EVALUATING MENU LABELING APPLICATION IN THE QUICK SERVICE RESTAURANT CHAINS IN EGYPT

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ABSTRACT

This study aims at recognizing the possibility of Evaluating Menu Labeling Application in the Quick Service Restaurant Chains in Egypt, the awareness of restaurants customers of menu labeling and the impact of menu labeling on the restaurants and customers decisions. The study population consists of the customers at the restaurants in Luxor and Aswan governorates and Hurghada city. To achieve the results, the researcher relied on the SPSS programme (V.25) for the statistical analysis and employed a quantitative methods approach, analyzing 389 questionnaires supplied by restaurant patrons. The results show that there is a relationship between menu labeling and customers' desires and their choice of food and restaurant.

KEYWORDS: Menu labeling, quick service restaurants, customers' desires.

INTRODUCTION

Restaurants play an important role in our lifestyles, and eating out is a favorite social activity. Everyone needs to eat, enjoy good food, and maybe the company of friends and nice surroundings is one of life's pleasures. Eating out has become a way of life for families (Hanks et al, 2017). In recent years, customers' interest in nutritional and health issues has increased significantly. This increase in interest can be attributed to a number of factors which comprises people lifestyle, diffusion of dietrelated diseases, nutritional knowledge, aging population, and dietary and safety concerns. The food industry has turned to provide more nutritional information on their food products and has made nutritious food items more accessible and available to individuals in supermarkets or

restaurants, As a result of increased awareness of customers about what they consume and how it impact on their health (Aitken et al.,2020).

LITERATURE REVIEW

DEFINITION OF MENU LABELLING

Menu labeling, according to definition provided by Green (2014), is "the practice of clearly posting the calorie and nutritional content of a particular food or beverage item, as it is usually prepared or offered for sale, adjacent to the name of the standard menu item so that it can be clearly associated with the menu item at the point of purchase. Menu labels can appear on menu boards, food tags, or printed menus".

Using menu labels for nutrition information in restaurants enables patrons to make informed meal selections by providing pertinent information about the nutrient composition of products at the moment of purchase. (Food and Drug Administration.2020). Restaurant menu labeling is something that customers like to see. Additionally, these studies supported the claim made by consumers that if they see this information, they will choose healthier menu options. (Katsouri et al., 2022).

QUICK SERVICE RESTAURANTS

The QSR segment drives the industry and includes all restaurants where the food is paid for before service. (Guthrie et al., 2018). Guests order at a brightly lighted counter over which are color photographs of menu items and prices. Guests may serve themselves drinks and seasonings from a nearby counter, then pick up their own food on trays in order to cut costs, some QSRs now serve the sodas and hand out a couple of ketchup packets when requested-along with napkins for each order. QSRs are popular because they are conveniently located and offer good price and value (Fenko et al., 2018).

IMPACT OF MENU LABELING ON CUSTOMERS' DESIRE

According to a Hashad (2014) study, most respondents want to see menu labelling in all types of restaurants, but quick-service restaurants in particular (Sacco et al. 2017). The study examined customers' awareness of and desire for nutritional information in quick service restaurants located in Cairo city. Customers' attitudes towards nutrition information were found to be more positive and proactive when it came to using it than when it came to other demographic groups, including women (Kim et al., 2018), elderly people (Rincón-Gallardo et al., 2020), people with higher incomes and educational levels (Duckworth et al., 2018), and households with children (Marathe et al., 2019).

THE MODERATING EFFECT OF GENDER AND EDUCATIONAL BACKGROUND

Gender is considered to be critically influential in the Customers' desire. Gender as a marketing segment is a decisive factor in terms of market penetration. According to certain research, women are often perceived to be more emotional, whilst males are seen to be generally more aggressive and independent. The female customers generally tend to give higher ratings for performance than males. In addition, females may intend to have affiliation with people and place more emphasis on social interactions when they are served by others. (Abdullah et al.2018).

HYPOTHES IS

H1: There is no statistically significant influence of the menu labeling on the customers' desire in the Quick service restaurant chains in Egypt.

H2: There are no statistically significant differences between males and females regarding to menu labeling in the Quick service restaurant chains in Egypt.

H3: There are no statistically significant differences between males and females regarding to customers' desire in the Quick service restaurant chains in Egypt.

H4: There are no statistically significant differences between customers' Educational backgrounds regarding to menu labeling in the Quick service restaurant chains in Egypt.

H5: There are no statistically significant differences between customers' Educational backgrounds regarding to customers' desire in the Quick service restaurant chains in Egypt. Fig. 1 below presents a theoretical model of those hypotheses:

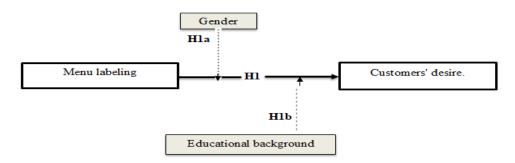


Figure 1: The proposed research model

METHODOLOGY

To test the hypotheses against the proposed model, a survey was conducted. Data were collected via a self-administrated questionnaire. The target population for this study was all customers of quick service restaurants in Luxor, Aswan and Hurghada. A number of 430 questionnaires were distributed to a convenience sample of Customers. A total of 389 questionnaires were completed and valid for analysis, thus achieving a response rate of 90.5% of them. SPSS version 25 was used to statistically evaluate the responses from forms that were legitimate.

