	3.66
LPP12	3.62
LPP10	3.71
LPP8	3.65
LPP7	3.63
LPP11	3.74
LPP1	3.67
LPP6	3.56
LPP4	3.73
LPP3	3.71
Local product awareness scale	3.48
LPA15	3.37
LPA14	3.45
LPA13	3.74
LPA16	3.32
LPA17	3.53
Local product purchasing behavior scale	3.71
LPPB22	3.71
LPPB21	3.80
LPPB19	3.64

According to Table 5; "LPP11 - Buffalo products from Balıkesir region are produced in standard quality compared to buffalo products from other provinces. LPP3 -Balıkesir region buffalo products contribute to the promotion of the region. LPA13- It is important for me that buffalo products of Balıkesir region are produced by supporting the local economy. LPPB21 -I would like to buy local buffalo products with natural ingredients" statements were found to have high values.

It is seen that the general means of all three scales are high. Before the hypothesis testing of categorical variables, it was determined that the variances of all categorical variables showed a homogeneous distribution ($p > 0.05$). However, since the missing data value determined while analyzing the data was not $p > 0.05$, missing data could not be assigned to the data. Table 6 below shows the distribution of demographic characteristics over 390 participants.

Table 6. Demographic Characteristics of Participants

Demographic Characteristics		Number	Percentage (%)
Gender	Woman	209	53.6
	Male	181	46.4
Age	18-25	100	25.6
	26-35	126	32.3
	36-50	65	16.7
	51 and above	96	25.4
Education Status	High school and below	23	5.9
	Associate Degree	73	18.7
	License	156	40.0
	Postgraduate	138	35.4

Before the hypothesis tests, the mean values of the scales were calculated. The hypotheses that constitute the main purpose of the research are as follows:

- H1: Perception of local regional products has a significant effect on purchase behavior of local products.
- H2: Local product awareness has a moderating role in the effect of perception of local products on purchase behavior of local products.

Before proceeding to hypothesis testing, the mean values of the scales were calculated separately in order to reach reliable results.

Table 7. Correlation Values for H1 Test

Correlations				
		LPP	LPA	LPPB
LPP	Pearson Correlation	1	0.746	0.866
	Significance (p.sig) (2-tailed)		0.000	0.000
	Number (n)	390	390	390
LPA	Pearson Correlation	0.746	1	0.647
	Significance (p.sig) (2-tailed)	0.000		0.000
	Number (n)	390	390	390
LPPB	Pearson Correlation	0.866**	0.647**	1
	Significance (p.sig) (2-tailed)	0.000	0.000	
	Number (n)	390	390	390

According to Table 7 above, there is a significant relationship between the independent variable local product perception, the second level independent variable local product awareness and the dependent variable local product purchase behavior. In the Table 7, the fact that all three relationships are $p < 0.05$ indicates a significant relationship. The correlation coefficient (+) close to 1 indicates a strong positive relationship. According to this relationship result, the highest correlation coefficient between local product purchase behavior and local product perception is (.866), the correlation coefficient between local product perception and local product awareness is (.746), and the correlation coefficient between local product awareness and local product purchase behavior is (.647), respectively, indicating a high positive relationship between the variables. In this case, it is appropriate to measure the effect between the variables.

Table 8. Simple Linear Regression Analysis Results for Test H 1

ANOVA						
	Model	Sum of Squares	df	Center Square	F	Significance (p)
1	Regression	264.100	1	264.100	1166.501	0.000 ^b
	Remaining	87.844	388	0.226		
	Total	351.944	389			
a. Dependent Variable: LPPB						
b. Predictors: (Constant), LPP						

Simple Linear Regression Analysis was applied since the effect of an independent variable on a dependent variable would be tested in the hypothesis. According to the result of the Simple Linear Regression Analysis, the test value was determined as 1166.501 and the R value was determined as .866. According to this result; it is revealed that the independent variable has a strong positive effect on the dependent variable. In the Anova table shown in Table 8, it is determined that $p < 0.05$. In this case, it is determined that the perception of local products has a significant effect on the purchase behavior of local products. In other words, the participants' perception of local products increases their local product purchasing behavior. Therefore, the hypothesis H1 is accepted. The R square value was determined as 75%. The effect of the independent variable "perception of local products" on the dependent variable "buying behavior of local products" has an explanatory value of 75%.

