# Identification of Antecedents of Consumers' Intentions for Green Restaurants in Post Covid Time

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#### **Abstract**

Businesses are changing their functional operations through adapting to green practices which has become a need of the hour. With the incorporation of green marketing, beliefs and attitude of consumers are also changing in favor of those companies who consider the environmental issues into their processes. Although green practices are increasingly adopted in the restaurant industry, there is not much research in terms of investigating the attitude of consumers towards dining in green restaurants. The willingness to pay more for green initiatives has also been studied across the globe.

Issues like pandemic, global warming and scarcity of resources are adversely affecting growth of the restaurant industry. Green practices are subsequently gaining importance in post covid world. Consumers' preference for health and wellbeing has also grown in post pandemic time.

Level of consumer awareness towards adoption of green products is still not very encouraging. Brands have been communicating green benefits to create differentiation and enhance recall value to consumer. In order to create the strong impact of green concept, attitude and awareness of consumers towards accepting green practices need to be thoroughly studied.

Present research work is aimed to study consumer awareness towards green products and overall sustainability of environment with respect to restaurant industry. This study presents a framework for measurement of consumer attitude.

**Keywords:** Green restaurants, Post Covid World, Consumer Attitude, Willingness to pay more, Environmental Issues.

#### Introduction

India is known as a food loving country where the food preferences keep changing moving from one region to other. Earlier people preferred to eat at home but due to many factors like rise in disposable income and changing lifestyle the frequency of dining out has increased

significantly. The restaurant sector in India has grown at a rapid pace and offered many innovative practices such as green restaurants to the health and environment conscious consumers. Based on the level of consumption, restaurants have been categorized into different types such as quick, drive through and high end restaurants. People choose restaurants on the basis of environment. The term environment could be the ambience, food and sound etc. The perceptions of different consumers were different for environment (Heung & Gu, 2012). The studies have shown that Indian consumers prefer green restaurants due to health reasons and displayed willingness to pay more when compared to American consumers (Dutta et al., 2008). However, the concept of green restaurant can still be termed at the nascent stage and it carried huge scope in the city like Jaipur which is a world famous tourist destination.

Covid 19 pandemic which occurred in December 2019 and originated from Wuhan (China) through human to human spread of Corona virus ((Hawley and Huynh, 2020) impacted the health condition of consumers and imposition of lockdown to check the spread of virus, caused changes in eating behavior of the consumers (Huber et al., 2020). Due to lockdown and risk of pandemic consumers preferred to stay away from dining out. Now since the lockdown is lifted and post covid management is in place, consumers are preferring to eat out instead of ordering food.

Worldwide the concern for personal health has also gained importance (Nielsen, 2015). Consumers are adopting health conscious lifestyle and preferring ecofriendly restaurants as healthy option (Hanspal and Devasagayam, 2017; Lo et al., 2017).

The awareness regarding environmental issues has grown since last decade (Dewald et al.,2014). Pro environmental behavior of consumer for recycling, energy efficiency and green consumerism has necessitated the industries to adopt green practices (Kim and Choi, 2005; Moisander, 2007; Han et al., 2019). A strong association between green attitude and green behaviour has been identified which has become a foundation for many environment based studies (Milfont and Duckitt, 2004; Choi and Fielding, 2013).

Considering this, many companies in the hospitality and restaurant sector have launched green initiatives to activate

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the green buying behavior of consumers (Lee et al., 2010; Kim, 2011; Gifford andNilsson, 2014; Choi et al., 2015; Hwang et al., 2018; Verma et al., 2019). Consumers prefer today the nutritional information in restaurant menu which signifies inclusion of health factor in green restaurant practices (Lo et al., 2017).

The previous studies have widely researched the preference for green restaurants in view of ecological consciousness of the consumers by understanding the prosocial and psychological motives (Han, 2020) yet there is great scope to study the consumers' perspective of health and risk of pandemic for making a choice for green restaurants.

Present research work studies the consumers' beliefs in more comprehensive manner in the current context of pandemic. The following section illustrates the literature review, methodology and data analysis for the research study.

