

An Empirical Study on Sustainable Marketing Through Social and Environmentally Responsible Marketing Activities in The Restaurants In UAE

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Abstracts: This paper investigates into the measures taken by the fast-food restaurants in the UAE to promote sustainable marketing through socially and environmentally responsible marketing activities and analyse the extent to which these fast-food restaurants have adopted sustainable marketing principles. The world population is facing problems like environmental pollution, increased carbon footprint, and unethical business practices. One of the causes of this pathetic state of affairs are the mushrooming fast-food restaurants which have contributed largely to the environmental footprint due to its wasteful packaging, inefficient waste disposal, and inefficient use of energy in its outlets. It was observed that the majority of the international fast-food restaurants were implementing sustainable marketing principles to a great extent. Though a few small local fast-food restaurants were aware of the sustainable marketing principles, however, they were finding it difficult to implement them in practice as these local restaurants were small business firms with low financial returns.

Keywords: Sustainability, Carbon Footprint, Restaurant, Environmental Pollution.

1. INTRODUCTION

Responsible marketers take pains to understand the genuine and changing needs of the consumers and respond with goods and services that create value for the customers and capture value in return. A few companies use unethical marketing practices to grind their own axe rather than serving the consumers' interests. Therefore, responsible marketers must take into account if their market offerings or market actions are sustainable in future. Sustainability marketing calls for socially and environmentally responsible actions that meet the current needs of the consumers and businesses while also preserving or enhancing the ability of future generations to meet their needs [1]. Sustainability is defined on the basis of a 'Triple Bottom Line' perspective i.e., people, planet, and profit [2]. The term sustainability was coined by The Brundtland Report in 1987. The term sustainability does not cover the environmental and social issues alone, but is also bound by ethical and moral issues under the broad umbrella of the principles of sustainability marketing. Therefore the purpose of this paper is to investigate the extent to which the fast food restaurants in Ajman abide by the principles of sustainability marketing. Every company should strive to implement the principles of sustainable marketing viz. consumer-oriented marketing, customer value marketing, innovative marketing, sense-of-mission marketing, and societal marketing.

1.1. Scope And Importance Of The Study

This study assumes paramount importance and a wide scope in fetching benefits to companies like fast food restaurants, cafeterias, and other food and beverage firms by highlighting the importance of implementing sustainable marketing principles in a proactive fashion which in turn will bring value to both the customers and also to the society at large. It will help save the planet from environmental pollution, increased carbon footprint, and unethical business practices.

1.2. Research Problem

The research problem of the study is to investigate into the measures taken by the fast food restaurants in the UAE to promote sustainable marketing through socially and environmentally responsible marketing activities and analyze the extent to which the international and local fast food restaurants have adopted sustainable marketing principles.

1.3. Research Questions

1. To what extent have the fast food restaurants in the UAE implemented the principles of sustainable marketing?
2. To find out if there is any significant difference in the implementation of sustainable marketing principles between the international and local fast food restaurants in the UAE.

2. REVIEW OF LITERATURE

Sustainable marketing has been studied across different perspectives. Many scientists have studied and deliberated on environmental and social issues. But there has not been enough study about the principles of sustainable marketing viz. principles of consumer-oriented marketing, customer-value marketing, innovative marketing, sense-of-mission marketing, and societal marketing. The previous studies have only evaluated and analysed the green or environmental marketing strategies. Therefore, there is an urgent need to throw light on the principles of sustainable marketing which will address issues related to environmental, social and ethical goals and objectives in an integrated fashion. Therefore, this paper focuses on the principles of sustainable marketing.

1. Andrea Bedek (2012) conducted a study on the topic 'Sustainable Marketing Strategies: Examples of Best Practices in Croatia'. The objective of this paper was to examine best practices among Croatian companies that distinct themselves from others by implementing sustainability in their everyday business practices and provide managerial suggestions that can help in sustainability implementation. The author concludes saying that quite often companies are guided with short term goals and by the desire to achieve immediate profit and companies usually neglect activities that have positive impact on environment and society.