Following the H1 hypothesis test, the role of the moderator variable in the effect of the independent variable on the dependent variable will be tested. In order to determine whether the effect of the independent variable on the dependent variable increases or decreases due to the moderator variable, the hypothesis H2 was formed. The result of the moderator variable test was obtained by multiplying the independent variable "local product perception" and the second level independent variable "local product awareness".

Table 9. Moderator Analysis Results for H2 Test

Coefficients ^a						
Model		Unstandardized Coefficient		Standardized Coefficient	t	Significance (p)
		B	Std. Error	Beta		
1	(Constant)	3.750	0.028		132.542	0.000
	Zscore(LPP)	0.806	0.037	0.848	21.780	0.000
	Zscore(LPA)	0.004	0.036	0.004	0.108	0.914
	Moderator	-.038	0.020	-.051	-1.915	0.056
a. Dependent Variable: LPPB						

According to Table 9, the test value is 391.735 and the R value is (0.868), which again shows that the independent variable has a strong positive effect on the dependent variable. Since the significance value of the moderator variable test did not meet the condition of $p < 0.05$ (0.056), it was determined that the H2 hypothesis was rejected. Because the explanatory rate of the moderator variable (local product awareness) in the effect of the independent variable "local product perception" on the dependent variable "local product purchasing behavior" is also 75%.

In this case, the hypothesis H2 is rejected at the limit. Since the effect of the independent variable (perception of local products) on the dependent variable (buying behavior of local products) is 75.3%, the moderating variable (awareness of local products) has no moderating role.

In the light of the finding expressing rejection at the boundary in Table 9, SPSS PROCESS developed by Andrew Hayes was utilized in order to make the regulatory effect analysis in the H2 hypothesis test in more detail. In this way, more detailed results could be obtained. At the analysis stage, as shown in Hayes (2022), the analysis was

conducted according to "Model 1", which is compatible with the model of this study.

Table 10. The Role of Moderator Variable (Local Product Awareness) in the Effect of Independent Variable on Dependent Variable, General Results of Process Analysis

	coeff	se	t	p	LLCI	ULCI
constant	-.5702	0.3292	-1.7319	0.0841	-1.2174	0.0771
LPP	1.1724	0.0981	11.9517	0.0000	0.9795	1.3653
LPA	0,2011	0,1113	1,8064	0,0716	-,0178	0,4199
Int 1	-,0535	0,0280	-1,9151	0,0562	-,1085	0,0014

In the Hayes table shown in Table 10, it is seen that the $p < 0.05$ condition for the moderating role is not met and the result in Table 9 is also found here. However, significant effects of the moderating role were found in the mean levels of the moderating variable "local product awareness". These values are shown in Table 11.

Table 11. The Role of Moderator Variable (Local Product Awareness) in the Effect of Independent Variable on Dependent Variable, Process Analysis Results, Differences by Scale Variable

LPA	Effect	se	t	p	LLCI	ULCI
2.6000	1.0332	0.0466	22.1659	.0000	0.9415	1.1248
3.6000	0.9796	0.0461	21.2672	.0000	0.8891	1.0702
4.4000	0.9368	0.0566	16.5422	.0000	0.8255	1.0481

Since the modifier variable is a scale scale, the mean values differ according to the markings made by the participants. According to Table 11, it is determined that the effect of the independent variable on the dependent variable is significant ($p < 0.05$) at various levels (2-Disagree, 3-Negree, 4-Agree) according to the standard deviations of the mean values of the markings made by the participants of the second level independent variable "local product awareness". In addition, the fact that LLCI and ULCI values at certain levels are above zero (0) proves the regulatory role in the model.