#### Literature Review

#### **Green Restaurants Practices**

Involving in green practices is considered as a strategy that restaurants can use to augment social responsibility. The terms green environment saving practices and green practices are often used interchangeably. Similarly, the term green restaurant will refer to any restaurant that actively engages in green practices (Canziani et al., 2016). A green restaurant is one that strives to achieve a balanced relationship between people and the environment through green activities such as contaminant and solid reducing waste, efficient agriculture and food use, composting, highly toxic cleaning and industrial chemicals, sustainable construction material, and employee training, in addition to providing a variety of green menus that use farm fresh, organic, but also healthy ingredients (Heung and Gu, 2012).

#### **PurchaseIntentions for Green Restaurants**

Green marketing has become more popular as people started showing their concern for environmental problems and wished to spend the money for the activities which can save the environment.

Marketing of green aspects includes many things such as use of ecolabels, ecofriendly packaging and use of messages and communication which focuses on green features (Papadas et al., 2017). Marketing of this sort is more expensive and it can similarly be profitable as a result of the growing acceptance. As an example local made products can be expensive than those made abroad since local products have less carbon footprints (Groening, 2018). Green Marketing improves the cost and facilitates the market differentiation (Hu et al.,2010) however it does not always bring in better prospects for companies (Ham and Lee,2011).

Studies in the past have studied the dimensions of intentions for preferring green restaurants (Hu et al., 2010). The previous studies defined the green attributes of restaurants on the basis of the broad range of green activities performed by restaurants (Tan and Yeap, 2012).

Based on the level of consumptions restaurants are categorized into two sections. Quick assistance restaurants or drive-through restaurants and high end restaurants. It can be casual, midscale or upscale range (Canziani, 2016). The criteria for selecting restaurants is important to understand the choice of restaurant (Harrington, et al., 2013). People choose restaurants on the basis of environment of any restaurant. The term environment can be the ambiance, food, sound etc. The perceptions of different consumers are different for environment (Heung and Gu, 2012).

Consumers with a higher importance for green practices were found to be more willing to pay premium (Namkung and Jang, 2017)

Women give high ratings as compared to men in many green characteristics (Kwok, et al., 2016). The conceptual framework in the present study is derived from the theoretical underpinnings of planned behaviour (Ajzen and Fishbein, 1980; Azjen, 1991) to predict the underlying dimensions and intentions of green behavior.

#### **Health Consciousness**

Heath consciousness means one's knowledge about own health and wellbeing. It is also shown by engaging in activities related to healthy lifestyle (Becker et al., 1977; Gould, 1988). People who have self-awareness regarding health more often seek advice from health practitioners (Mesanovic, 2013). People develop beliefs and attitude regarding healthy lifestyle by seeking information from mass and social media (Chae and Quick, 2015).

Health consciousness plays a crucial role while deciding to consume nutritional food therefore such consumers prefer those vendors who ensure quality and nutrition in their food products (Huang, 2014; Seymour et al., 2004). Thus health consciousness influences consumers' attitude and intentions to choose restaurants which offer nutritional and sustainable menu (Lo et al., 2017). The Awareness for health is associated with perceived knowledge and beliefs which tend to develop attitude to consume dairy products (Hoque et al., 2018). Gender and past experience with certain food items also play major role in developing attitude and intentions for consuming healthy food (Jun et al., 2016). Females were found to be more health conscious than male. They seek knowledge about health and prefer to eat healthy food (Lone et al., 2009; Wardle et al., 2004).

Degree of health consciousness can be assessed by considering the self-image of the consumers. The self-image also guides the consumer to consume food products which are labeled healthy (Hanspal and Devasagayam 2017). Therefore

H1: Consumers' health consciousness relates positively to green purchase attitude.

#### **Environment Consciousness**

Individual's concern for environment is considered as most fundamental aspect in environmental research (Hines et al., 1987). Environmental concern develops consciousness for saving environment and people with high consciousness are morewilling to purchase the green products compared to those who are not conscious about the environmental issues (Mainieriet al., 1997).