2. Kumar, Vinod, Zillur Rahman, A.A. Kazmi & Praveen Goyal (2012) collectively conducted a study on the topic 'Evolution of Sustainability as Marketing Strategy: Beginning of New Era'. The objective of this paper was to review and understand concepts of marketing strategy and sustainability. They concluded saying that reassessment of the social issues resulted in evolution of green or environmental issues in marketing strategy and now the sustainability in marketing strategy has become the focus of attention of the researchers

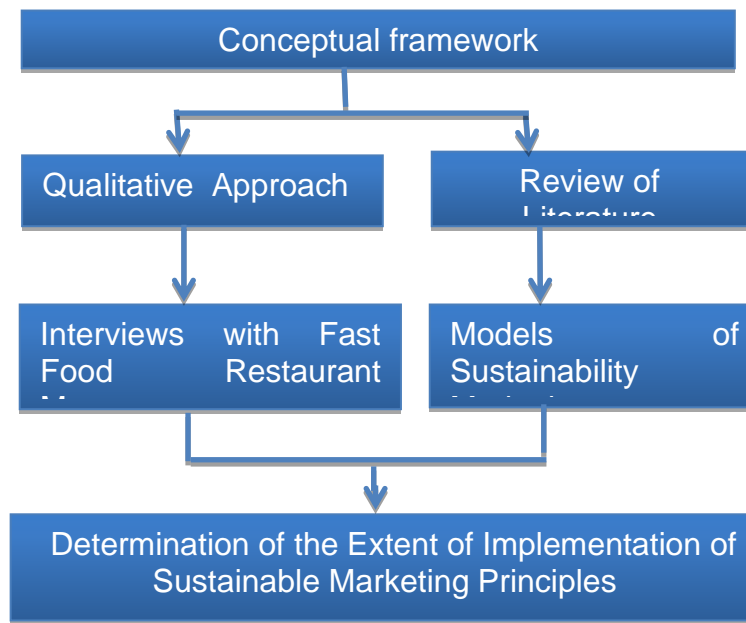
Marek Seretny (2016) of American University in the Emirates published an article titled 'Marketing as an Agent of Sustainable Change'. The purpose of the paper was to highlight the vital role that marketing plays in achieving behavioural change among customers as well as emphasize the changes in marketing practice that are required to help business adopt more sustainable practices. He concluded that sustainable marketing promotes credibility and responsibility, leading to better consumption, better relationships, and more responsible business, thus influencing the creation of a better world.

3. Mark Peterson et al. (2020) conducted a study on the topic 'Sustainable Marketing and Consumer Support for Sustainable Business'. The objective of this paper was to examine how consumer values and consumer perceptions of the marketplace practices of firms influence consumer support for those firms pursuing sustainable business practices. The authors conclude that 1) consumers' nature-based values have the most positive influence on consumers' support for sustainable businesses, 2) followed by attitude toward firm benevolence, and 3) concern about the ethicality of firms. Valuing social justice and recognizing business' contribution to one's own quality of life did not register as being influential on consumers' support for sustainable businesses.

5. Pierre Mc Donagh et al. (2021) conducted a collective study on 'Sustainability Marketing Research: Past, Present and Future'. This paper provides a synthesis and critical assessment of the sustainability marketing literature, from the period 1998–2013, building on a previous assessment from 1971 to 1998. It details research within major marketing journals and critically assesses this research in relation to the on-going conversation which focuses on marketing's relationship with the natural environment. Differences in the content and depth of sustainability coverage in marketing journals are considered. Potential avenues for future sustainability marketing research are proposed, with a particular call for theoretical and managerial reflections which tackle broader systemic and institutional issues within the discipline.

3. CONCEPTUAL FRAMEWORK

The conceptual framework has been developed with the help of major factors that have been derived from the review of literature and qualitative data. The framework consists of dependent and independent variables. The research aims to identify those principles of sustainability practices that are implemented in the fast food restaurants in the UAE. The below conceptual framework summarizes the aim of this research in which it intends to study the principles of sustainability practices that are implemented among the fast food restaurants in the UAE.



The following research hypothesis will be tested.

3.1. Hypotheses Of the Study

H0: There is no significant relationship between the practices of sustainable marketing principles of the international and local fast food restaurants in the UAE.

H1: There is a significant relationship between the practices of sustainable marketing principles of the international and local fast food restaurants in the UAE.

4. METHODOLOGY

The researcher has adopted a descriptive research design to investigate into the research questions by conducting both quantitative and qualitative research among the fast food restaurants in the UAE. The researcher has developed a conceptual framework with the help of major sustainable marketing factors that will be derived from the review of literature and qualitative data. The conceptual framework consists of dependent and independent variables. A research hypothesis has been evolved and clearly stated and is subject to testing.