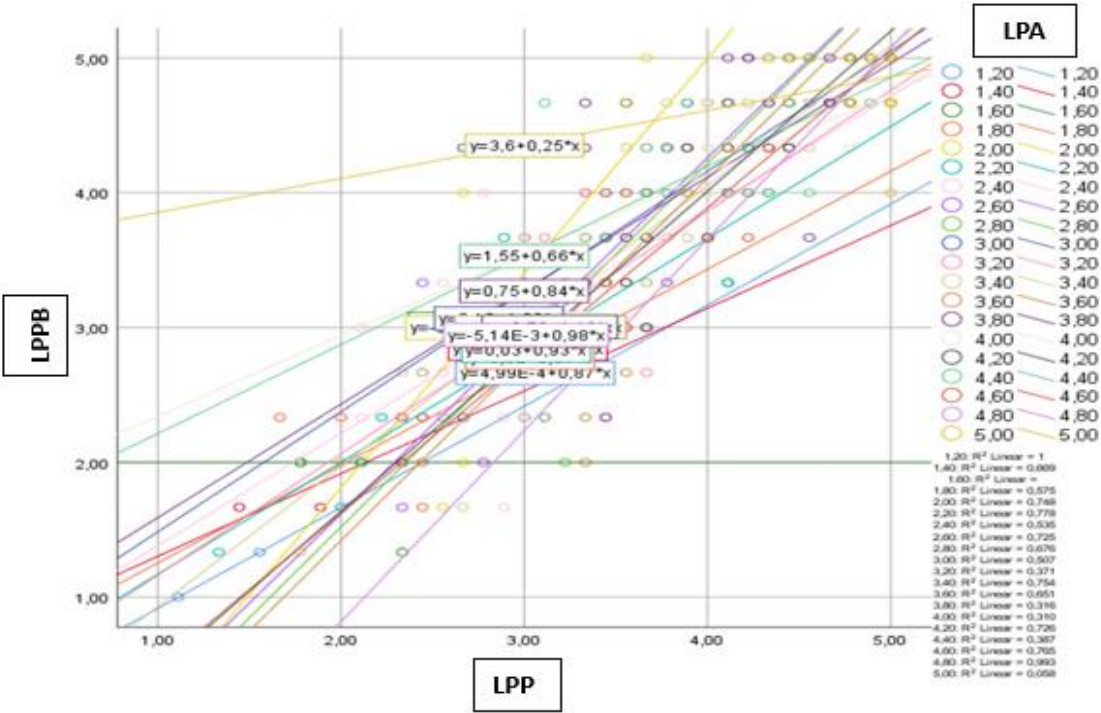


Figure 3. Detailed Results of Moderator Variable by Scale

According to Figure 3 above, according to the average markings made by the participants, at each level of local

product awareness; local product perception creates an increase in local product purchase behavior. When the R2 values are analyzed, the level of 4.80 (strongly agree) has the highest explanatory value with 99%. When the overall R2 value of the table is examined; it is seen that the moderating variable (awareness of local products) plays a constant increase role at a rate of 75% in the effect of the independent variable on the dependent variable. Table 12 below shows the H1 and H2 test results.

Table 12. Results of Hypothesis Tests for the Main Objectives of the Study

Hypotheses	Test Results
H ₁ : Local product perception has a significant effect on purchase behavior of local products. H ₂ : Local product awareness has a moderating role in the effect of local product perception on local product purchase behavior.	Acceptance Rejection

The table below shows the results of the hypothesis tests that constitute the sub-objective of the research. According to Table 13; One Way Anova test, which is used in hypothesis testing of variables with more than 2 categories, was applied for H3, H4, H5, H6, H7 and H8 tests. Since the (p) significance value is not $p < 0.05$, all hypotheses shown in Table 13 are rejected. In other words, local product perception, local product awareness and local product purchasing behavior do not differ significantly according to age and educational status.

Table 13. One-Way Anova Test Results for H3, H4, H5, H6, H7, H8

Hypotheses	Test Value (F)	Significance p.(sig)
H ₃ : Local product perception differs significantly according to age groups.	1.081	0.365
H ₄ : Local product awareness differs significantly according to age groups.	0.272	0.896
H ₅ : Local product purchasing behavior differs significantly according to age groups.	1.264	0.284
H ₆ : Local product perception differs significantly according to education levels	1.532	0.206
H ₇ : Local product awareness differs significantly according to education levels.	0.954	0.414
H ₈ : Local product purchasing behavior differs significantly according to education levels.	1.009	0.389

The table below shows the results of the other hypothesis tests that constitute the sub-objective of the research. According to Table 14; for H9, H10 and H11 tests, Independent Sample T-Test, which is used in hypothesis testing of variables with 2 categories, was applied. In all hypothesis tests, the homogeneity condition of the categories $p > 0.05$ is met. The fact that the (p) significance value in the second column shown in Table 14 meets the $p < 0.05$ condition indicates that the hypotheses are accepted. In other words, local product perception, local product awareness and local product purchasing behavior differ significantly according to gender. Since the gender variable, which is the independent variable in these hypotheses, consists of two groups, post-hoc test was not needed. Therefore, when the mean values are examined in all of the differences, it is determined that women are at the forefront.