Environmental consciousness means the importance of environment to the individuals. It also shows the awareness towards the environmental issues and willingness to perform actions to resolve these issues (Alwitt and Pitts, 1996; Dunlap and Jones, 2002). Environment knowledge has significant impact on ecological behavior of a person (Kaiser et al., 1999). Consumer derive knowledge about environment from the green initiatives taken by companies. Less consumer awareness to the issues of environmentcreates huge scope to explore the relationship between environment conscience and behavior towards green consumption (Tsai and Tsai, 2008).

The concept of three Rs known as reduce, reuse and recycle along with two Es which refers to energy and efficiency is considered an important constituent of the green initiatives (Gilg et al., 2005).

Environment concern and knowledge as important constituents of attitude have been studied to establish the relationship with intentions to support green restaurants (Hu et al., 2010). The psychological evaluation of the perceptions and beliefs regarding green environment builds up favourable or unfavourable attitude to adopt green practices (Cherian and Jacob, 2012). Therefore

H2: Consumers' environmental consciousness relates positively to green purchase attitude.

#### Perceived Risk of Pandemic

Perceived risk refers to perception of consumer regarding unfavourable experience of an outcome while engaging in an activity, be it purchasing or availing any service (Bruwer et al., 2013).

Spread of corona virus pandemic and subsequent implementation of lockdown has severely affected life of everyone. It has changed the habits and life style of people related to buying and consumption of products and services. There have been changes in behavior related to purchase of food products and food consumption behavior during this time. People preferred to stockpile the staples at home and preferred online delivery of food. Consumers have shown preference for healthy and sustainable food options despite decline in income due to lock down.(Borsellino, et al., 2020). Even duringpost lockdown when people have gradually started dining out, hygiene, cleanliness and quality of food remain the most important areas of concern (Numerator, 2020). Recent consumer researches have indicated that consumers will be more careful about hygiene while opting to dine at restaurants (Netscribe, 2020).

Like influenza, SARS and many such previous diseases, COVID-19 has severely affected the lifestyle and behavior of people all over world. The fear or risk of pandemic is high in minds of people and the life will take its own time to come back to normal. The concept of green restaurants might have to pay more emphasis on clean and healthy food

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and sustainable service practices as happened after SARS outbreak (Nhamo et al., 2020).

H3: The perceived risk of pandemic positivelyinfluences the green purchase attitude.

#### **Green Purchase Attitude**

Various theories such as theory of reasoned action and theory of planned behavior have predicted the attitude -intention- behavior model. Attitude has been designated as a potent precursor to indulge in a particular behaviour which in turn is shaped by beliefs and values of an individual. Therefore the beliefs regarding an event or situation guide the selection and subsequent evaluation of intentions and behaviour (Schwartz, 1992). The present study explores the environmental, health and pandemic related beliefs of consumers which lead to develop strong attitude and intentions to select green feature while making choice for restaurants. The environmental knowledge facilitates the formation of attitude and behaviour as discussed in previous studies. There are strong evidences that concern for environment leads to develop green consumer behaviour (Peattie, 2001). The model of theory of planned behaviour has been applied in previous researches to study the health and nutrition related behavior of consumers (Sweitzer et al., 2011).

The positive influence of expected outcomes of consumers to stay at green hotels on behavioural intentions brings more opportunities for green practices in hospitality sector (Lee, et al., 2011).

Attitude for green behavior has strong association with overall green image of hotels and restaurants (Lita et al., 2014).

Consumers' favourable beliefs for sustainable environment positively relate to the willingness for green restaurants (Shin, et al., 2017).

The previous studies researched on green behaviour in hotel industry ( Le et al., 2006). The role of attitude in shaping intentions for green restaurants is still an under explored area therefore in today's time of pandemic this concept gains more prominence.

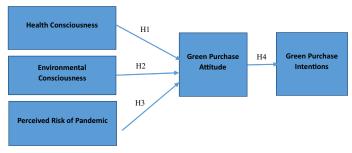
Thus H4:Green purchase attitude relates positively to intention to visit green restaurant.

