Attributional and Substantial Assessment of Comestible Product for Sustainable Development in Hospitality Industry

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Abstract: The usage of straw in general plastic creates an undue impact on earth's health and environment gets severely affected specially the marine life, a human habit of sipping any beverage through straw impacts nature in a big way, Plastic straw rubbish is the fifth largest contributor of plastic waste in the world. The market awareness and availability of reusable drinking straws made of steel, bamboo, or wood and edible straw that is free from any microplastic raises the hope of using a viable option to the usage of environment- friendly practices that the human civilization need to prevent any environmental impending catastrophe. We conducted a field trial (N = 51) to evaluate the efficacy of a default nudge intervention that aimed to decrease the use of plastic drinking straws in light of the environmental pollution caused by plastic waste. Or A qualitative research which is descriptive in nature by collecting a stratified random sampling of sample size of 51 where a chi-square test is being done to compare observed and expected results.
Keywords: Straw, Reusable, civilization, awareness, catastrophe

Environmental Implication

The plastic straw is very light in weight which leads to acquiring the damage the coastal area market, water pollution & damages of sea animals. It is made up of certain chemicals which are resistance to recycling, & reusing of products. This study aims to encourage the level of usages of edible straw to beat the drawback of plastic straw. The Hotel Industries are constantly focusing upon sustainable development through introducing the comestible product. Hospitality industries and environment are complementary to each other; this research work is an attempt to contribute towards environments and sustainable development.

1. Introduction

This is a study about the understanding of the consumers of how they feel the necessity of using straw to drink any beverage and what is the material they generally sip the beverage and if an option is given to them for choosing the type of straw which one would they be preferring. The article also intends to generate awareness among all our hospitality and tourism stakeholders that a single plastic use just for the sake of convenience can create havoc in environment. It explores on the study that a simple casual activity to sip a beverage using a simple plastic has far reaching repercussions on marine life, there has to be empathy generated among all humans. Today's generation is very much fond of drinks and use straws as medium to drink. But, least none of us is interested to know or think that from where straw is been made from. This is very much concerning point because it is destroying our ecosystem. In big cities we have seen the

most common problem of water logging is because of plastic. The habit of abandoning plastic must come from within, a simple plastic straw we can easily do without -eliminating plastic straw usage rarely require a drastic change in behavior.

2. Literature Review

Plastic goods were widely available to consumers because of the factors which include being cheap, easy availability and which resulted in plastic waste. The concern is related to various parameters which amounts to usage of plastic becoming a integral part of day to day life. One of the items include plastic straw. Contrary to natural materials like paper, wood, or cotton, polypropylene, the material used to make the majority of single-use plastic straws, is not biodegradable. The plastic will break down into tiny plastic particles over a 200-year period, releasing dangerous compounds including biphenyl A (BPA) that have been associated with health issues and environmental contamination. Due to their difficulty in recycling, plastic straws end up in landfills. Straws can sometimes end up in environmentally sensitive areas like oceans, where they mix with floating trash and block sunlight from reaching the planktons, which convert sunlight into essential nutrients. B.V, T. P. (2020, July 9). Plastic Straws and the Environment: What is the Impact?

Plastic pollution poses a global threat. Since many straw kinds contain chemicals, they cannot be recycled or reused. The majority of plastic straws are likewise not biodegradable and cannot breakdown naturally into non-toxic elements through the action of bacteria and other decomposers. This research paper says that, straw is the main source of blocking the waterways. The plastic straw is lightweight due to which the beach littering, harming animal and sea animal are always in news. It creates hurdle for water transportation as well as converting into another chemical which is directly reacts with environment. Replacing them with edible or reusable one or giving up the habit of using straw can also be thought of. Staff, A. (2019, November 15). How do straws hurt the environment?

Trvst: Environmental Impact of straw: The study reveals that plastic straw is lightweight as well as made of polypropylene which cannot be easily degraded nor recycled. As a result, usages of high volume of plastic straw are a biggest hurdle in sustainable development. Plastic straw possesses a threat to marine life as various citing have been done on how aquatic and marine life treat plastic as their food and consume them which when enters in our food cycle causes harm to us. Environmental Impact of Plastic Straws. (2019, February 14).