SURVEY INSTRUMENT

To measure the constructs in the proposed model, a questionnaire was adapted from validated from previous research studies. The final questionnaire items are listed in Table 1 along with their sources. The questionnaire is divided into two sections. In the first section, employees were asked to rate 20 items on a five-point Likert type scale ranging from strongly disagree (1) to strongly agree (5). The 10 items are divided into two variables: Menu labeling (5 items), Customer desire (5 items). The second section asked customer for demographic data (e.g., gender, age, Educational background).

Table.1: Distributed forms

No	Governorate	Name of the restaurant	Distributed forms	Forms suitable for analysis
		Mac	86	79
1	Luxor	Kfc	86	80
2	Aswan	Kfc	86	84
		Mac	86	74
3	Hurghada	Kfc	86	72
	Total		430	389

TEST OF HYPOTHESES

		Frequency	Percentage %	Rank
	Male	238	61.2	1
Gender	Female	151	38.8	2
	Total	389	100.0	-
	From 21 to 30 years	132	33.9	1
	From 31 to 40 years	100	25.7	3
Age	From 41 to 50 years	117	30.1	2
	More than 50	40	40 10.3	
	Total	389	100.0	-
Education	Less than a high school	78	20.1	3
	High School	97	24.9	2
	University	179	46.0	1
	Postgraduate	35	9.0	4
	Total	389	100.0	-
	Not on special diet	166	42.7	1
Employment	On special diet	37	9.5	5
status	Low fat	29	7.5	6
	Low sodium	41	10.5	4
	Low calorie	56	14.4	2
	Vegetarian	43	11.1	3

	Others	17	4.4	7
	Total	389	100.0	-
	Once: 3 times a month	210	54.0	1
Restaurant	Once: 2 times a week	98	25.2	2
visit	3 times: 4 times a week	61	15.7	3
	once a day	20	5.1	4
	Total	389	100.0	-

H1: There is no statistically significant influence of the menu labeling on the customers' desire in the quick service restaurant chains in Egypt.

To test **H1**, the researcher adopted the Pearson correlation coefficient and linear regression tests to test the influence of menu labeling on the customers' desire in the quick service restaurant chains in Egypt. The results are presented as follows:

Table 3: Correlation between the menu labeling and the customers' desire in the quick service restaurant chains in Egypt

	Variables		
	Pearson Correlation (R)	0.633**	
Menu Labeling	Sig. (2-tailed)	0.000	
	N	389	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Table 4: Linear regression coefficients for the influence of the menu labeling on the customers' desire in the quick service restaurant chains in Egypt

Model	В	R ²	Std. Error	Т	Sig.
(constant)	1.465	0.400	0.166	9.002	.000
Menu Labeling	0.627		0.039	16.072	.000

a. Dependent Variable: Employee engagement

The following equation can be inferred to predict the customers' desire from the level of menu labeling as follow: Customers' desire = 1.465 + (0.627 * Menu labeling)

According to the above results, the second objective of the current study was achieved, which is to "H2: To examine the impact of menu labeling on customer desire in the quick service restaurant chains in Egypt".

H2: There are no statistically significant differences between males and females regarding to menu labeling in the quick service restaurant chains in Egypt.

Table 5: Statistical significant differences between males and females regarding to menu labeling in the quick service restaurant chains in Egypt

Variable	Gender	N	Mean Rank	Mann- Whitney	Sig.
	Male	238	186.56		
Menu	Female	151	208.30	15960	0.000
Labeling	Total	389	-		

According to the above results, the third objective of the current study was achieved, which is to "Obj3: To identify the differences between males and females regarding menu labeling in the quick service restaurant chains in Egypt".

H3: There are no statistically significant differences between males and females regarding to customers' desire in the quick service restaurant chains in Egypt.

To test **H3**, the researcher adopted the Mann-Whitney test was employed. The Mann-Whitney test is utilized to compare two independent groups, and it does not require the samples to be normally distributed (Nashar, 2008). The outcomes of the Mann-Whitney test are presented as:

Table 6: Statistical significant differences between males and females regarding to customers' desire in the quick service restaurant chains in Egypt

Variable	Gender	N	Mean Rank	Mann- Whitney	Sig.
	Male	238	185.86		
customers'	Female	151	209.41	15793	0.000
desire	Total	389	-		

According to the above results, the fourth objective of the current study was achieved, which is to "Obj4: To identify the differences between males and females regarding customers' desire in the quick service restaurant chains in Egypt".

H4: There are no statistically significant differences between customers' educational backgrounds regarding to menu labeling in the Quick service restaurant chains in Egypt.