#### **Proposed Research Framework**

Theory of reasoned action (Ajzen & Fishbein in 1980) discussed that human intentions are guided by attitude and subjective norms which in turn are based on behavioural and normative beliefs of the person. The control beliefs were later added in this theory (Ajzen, 1985) to enhance or reduce the occurrence of a particular behavior. The TPB framework has been extensively adopted to explore the association of environment concern and health consciousness with the intentions & behaviour (Smith and Paladino, 2010).

Based on the study of literature this research establishes the relationship between green purchase attitude and green purchase intentions for restaurants. The green purchase attitude is shaped by beliefs of the consumers related to health consciousness (HC), environmental consciousness (EC) and perceived risk of pandemic (PRP). The framework for the research is shown in figure 1.

Figure 1. Research Framework



#### Methods

### Sampling

The purpose of this study was to investigate intentions of consumers for green restaurants in time of post covid. As discussed in review of literature, intentions are measured by attitude which in turn is shaped by favourable or unfavourable beliefs of the consumers (Ajzen, 1985).

The study is done in some select districts of Rajasthan and data for the study was gathered through online filling of questionnaire by a sample of 306 respondents using convenience sampling from Jaipur and few more select cities of Rajasthan. The demographic profile of respondents is provided in table 1. In the survey data male respondents' percentage was approximately 17 % higher than female

respondents. Majority of respondents (75.82%) were of 21-31 age group. A good percentage of respondents were either graduate or post graduate. Number of married respondents was more than the unmarried one and they belonged to Jaipur city.

Table 1. Profile of Respondents

Demographic	Number	Percentage
Characteristics		
Gender		
Male	180	58.82%
Female	126	41.18%
Age		
21-31	232	75.82%
32-42	62	20.26%
43-53	8	2.61%
54 and above	4	1.31%
Education		
Under – graduate	27	8.82%
Graduate	120	39.22%
Post- graduate	103	33.66%
Professional	56	18.30%
Marital status		
Married	125	40.85%
Single	181	59.15%
Place		
Jaipur	222	72.55%
Kota	4	1.31%
Ajmer	40	13.07%
Udaipur	12	3.92%
Jodhpur	7	2.29%
Other place in	21	6.86%
Rajasthan		

#### **Data Collection**

The measures of study were taken from the previous established scales. Theitems for health consciousness were adapted from the scale used by Gould (1990) and later modified byMichaelidou& Hassan (2008) and Lo et al., (2017). The environmental consciousness was taken as second variable and the items for this were derived from the research work of Shin et al. (2017). The items for third variable Perceived risk of pandemic were adapted from scales used by Lee et al. (2012). The items of green purchase

attitude and green purchase intentions were adapted from work of Ajzen (1995), Hu et al. (2011) and Han et al. (2012). Respondents for this study were the people who were above the age of 20. Data from the respondents was collected on a multi item scale in which 16 items were taken altogether. Respondents have indicated their agreeableness on the given items based on a5 point Likert scale (1 means strongly disagree and 5 meansstrongly agree). Survey was conducted online as offline filling of the questionnaire was not possible due to covid guidelines. Survey instrument with measurement items is attached in the appendix.

## **Data Analysis**

The proposed research model was analyzed with the help ofstructural equation modeling (SEM). The two step model of SEM was used in which the measurement model first measured the latent variables and then the SEM or path analysis was performed by using AMOS 26.0 (Anderson and Gerbing, 1988).

#### Measurement Model

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#### Results

## **Structural Equational Modeling**

The interrelation between constructs was analysed using structural equation modeling in which a model testing is performed by two step method. In first step the reliability and validity of latent constructs and indicators is tested and model fit is established. In the second step the hypothesis testing is performed by conducting path analysis. Items of the measurement model are reported in table 2, table 3 and table 4. The reliability and validity have been tested and measured. The values of Cronbach's alpha and composite reliability were above .60 confirming the condition for reliability mentioned in literature (Hair et al., 2010; Bagozzi and Yi 1988). Convergent validity was measured in which all the values of average variance extracted were above .50 as recommended in the related studies (Fornell and Larcker, 1981). The measurement of discriminant validity was conducted in which the square root of values of average variance extracted were higher than the diagonal values of correlation.