4.1. Sample Frame

The sample frame of the study comprises the international fast food chains and the local/regional fast food restaurants in the UAE.

4.2 Sampling Technique

A simple random sampling technique has been used to choose the sample units of fast food restaurants from the sample frame mentioned above.

4.3 Sample Size

The sample size of the study undertaken was '60' **sampling units** from the above sample frame. The sampling units referred to here are the 60 fast food restaurants in the UAE both International and local.

4.4 Tools and Techniques used for Data Collection

The study was conducted using both primary and secondary data. The primary data were collected using interview schedules. The interview schedule was pre-tested on a small trial group comprising 10 respondents to ensure the validity and reliability of the research instrument. In response to the pilot study, necessary modifications were made in the interview schedule and the modified instrument was used for the collection of primary data. To fulfil the objectives of the study, the researcher has used both criterion (dependent) and predictor (independent) variables in the study. The primary data collected were consolidated to a Microsoft Excel spreadsheet for conducting the data analysis. The consolidated data were finally analysed by classifying, tabulating and applying statistical tools such as percentage analysis, coefficient of correlation, and Chi-square test.

4.5 Limitations of the Study

This study is not free from limitations. Following are the limitations that the researcher could find in the study:

1. Due to time, money, and energy constraints the researcher had to limit the sample size of the study to a small number.
2. A factor analysis could have also been adopted by the researcher so that the study highlights the important factors that will contribute to the achievement of sustainability marketing.

5. DATA ANALYSIS AND INTERPRETATION

After collecting the primary data through the interview schedules the researcher has used the percentage analysis and the Chi-square test for analyzing the data. The researcher was interested to know the number of respondents who recycled the waste, especially the food waste and the packaging waste. Majority of the respondents said that they don't recycle the food waste or packaging waste in their companies, but they either dump them in landfills or burn them in incinerators or dispose them in the municipality bins. The following Table No.1 highlights the percentage of respondents who dispose the food and packaging waste in the fast-food restaurants.

6. FIGURES AND TABLES

Table No.1 Disposal of Food and Packaging Waste formed in Fast Food Restaurants

Opinion	Respondents	%Percentage
Dump them in landfills	15	25
Burn them in incinerators	6	10
Dispose them in municipality bins	39	65
Others	0	0
Total	60	100

Source: Primary Data

The above table No.1 highlights the fact that 65% of the respondents dispose the food and packaging waste in the municipality bins provided to them by the Municipality, 25 % of the respondents dump the waste in landfills and

10% burn them in incinerators. We could thus conclude by saying that the majority of the fast food restaurants dispose their food and packaging waste in municipality bins provided by the municipality and are aware of reducing environmental pollution and improving sustainability marketing principles.