Table 14. Independent Sample T-Test Results for H9, H10, H11

Hypotheses	Test Value (F)	Significance p.(sig)	Significance (2 -tailed)	Gender	Average
H ₉ :Local product perception differs significantly according to gender.	0.405	0.525	0.002	Woman	3.7921
				Male	3.5322
H ₁₀ :Local product awareness differs significantly according to gender.	1.648	0.200	0.000	Woman	3.6316
				Male	3.3171
H ₁₁ :Local product purchasing behavior differs significantly according to gender.	1.240	0.266	0.000	Woman	3.8868
				Male	3.5304

The results of all hypotheses regarding the sub-objectives of the research are presented in Table 15. While 6 hypotheses expressing the sub-objectives were rejected, 3 hypotheses were accepted.

Table 15. Results of the Hypotheses Regarding the Sub-Objectives of the Study

Hypotheses	Test Results
H ₃ : Local product perception differs significantly according to age groups.	Rejection
H ₄ : Local product awareness differs significantly according to age groups.	Rejection
H ₅ : Local product purchasing behavior differs significantly according to age groups	Rejection
H ₆ : Local product perception differs significantly according to education levels.	Rejection
H ₇ : Local product awareness differs significantly according to education levels.	Rejection
H ₈ : Local product purchasing behavior differs significantly according to education levels.	Rejection
H ₉ : Local product perception differs significantly according to gender.	Acceptance
H ₁₀ : Local product awareness differs significantly according to gender.	Acceptance
H ₁₁ : Local product purchasing behavior differs significantly according to gender.	Acceptance

Discussion

It has been determined that qualitative methods are mostly preferred in studies on local products in the literature. It is seen that quantitative studies on local products are limited. In the continuation of this research, a qualitative method will be used to identify buffalo products in the same sample and to determine the level of contribution of prominent buffalo products (buffalo milk, yogurt, cream, cheese) to the economic development of the region, a semi-structured interview will be conducted by scoring each buffalo product consumed in the region and making an evaluation over the total score.

In the study conducted by Deligöz and Üstünkardeşler (2021), it was determined that attitude towards local products has a positive positive effect on the effect of sensitivity towards price differences on local product purchasing behavior. However, as a result of this research, it was determined that local product awareness did not play a role in purchasing behavior. On the other hand, in another more detailed study (Schneider & Ceritoğlu, 2010), it was determined that branding, which refers to the characteristics of local products such as being of high quality, having healthy ingredients, being natural and delicious, and being a well-known brand, positively affects the purchasing behavior. This finding shows another result that is contrary to the results of this research. Because, as a result of this research, it was not supported that the perception of local products has a positive effect on purchasing behavior and creates brand value. However, in the study of Yılmaz (2023), it was determined that health awareness was effective in the purchase of local products. It is possible to say that the aforementioned finding is compatible with the result of this research that female participants are more prone to local products and purchasing behavior. This is because women can be more sensitive both for their own health and the health of their family members. Thus, this sensitivity may positively affect the purchasing behavior with the idea of consuming a familiar food produced by local producers, which is believed to be healthier. Muti Tabanlı and Akdoğan (2022), on the other hand, found that young consumers have a positive effect on the purchasing behavior of perceptions towards geographically marked products, but this study points to a contrary finding according to the findings of this research. As a result of this research, it was determined that the age groups variable did not make a difference on local product perception, awareness or purchasing behavior. In the study conducted by Yılmaz and Kadanalı (2024), it was concluded that local product perception positively affects local product purchasing behavior. Local product perception was measured with the dimensions of perceived risk, perceived quality and perceived value. In the aforementioned study, the effect level was 20%, which is considerably less than the 75% effect level reached in this study. In addition, the 75% effect

level in this study was obtained by the fact that the perception of local products consisted of a single dimension. Therefore, the effect of local product perception on local product purchase behavior obtained as a result of this research shows a stronger effect.