Table 2. Reliability and Validity Analysis

Scales	Items	Cronbach's alpha	Composite reliability	Average variance extracted(AVE)	Maximum shared variance(MSV)
НС	3	.831	0.765	0.635	0.245
EC	3	.793	0.796	0.565	0.245
PRP	3	.819	0.821	0.605	0.099
GPA	3	.831	0.836	0.631	0.437
GPI	4	.807	0.809	0.515	0.437

**Table 3. Correlation Matrix** 

							Corr	elations								
	HC1	HC2	HC3	EC1	EC2	EC3	PRP1	PRP2	PRP3	GPA1	GPA2	GPA3	GPI1	GP12	GPI3	GPI4
HC1	1	.624	.682"	274	.292"	.281"	.124	.103	.170"	.286"	236	298"	.196"	.278"	.273"	.190"
HC2	.624	1	.591"	265*	.302**	.344"	.112	.048	.139*	233"	.149	.194"	.200**	.277**	.219"	214"
HC3	.682	.591	1	.331	.355"	.269"	.212"	.135	.179"	260"	.191	.274"	.156"	.319"	298"	.187"
EC1	274	265	.331"	1	.579"	.516	.254"	227"	.243"	.330"	262	.299"	233"	.244"	233"	.253"
EC2	292	.302	.355**	.579	- 1	.594"	.217"	.162	.189	.333**	284	.317	.211"	.248**	.200	.212"
EC3	281	.344	.269"	516	.594"	1	.159"	.153	.107	235"	.169	218"	.223"	.179"	.137*	245"
PRP1	.124"	.112	.212"	254	.217"	.159"	1	.554"	.594"	.121	.171	.109	.042	.260"	.260"	.180"
PRP2	.103	.048	.135*	227*	.162"	.153**	.554"	- 1	.654"	.137	.181	.102	.018	.224"	.169"	.105
PRP3	.170	.139	.179**	243	.189**	.107	.594"	.654"	1	.132*	.145	.040	007	.226"	.202"	.120

GPA1	286	233	260"	330	.333"	.235"	.121	.137	.132	1	.618	688"	.401"	.405"	.349"	.444"
GPA2	236	.149	.191"	262	.284"	.169	.171**	.181	.145	.618"	- 1	.569	.363**	.358"	.343"	.389"
GPA3	298	.194	.274**	299	.317	.218"	.109	.102	.040	.688**	.569	1	.337"	.385**	.411"	.364"
GPI1	196	200	.156**	233	211"	.223"	.042	.018	007	.401"	363	.337"	1	.507**	.441"	.610"
GPI2	278	277	.319**	244	248	.179"	.260**	224"	226**	.405"	358	.385	.507**	- 1	.596™	.467"
GPI3	273	219	.298"	233	200"	.137	.260**	.169	202"	.349"	343	.411"	.441"	.596"	1	.470
GPI4	190	214	.187"	253	212"	.245	.180"	.105	.120°	.444"	389	364"	.610	.467"	.470**	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

**Table 4. Measurement Model** 

	χ2	df	χ 2 /df	RMSEA	GFI	CFI	TLI
Measurement	168.020	97	1.732	0.049	.933	.965	.956
Model							

Note:  $\chi$  2: Chi-square; df: degree of freedom; RMSEA: root mean square error of approximation; CFI: comparative fit index; TLI: Tucker–Lewis index.

A good model fit of the measurement model was established as all the measures were meeting the expected values.

## Structural or Path Analysis

The relationship among the variables of the proposed model was tested by conducting structural or path analysis. The results of structural analysis are displayed in table 5.

Table 5. Results of SEM analysis

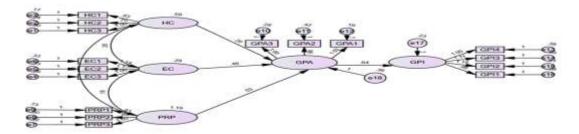
Hypothesis	Casual path	Path coefficient	Standard errors	Critical ratios	p-values
H1	HC ? GPA	.465	.108	4.315	***
H2	EC ? GPA	.201	.068	2.948	.003
Н3	PRP ? GPA	.030	.042	.717	.474
H4	GPA ? GPI	.637	.070	9.100	***

#### Discussion

The model fit of SEM model was established and measures rightly matched the required values. The results of the SEM matched the hypothesized model. The influence of health consciousness and environmental consciousness positively affected the green purchase attitude therefore H1 & H2

were accepted. Perceived risk of pandemic did not show a significant impact on the green purchase attitude so the H3 was rejected. Green purchase attitude related positively to intentions for green restaurants thus the H4 was accepted. The hypothesized path structure with standardized path coefficients is displayed in figure 2.