Table 7: Statistical significant differences between customers' educational backgrounds regarding to menu labeling in the quick service restaurant chains in Egypt

Variable	Educational backgrounds	N	Mean Rank	Chi- Square	Sig.
Menu	Less than a high school	78	188.61		
labeling	High School	97	199.49		
labeling				8.364	0.039
	University	179	185.85		
	Postgraduate	35	243.61		
	Total	389	-		

The following tables show the results of Mann-Whitney tests as follow:

Table 8: Statistical significant differences between four levels of customers' educational backgrounds regarding to menu labeling in quick-service restaurant chains in Egypt

Variable	Educational backgrounds	N	Mean Rank	Mann- Whitney	Sig.
Menu	Less than a high school	78	85.37	3577	0.532
Labeling	High School	97	90.12	3311	0.332
	Total	175	-		
Menu	Less than a high school	78	130.06	6898	0.879
labeling	University	179	128.54	0898	0.879
	Total	257	-		
Menu	Less than a high school	78	52.19	000	0.170
labeling	Postgraduate	35	67.73	989	0.170
	Total	113	-		
	High school	97	144.84		
Menu	University	179	135.07	8067	0.043
labeling	Total	276	-		
	High school	97	62.54		
Menu	Postgraduate	35	77.49	1313	0.326
labeling	Total	132	-		
	University	179	102.24		
Menu	Postgraduate	35	134.40	8116	0.004
labeling	Total	214	-		

According to the above results, the five objective of the current study was achieved, which is to "Obj5: To identify the differences between customers' Educational backgrounds regarding menu labeling in the quick service restaurant chains in Egypt".

H5: There are no statistically significant differences between customers' educational backgrounds regarding to customers' desire in the quick service restaurant chains in Egypt.

Table 9: Statistical significant differences between customers' educational backgrounds regarding to customers' desire in the quick service restaurant chains in Egypt

Variabl	Educational backgrounds	N	Mean Rank	Chi- Square	Sig.
	Less than a high school	78	179.56		0.037
Customers'	High School	97	191.53	0.455	
desire	University	179	193.96	8.455	
	Postgraduate	35	244.37		
	Total	389	-		

Table 10: Statistical significant differences between four levels of customers' educational backgrounds regarding to customers' desire in quick-service restaurant chains in Egypt

Variable	Educational backgrounds	N	Mean Rank	Mann- Whitney	Sig.
Customers'	Less than a high school	78	84.99	3548	0.479
desire	High School	97	90.42		
	Total	175	-		
Customers'	Less than a high school	78	122.41	6467	0.345
desire	University	179	131.87	0407	0.343
	Total	257	-		

Variable	Educational backgrounds	N	Mean Rank	Mann- Whitney	Sig.
Customers'	Less than a high school	78	51.16	909	0.004
desire	Postgraduate	35	70.01	909	0.004
	Total	113	-		
	High school	97	137.43	7027	0.869
Customers' desire	University	179	139.08		
desire	Total	276	-		
	High school	97	61.68		
Customers' desire	Postgraduate	35	79.87	1229	0.015
desire	Total	132	-		
	University	179	103.01		
Customers' desire	Postgraduate	35	130.49	2328	0.015
uesne	Total	214	-		

DISCUSSION AND IMPLICATIONS

The purpose of this study is to Evaluating Menu Labelling Application in the Quick Service Restaurant Chains in Egypt .Based on previous studies, there were predictors of Evaluating Menu Labelling Application And its impact on Gender, Educational background and Customers' desire. A correlation and linear regression analysis have been performed to check the relationship between the research variables and estimate the impact of each independent variable (Gender, Educational background &Customers' desire) on the dependent variable (Menu labeling). The results of the correlation proved that there is a significant impact of Menu labeling Customers' desire this finding came to agree with the studies of Grunert et al. (2007); Hofstede et al. (2011); Khan et al. (2022). Have confirmed that customers are influenced by their friends and families and thus spend much time at McDonald's together. To use the nutrition labelling provided at McDonald's and other international restaurants. Which found a positive significant influence of control on customers' intentions to buy menu labelled items. This means that respondents were

confident and had the time and money to buy menu labelled items when these was offered to them at Quick service restaurants; hence, this positively affected their intention to buy items with menu labels at Quick service restaurants. This could because most respondents were highly educated and had more control of their time and money; these results are consistent with other studies Kim et al. (2013); Aitken et al. (2020).

RECOMMENDATIONS

From the previous conclusion, the researcher recommends the following:

- Quick-service restaurants should provide menu labeling on their menu boards.
- Quick-service restaurants should write nutritional information with percent daily value format.
- Quick-service restaurants should insert menu labeling in their promotional and advertising campaigns to inform people.
- Providing employees with continuous training to be fully aware of the menu labeling.
- The need to pay attention to put the menu labeling and other nutritional aspects within the curricula of the basic educational stages to develop the healthy and nutritional aspects of students since childhood.
- The government should require restaurants to publish nutritional information about their menu items.
- The Ministry of Tourism should make provision of menu labeling information one of the conditions for obtaining a tourist license.

FURTHER RESEARCH

As mentioned above, the research was limited to the quantitative research method. Further research can be conducted to examine and expand the findings of this research by conducting qualitative or mixed research separately. The study is limited in restaurants of Luxor, Aswan and governorates and Hurghada city. This study is limited to quick service restaurants. Further research could be conducted on other governorates of Egypt.

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