Conclusions

As a result of the research, it was determined that local product perception is effective on local product purchasing behavior. In other words, it has been determined that the presence of local product perception in the participants positively affects the purchasing behavior of local products and increases the purchasing behavior. However, it has been determined that local product awareness does not have a regulatory role in this effect. In other words, local product perception affects local product purchasing behaviour, but local product awareness does not increase or decrease this effect. According to the findings obtained in the research, it was determined that external factors such as advertising, which are some of the factors that are effective in the perception of local products, i.e. the formation of perception, are effective in the purchase of local products belonging to a region. However, it has been determined that local product awareness, that is, consciously, whether the relevant product will benefit the person or not, or the difference of that product from others is not known, so it does not create an increase or decrease effect on the perception of local products that are effective in purchasing behavior. This result indicates a weakness in the way of creating brand value of local buffalo products. In order for a product to create brand value, it is expected that perceptions and awareness about that product can have a direct effect on purchasing. Effective local, regional, national and international promotion activities should be implemented for this product.

According to the results of this research, the regulatory role of local product awareness is marginally rejected. Therefore, it is thought that the same or similar model can be tested again in different samples. This research has been handled with the Social Exchange Theory due to the lack of branding of buffalo products in the region. Social exchange refers to a step before economic exchange. In other words, social exchange is not yet based on an economic benefit or loss, but only on whether we can establish a good social interaction. For this reason, it is thought that brand value will be created by increasing the positive perception and awareness of buffalo products among locals and domestic tourists in the villages that breed buffaloes and produce buffalo products in Balıkesir region through promotion activities over time.

As a result of the research, it was determined that it is important that buffalo products are produced in standard quality and contribute to the promotion of the region. Therefore, it is thought that if buffalo products continue to be produced in the regions where buffalo products are available in Balıkesir in the coming years, the recognition and popularity of the region will be positively affected. In fact, it is supported that it is important to produce buffalo products by supporting the local economy and that the region should profit from buffalo products. In addition, it is seen that the willingness to buy buffalo products with natural ingredients stands out. Therefore, safe production and consumption of buffalo products and support for producers are favored. Since there is buffalo production in Balıkesir, buffalo products should not be considered only as milk derivatives.

According to the test of the differentiation of perception, awareness and purchasing behavior towards local products, which constitute the sub-objectives of the research, according to demographic variables, it was determined that only the gender variable created a difference. It has been determined that women's perception and awareness of local products are higher than men. Similarly, it was found that female participants were more sensitive to the

purchasing behavior of local products. In this case, local products show that women are more sensitive to the fact that they spend more time in kitchens and are more sensitive about the nutrition and health of family members. Therefore, as the social exchange theory, which forms the basis of this research, points out, at the point where the exchange takes place, the party in communication and behavior tries to minimize the possible damage by acting rationally. The fact that buffalo products have not yet established a brand value in the region where this research was conducted made it necessary to explain the issue with social exchange rather than an economic exchange. According to the results of this research, for example, women's desire to provide healthy products to their families by accessing healthier products is an example of rational behavior. On the other hand, it is possible to say that this purchasing behavior will be sustainable as long as the benefits (health, affordable cost, local branding and recognition) provided by women by purchasing local products continue. Based on the Social Exchange Theory, it is possible to say that in the reciprocal purchasing process, both the brand value of local products will increase and the economic development of the region will benefit for the locals, and this purchasing behavior and the tendency towards local products will be sustainable.

Considering the demographic characteristics of the participants, the fact that the majority of the participants (32%) are young people between the ages of 26-35 and that most of them (40%) have undergraduate education makes the measures to be taken in line with the findings of this research even more important. This is because young people are just starting to dominate the business fields and policies determined from their perspectives play an important role in the development of a region, region or nation. In addition, the fact that the majority of the respondents in the study were undergraduates indicates the need to increase the belief that buffalo products can provide social development and economic growth in the region.

Recommendations

As a result of the research, recommendations were developed on the subject. These recommendations are listed below.