Figure 2. SEM Model with Standardized Path Coefficients



<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

The outcomes of this study are expected to be very useful for the green restaurants operating in Rajasthan. In previous researches the importance of health consciousness and environment consciousness has been studied but its direct relation to the intentions for green restaurants is still not very clear (Han, 2020; Lee & Han, 2019; Hwang & Lyu, 2020). Restaurants have been trying to attract the consumers in multiple ways to pay attention to the green practices adopted by them(Choi et al., 2015; Jeong et al. 2014). So far positioning of green restaurants was more for the niche consumers. The strong inner belief and deep understanding for such initiatives was not very clearly visible. The outcomes of this study display the strong association of self-beliefs related to importance of health and sustainability of the environment with the overall green attitude of the consumers. A good number of respondents have responded in agreement with the statements of health and environment consciousness. They assumed the responsibility of taking care of their health and environment very important. The pandemic has taught many lessons and the care of health and environment is going to be the most important take away in post covid time.

Majority of respondents were in favour of dining at green restaurant and have shown confidence in green restaurant practices. They have shown willingness and intentions for dining at green restaurants once the pandemic is controlled. A good number of people who were surveyed have depicted their willingness to pay extra for green restaurant.

The sample of this study belonged to household consumers, professionals and students across various disciplines and majority of them have responded in favour of green restaurants practices and their willingness to choose such initiatives in future. Interestingly the youth belonged to 18-31 years of age has shown positive attitude for health, environment and consuming food in green restaurants. Sample consisted of almost equal number of married and unmarried professionals and they preferred green restaurants in view of health and environmental issues. Though the research studies mentioned in literature section suggested that people may pay more attention and develop positive influence for green practices to take care of their health in post pandemic phase however the

perceived risk of pandemic may deter the intentions to dine out as it has been surveyed that the preference for home cooked food under proper hygiene will remain the top priority for consuming food. Due to stress of lockdown people may think to dine out now when the markets are open but the percentage of such people is still uncertain.

#### **Conclusion and Limitations**

Thus the study concludes that beliefs of consumer pertaining to attitude and intentions for green restaurants have become more significant due to covid 19 pandemic and there is great scope for the companies in restaurant industry to address these changes in the food purchase and consumption behavior of the people once the life returns to normal. The pandemic has created huge scope to serve the market of health and environmental conscious consumers who may consider the benefits of green practices over the high price of such initiatives and at the same time companies should also think how to make green options available to the consumers without charging high and contribute for creating a pandemic risk free ecosystem. Since most of responses were gathered through online survey due to restriction during pandemic the study could not capture the direct response of consumers who visit a particular restaurant.

#### References

- Anderson, J.C. and Gerbing, D.W., 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin*, 103(3), p.411.
- Ajzen, I., 1991. The theory of planned behavior. Organizational behavior and human decision processes, 50(2), pp.179-211.
- Alwitt, L.F. and Pitts, R.E., 1996. Predicting purchase intentions for an environmentally sensitive product. *Journal of consumer psychology*, *5*(1), pp.49-64.
- Bagozzi, R.P. and Yi, Y., 1988. On the evaluation of structural equation models. *Journal of the academy of marketing science*, 16(1), pp.74-94.
- Becker, M.H., Maiman, L.A., Kirscht, J.P., Haefner, D.P. and Drachman, R.H., 1977. The health belief model