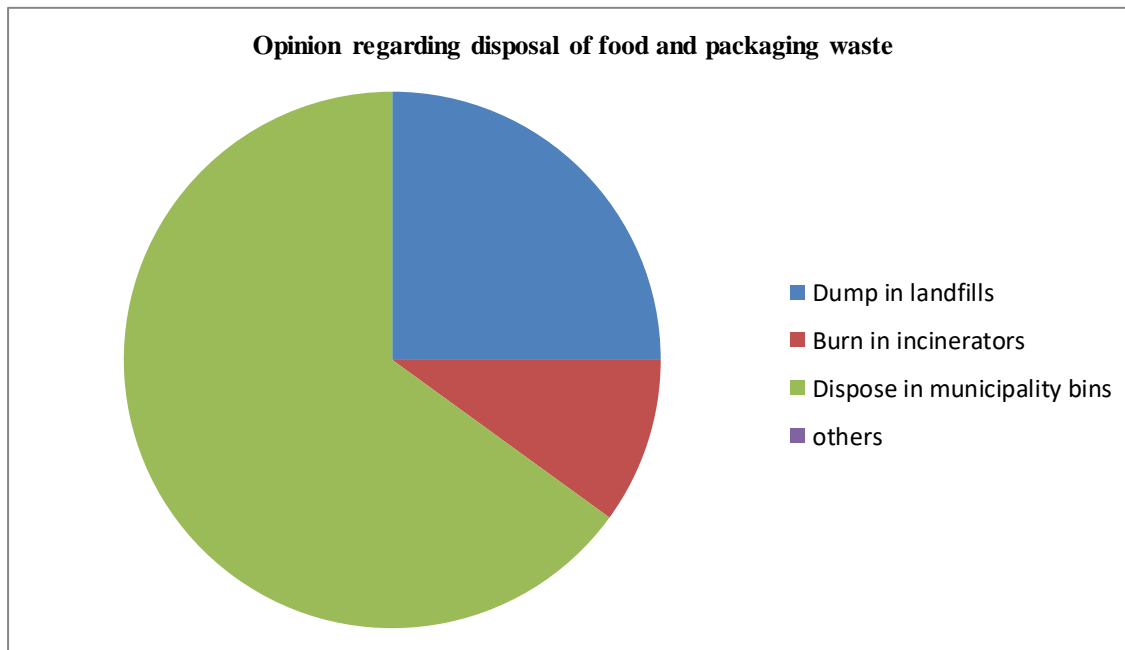


Figure 1: Disposal of Food and Packaging Waste in Fast Food Restaurants

6.1. Use of Energy –Efficient Lighting System

The researcher was interested to find out if the fast food restaurants were using energy-efficient lighting systems in their restaurants. The following Table No.2 shows its results.

Table No.2 Use of energy-efficient lighting system

Type of lighting system	Usage of respondents	Percentage
Incandescent light bulbs	12	20
LED lamps	18	30
CFL lamps	30	50
Others	0	100

Source: Primary Data

Table No.2 throws light on the fact that 50% of the fast food restaurants use CFL lamps, 30 % of them use LED lamps, and 20 % of them use incandescent bulbs in their restaurants. Hence, majority of the fast food restaurants use CFL lamps that are energy-efficient and energy saving causing less carbon footprint in the society and thus preventing greenhouse gas emissions.

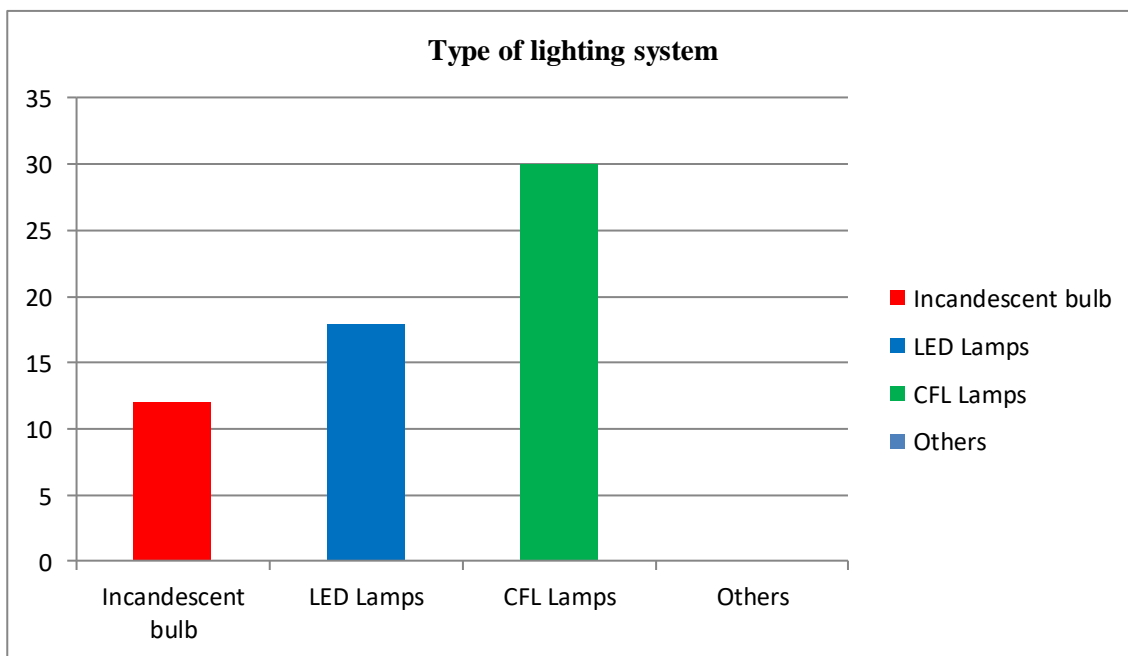


Figure 1 Type of Lighting System used in Fast food Restaurants

6.2. Food Items on the Menu ‘Below 400 Calories’ Category

The researcher was investigating to know if the fast food restaurants were providing food to its customers in their restaurants in which its menu had food items ‘below 400 calories’. The food items ‘below 400 calories’ was said to be healthier and environmentally sustainable. The following Table No.3 highlights its results.