- With the guidance of local administrators and using the Gedik Marketing Strategy, marketing activities suitable for small target audiences selected by local producers can be carried out. Since these marketing activities will mostly appeal to rural areas, it is beneficial to keep the pricing at reasonable levels. However, before this stage, producers should be supported by local administrators and production costs should be balanced. Otherwise, producers who cannot make a profit will not want to sell their products at reasonable prices. They will not even be able to spend effort on production due to high costs. For example, as a result of a research on buffalo products in Afyonkarahisar (Özer et al., 2022), it was determined that buffalo breeding decreased and this was reflected in the products.
- It is thought that the research in question can be repeated again and handled with different theories. It is thought that Planned Behavior Theory (PBT) or Rational Choice Theory can be used in these possible studies. Because over time, a brand value for buffalo products will be formed and various factors that lead people to purchase these products will emerge. In addition, the motives that influence the purchasing behavior of buffalo products and the choice-making process of prospective consumers and enable them to make rational decisions may vary. Various theories, such as the examples given, can reveal what these factors are.
- The importance of bovine and ovine breeding in Balıkesir also shows that the province is more advantageous

than other provinces in terms of red meat. Therefore, local administrators should increase red meat consumption in the region and ensure that locals benefit positively from this increase.

- Market expansion can be made by making the promotion and information processes related to local products more attractive for men rather than women.
- It is thought that young people will be pioneers in the processes of informing young people and people with a high level of education, supporting and promoting the production of local buffalo products, and consuming them. At this point, it will be beneficial for young people to be more active especially in the behavior of adhering to and adopting a brand. After this research, it is considered important to repeat this research after a certain period of time in order to show how the situation has been reached as a result of possible measures taken and to make a scientific contribution.

Declaration

All authors of the article contributed equally to the article process. The authors have no conflicts of interest to declare. The ethics committee permission request for the research was evaluated at the Balıkesir University Social Sciences and Humanities Research meeting and approved with the decision numbered E-19928322-050.04-391711.

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Appendix 1. Ethics Committee Permission

Evrak Tarih ve Sayısı: 07.06.2024-E-391711
Evrak Tarih ve Sayısı: 06.06.2024-389690

T.C.	
BALIKESİR ÜNİVERSİTESİ	
SOSYAL VE BEŞERİ BİLİMLER ARAŞTIRMALARI ETİK KURULU	
Toplantı Tarihi	: 31.05.2024
Toplantı Sayısı	: 2024/5
Toplantı Saati	: 10.30
Araştırmanın Başlığı	Türkçe : Yöresel Gastronomik Öğelerin Marka Değerinin Oluşturulmasında Ürün Farkındalığının Rolü: Balıkesir Yöresi Manda Ürünleri Örneği İngilizce : The Role Of Product Awareness In Creating The Brand Value Of Local Gastronomic Items: Example Of Water Buffalo Products From Balıkesir Region
SORUMLU ARAŞTIRMACI	
Ad Soyad	: Arş. Gör. Gözde KUMAŞ
Kurumu	: Turizm Fakültesi
YARDIMCI ARAŞTIRMACI/ARAŞTIRMACILAR	
Adı Soyadı Prof. Dr. Cevdet AVCIKURT Prof. Dr. Mehmet SARIOĞLAN Prof. Dr. Bilsen BİLGİLİ	Kurumu Turizm Fakültesi Turizm Fakültesi Kocaeli Üniversitesi

Sosyal ve Beşeri Bilimler Araştırmaları Etik Kurulu 31.05.2024 tarihinde Prof. Dr. Bayram ŞAHİN'in başkanlığında toplandı. Kurul üyelerinden Prof. Dr. Elif ÇİMEN (Raporlu) ve Prof. Dr. Salim ÇONOĞLU toplantıya katılmadı.

Görüşme sonunda, yukarıda bilgileri yer alan araştırmanın Bilimsel Araştırma Etik Kurul Onay Belgesi talebi Sosyal ve Beşeri Bilimler Etik Kurulunca değerlendirilmiş ve etik açıdan uygun bulunmuştur.

BAŞKAN
Prof. Dr. Bayram ŞAHİN

Prof. Dr. Sebahattin KARAMAN
Üye

Prof. Dr. Uğur GÜRGAN
Üye

Doç. Dr. İbrahim Murat BİCİL
Üye

Doç. Dr. Nuri Berk GÜNGÖR
Üye

Üye

Üye

Bu belge, güvenli elektronik imza ile imzalanmıştır.