A Field Experiment on Reducing Drinking Straw Consumption by Default The study was done based on hypothesis that individuals would consume straws less frequently when they had to pick the straw from the boxes may not be very interested to use. This study also reveals that some forced restrictions might change the behavior of consumers towards the usages of plastics items. More research is needed to improve current and future interventions to significantly reduce the amount of plastic consumption and, consequently, waste in the environment. Mundt, D., Carl, S., & Harhoff, N. (2020).

3.Research Methodology

It refers to proper techniques and process validating a proper research design to establish specific results and interpretation by collecting and analyzing data meeting the research objectives. It provides a specific process and framework to get the research work done. The study is Exploratory which is descriptive research in nature.

4. Research Design

The research design is based on the problem that guides in formulation of overall strategy to integrate into different forms of study. To examine the relevance and purposes of research, proper research framework has been designed to find the uniqueness from research and derive all the answers of research problems. To identify the insights and thorough investigations, Exploratory Research Design is being implemented so far. Conclusive research is more likely to be used for qualitative research.

4.1 Data Collections

During research work data were collected through below mentioned instruments which are structured designed schedule, Face to Face interview and observation methods.
Size of Sample – To collect the data, numbers of units which were chosen for this purpose. The study has 51 sample size.

4.2 Test of Associations & *Chi Square Test*

To examine the pair of hypotheses that is the null hypothesis and observation hypothesis the pairs of random variables, Chi- square Test is being applied. It helps to derive association between two different categorical variables which are dependent and independent. Pearson's chi-square test is being applied to determine the expected frequency and observed frequency.

5. Analysis and Interpretations

5.1 *Test of association between age and Frequent usages of straw*

H_0- The usage of the straw to drink beverage is not associated with the age of the respondent.

H_1 – The usage of the straw to drink beverage is associated with the age of the respondent.

Table 1 Significant association between usages of straw to drink beverages and age factor

Respondents	38	13	51
% within Age	74.5%	25.5%	100.0%
usages of straw to drink beverages	100.0%	100.0%	100.0%
% of Total	74.5%	25.5%	100.0%

Table 2 Chi-Square Tests

	Value	df	Asymptotic Significant. (2-sided)
Pearson Chi-Square	3.989[a]	3	.263
Likelihood Ratio	5.182	3	.159
N of Valid Cases	51		

Interpretation

From the above symmetric measures table, the p value can be observed as more than .05. Therefore, researcher has accepted the H_0. The researcher can conclude with that there is no association between age and usage of edible straw. *Hence hypothesis is rejected.*

5.2 Level of *Education and challenges of choosing sustainable option*

H_0- There is no association between education level of respondent and challenges to choose any sustainable option for straw from plastic straw.

H_1 – There is association between education level of respondent and challenges to choose any sustainable option for straw from plastic straw.

Table 3: Significant association between education level of respondent and challenges to choose any sustainable option for straw from plastic straw.

Total Respondents	10	14	27	51
% within Education	19.6%	27.5%	52.9%	100.0%
Challenges to choose sustainable option	100.0%	100.0%	100.0%	100.0%
% of Total	19.6%	27.5%	52.9%	100.0%

Table 4: Chi Square Test

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3.325[a]	4	.505
Likelihood Ratio	3.334	4	.504
Linear-by-Linear Association	.310	1	.578
N of Valid Cases	51		

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.011[a]	6	.422
Likelihood Ratio	6.014	6	.422
Linear-by-Linear Association	3.783	1	.052
N of Valid Cases	51		

Interpretation

From the above symmetric measures table, the p value can be observed as more than .05. Therefore, researcher has accepted the H_0. The researcher can conclude with that there is no association between education level of respondent and challenges to choose any sustainable option for straw from plastic straw. *Hence hypothesis is rejected.*

5.3 Impact of *education level in the selection of straw*

H_0- The material of straw drink beverage is not associated with the education of the respondent.
H_1 – The material of straw drink beverage is associated with the education of the respondent.
Table 5: Significant association between material of usage of straw to drink beverages and education factor

Table 6: Chi Square Test

Respondents	23	15	5	8	51
% within Education	45.1%	29.4%	9.8%	15.7%	100.0%
Material used for consumption of straw	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	45.1%	29.4%	9.8%	15.7%	100.0%

Interpretation

From the above symmetric measures table, the p value can be observed as more than .05. Therefore, researcher has accepted the H_0. The researcher can conclude with that there is no association between age and frequency of usage of edible straw. *Hence hypothesis is rejected.*

5.4 *Relation between the Preference of choosing the material required to drink beverage and Gender of respondents*

H_0- The material required to drink beverage is not associated with the gender of the respondent.
H_1 – The material required to drink beverage to drink beverage is associated with the gender of the respondent.