Table No.3 Food items on the menu below 400 calories

Percentage of Food Items on the menu having less than 400 calories	Respondents	Percentage
Less than 50%	9	15
50% to 74%	21	35
75% to 89%	18	30
90% to 99%	12	20
Total	60	100

Source: Primary Data

Table No.3 throws light on the fact that there were only a few restaurants (20%) that offered food items which were below 400 calories (i.e., 90% to 99% of food items were below 400 calories), 35% of the fast food restaurants offered food items which were 50 % to 74% ‘below 400 calories’. Hence, majority of the fast food restaurants can encourage responsible consumption among the customers by offering a healthy menu by diversifying into salads, fruits, grilled chicken, low-fat milk, and other nutritious food items thereby reducing carbon footprint in the society and encouraging environmental and social sustainability.

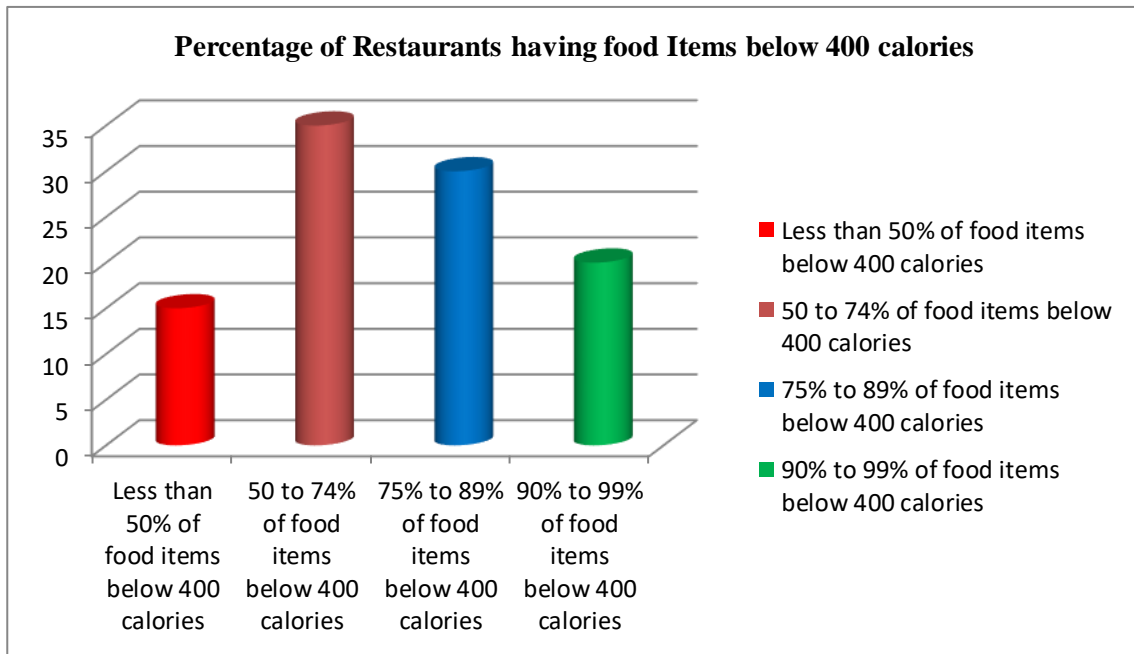


Figure 2 Percentage of restaurants having food items below 400 calories

6.3. Chi-Square Analysis

A Chi-square statistic was conducted by the researcher to test the statistical significance of the observed association in the cross-tabulation of the study. The researcher wanted to find out if there was a significant difference in the practices of sustainability marketing principles of the international and local fast food restaurants in the UAE. The researcher has formulated the null and alternative hypotheses of the study as follows.

H0: There is no significant difference between the practices of sustainability marketing principles of the international and local fast food restaurants in the UAE.

H1: There is a significant difference between the practices of sustainability marketing principles of the international and local fast food restaurants in the UAE.

Table No.4 Opinion of Fast Food Restaurants towards Sustainable Marketing Principles

Type of Restaurant	Opinion					Total
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
International Fast-Food Restaurant	8	6	6	5	5	30
Local Fast-Food Restaurant	6	6	6	7	5	30
Total	14	12	12	12	10	60

Source: Primary Data

The formula for the Chi-square statistic is as follows:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Where: χ^2 is the chi square statistic.
 Σ = summation symbol.
 O = Number observed.
 E = Number expected.

The observed frequencies and the expected frequencies were computed. The researcher now substituted these values in the Chi-square test formula and computed the calculated value of the Chi-Square test statistic.

The calculated value Chi square was: 0.619

The degrees of freedom= $(m-1)(n-1)$, where m =number of rows and n = number of columns

The degrees of freedom= $(2-1)(5-1)= 4$

The level of significance= 0.05

To determine whether a systematic association exists, the probability of obtaining a value of chi-square as large as or larger than the one calculated from the cross-tabulation is estimated. Now, looking at the chi-square tables, at 0.05 level of significance with 4 degrees of freedom, the critical value of the chi-square statistic is 9.488.

The calculated value being lesser than the critical value, the null hypothesis of 'no association' cannot be rejected. This indicates that the association is not statistically significant at the 0.05 level. Note that this lack of significance is mainly due to the small sample size (60). If, instead, the sample size were large, it can be seen that the value of the chi-square statistic would be large and would be significant at the 0.05 level of significance.

Since the calculated value is less than the critical value, we do not reject the null hypothesis. Thus we can conclude saying that there is no significant difference between the practices of sustainability marketing principles of the international and local fast food restaurants in the UAE.

6.4. Correlation Analysis

The correlation analysis intends to find out the strength of the linear relationship between two metric variables. In this study the researcher investigates into how strong is the relationship between 'readiness to implement sustainability marketing principles' (*dependent variable*) and the 'awareness of sustainability marketing principles' (*independent variable*). The readiness was measured on an 11-point Likert scale. The awareness was also measured on an 11-point Likert scale. The researcher intends to explain this relationship by testing it among 12 respondents (fast food restaurants). The researcher has taken a small number of observations to make the calculations easier and simpler due to time constraints.

The Pearson's coefficient of correlation 'r' was calculated between the variables and found to be 0.9267.

As $r=0.9267$, a value close to 1.0, the respondent's readiness to implement the sustainability marketing principles is strongly associated with their awareness of the sustainability marketing principles. Furthermore, a positive sign of r implies a positive relationship; more the awareness of sustainability marketing principles, more will be the readiness to implement these principles.

The product moment correlation is then calculated for the population rather than a sample which is denoted by ρ (rho). The statistical significance of the relationship between the above two variables measured by using 'r' are then tested.

The null hypothesis $H_0: \rho=0$

The alternative hypothesis $H_1: \rho \neq 0$

The test statistic is $t= r\sqrt{n-2}/\sqrt{1-r^2}$ which has a t distribution with $n-2$ degrees of freedom.

$t=0.9267\sqrt{12-2}/\sqrt{1-0.93612^2} = 8.329$

Looking at the t distribution table, with $12-2=10$ degrees of freedom and at 0.05 level of significance, the critical value of t for a two-tailed test is 2.228.

Since the calculated value is greater than the critical value, the null hypothesis, i.e 'there is no relationship between the variables', is rejected. The positive sign of 'r' indicates that the respondent's readiness to implement the sustainability marketing principles in the fast food restaurants in the UAE is strongly associated with their awareness of the sustainability marketing principles and the high value of r indicates that this relationship is strong. Thereby, the research hypothesis has been validated.

The implication is that if the government of the UAE creates a strong awareness campaign about the sustainability marketing principles in the fast food industry, then there would be a strong readiness to implement these sustainability marketing principles in the fast food restaurants in the UAE, thereby reducing carbon footprint and improving socially and environmentally responsible consumption among the customers.

CONCLUSION

This study attempts to investigate the extent to which the fast food restaurants in the UAE, both international and local, have been able to implement the principles of sustainable marketing. After a thorough analysis of the data collected from the 60 respondents through interview schedules, the researcher concluded that majority of the international fast food restaurants were implementing the sustainable marketing principles to a large extent. Though, a few small local fast food restaurants were aware of the sustainable marketing principles, yet, they were finding it difficult to implement them in practice. A few local fast food restaurants were finding it difficult to practice the principle of 'sense-of-mission marketing' and 'societal marketing' as these local restaurants were small business firms with low financial returns. It was noticed that there was no significant difference in the implementation of sustainable marketing principles between the international and local fast food restaurants in the UAE.

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