Table 7: Significant association between material of the straw to drink beverages and gender factor

Respondents	23	15	5	8	51
% within Gender	45.1%	29.4%	9.8%	15.7%	100.0%
Material used for Consumption of Drink	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	45.1%	29.4%	9.8%	15.7%	100.0%

Table 8: Chi-Square Test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.791[a]	3	.425
Likelihood Ratio	2.829	3	.419
Linear-by-Linear Association	2.364	1	.124

Interpretation

From the above symmetric measures table, the p value can be observed as more than .05. Therefore, researcher has accepted the H_0. The researcher can conclude with that there is no association between age and frequency of usage of edible straw. *Hence hypothesis is rejected.*

5.5 *Relation between the frequency of usage of straw and gender of the respondents*

H_0- The frequency of usage of straw to drink beverage is not associated with the gender of the respondent.

H_1 – The frequency usage of the straw to drink beverage is associated with the gender of the respondent.

Table 9: Significant association between frequency of usage of straw to drink beverage and the gender of the respondent

Respondents	26	20	5	51
% within Gender	51.0%	39.2%	9.8%	100.0%
within frequency	100.0%	100.0%	100.0%	100.0%
% of Total	51.0%	39.2%	9.8%	100.0%

Table 10: Chi Square Test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.219[a]	2	.896
Likelihood Ratio	.218	2	.897
Linear-by-Linear Association	.000	1	1.000
N of Valid Cases	51		

Interpretation

From the above symmetric measures table, the p value can be observed as more than .05. Therefore, researcher has accepted the H_0. The researcher can conclude with that there is no association between frequency of usage of straw to drink beverage and the gender of the respondent. *Hence hypothesis is rejected.*

5.6 *Relation between challenges of choosing sustainable option and age*

H_1 – There is association between age of respondent and challenges to choose any sustainable option for straw from plastic straw.

H_0- There is no association between age of respondent and challenges to choose any sustainable option for straw from plastic straw.

Table 11: Significant association between age of respondent and challenges to choose any sustainable option for straw from plastic straw.

Respondents	10	14	27	51
% within Age	19.6%	27.5%	52.9%	100.0%

Challenges to choose sustainable option	100.0%	100.0%	100.0%	100.0%
% of Total	19.6%	27.5%	52.9%	100.0%

Table 12: Chi Square Test

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.352[a]	6	.500
Likelihood Ratio	6.146	6	.407
Linear-by-Linear Association	.000	1	1.000
N of Valid Cases	51		

Interpretation

From the above symmetric measures table, the p value can be observed as more than .05. Therefore, researcher has accepted the H_0. The researcher can conclude with that there is no association between age of respondent and challenges to choose any sustainable option for straw from plastic straw. *Hence hypothesis is rejected.*

6.Conclusion

From the above study researchers can find out the significant contribution of society towards usage of sustainable accessories. On the basis structured survey, it can have derived that the demographic character of respondents has not given much impact on the choices of selection of sustainable accessories. For establishing the role of Comestible Product in the substantial assessment in terms of sustainable development specially in hospitality industry.

Through testing by Chi-square, we found a significant combination of demographic variables as well as comestible Product. The researcher also found there is no significant relation between types of comestible product and impact upon sustainable development. Thus, it indicated there is high scope of introducing comestible product in the society. As the entire hospitality industry moved into race of sustainable development, the intervention of comestible products becomes more indispensable. In due course more the usage of comestible product stronger the association of respondents will increase. At the end researcher can evaluate that there is strong Attributional approach in terms usages of comestible products and upcoming model of sustainable growth especially in hospitality industry

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