- and prediction of dietary compliance: A field experiment. *Journal of Health and Social behavior*, pp.348-366.
- Borsellino, V., Schimmenti, E. and El Bilali, H., 2020.
   Agri-food markets towards sustainable patterns.
   Sustainability, 12(6), p.2193.
- Bruwer, J., Fong, M. and Saliba, A., 2013. Perceived risk, risk-reduction strategies (RRS) and consumption occasions: Roles in the wine consumer's purchase decision. Asia Pacific Journal of Marketing and Logistics.
- Canziani, B.F., Almanza, B., Frash, R.E., McKeig, M.J. and Sullivan-Reid, C., 2016. Classifying restaurants to improve usability of restaurant research. *International Journal of Contemporary Hospitality Management*.
- Chae, J. and Quick, B.L., 2015. An examination of the relationship between health information use and health orientation in Korean mothers: Focusing on the type of health information. *Journal of Health Communication*, 20(3), pp.275-284.
- Cherian, J. and Jacob, J., 2012. Green marketing: A study of consumers' attitude towards environment friendly products. Asian social science, 8(12), p.117.
- Choi, A.S. and Fielding, K.S., 2013. Environmental attitudes as WTP predictors: A case study involving endangered species. *Ecological Economics*, 89, pp.24-32.
- Choi, H., Jang, J. and Kandampully, J., 2015.
   Application of the extended VBN theory to understand consumers' decisions about green hotels. *International Journal of Hospitality Management*, 51, pp.87-95.
- Dewald, B., Bruin, B.J. and Jang, Y.J., 2014. US consumer attitudes towards "green" restaurants. *Anatolia*, 25(2), pp.171-180.
- Dunlap, R.E. and Jones, R.E., 2002. Environmental concern: Conceptual and measurement issues.
   Handbook of environmental sociology, 3(6), pp.482-524.
- Dutta, K., Umashankar, V., Choi, G. and Parsa, H.G.,

- 2008. A comparative study of consumers' green practice orientation in India and the United States: A study from the restaurant industry. *Journal of Foodservice Business Research*, *11*(3), pp.269-285.
- Fishbein, M., Jaccard, J., Davidson, A.R., Ajzen, I. and Loken, B., 1980. Predicting and understanding family planning behaviors. In *Understanding attitudes and* predicting social behavior. Prentice Hall.
- Fornell, C. and Larcker, D.F., 1981. Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- Gould, S.J., 1988. Consumer attitudes toward health and health care: A differential perspective. *Journal of Consumer Affairs*, 22(1), pp.96-118.
- Gould, S.J., 1990. Health consciousness and health behavior: the application of a new health consciousness scale. *American Journal of Preventive Medicine*, 6(4), pp.228-237.
- Gilg, A., Barr, S. and Ford, N., 2005. Green consumption or sustainable lifestyles? Identifying the sustainable consumer. *Futures*, *37*(6), pp.481-504.
- Gronemus, J.Q., Hair, P.S., Crawford, K.B., Nyalwidhe, J.O., Cunnion, K.M. and Krishna, N.K., 2010. Potent inhibition of the classical pathway of complement by a novel C1q-binding peptide derived from the human astrovirus coat protein. *Molecular immunology*, 48(1-3), pp.305-313.
- Gifford, R. and Nilsson, A., 2014. Personal and social factors that influence pro-environmental concern and behaviour: A review. *International journal of psychology*, 49(3), pp.141-157.
- Groening, C., Sarkis, J. and Zhu, Q., 2018. Green marketing consumer-level theory review: A compendium of applied theories and further research directions. *Journal of Cleaner Production*, 172, pp.1848-1866.
- Hinesa, J.M., Hungerforda, H.R. and Tomerab, A.N., 1987. Analysis and Synthesis of Research on Responsible Environmental Behavior: A Meta-

- Analysis. *Journal of Environmental Education*, 18(2), pp.1-8.
- Hu, H.H., Parsa, H.G. and Self, J., 2010. The dynamics of green restaurant patronage. *Cornell Hospitality Quarterly*, 51(3), pp.344-362.
- Han, H., Hsu, L.T.J., Lee, J.S. and Sheu, C., 2011. Are lodging customers ready to go green? An examination of attitudes, demographics, and eco-friendly intentions. *International journal of hospitality management*, 30(2), pp.345-355.
- Ham, S. and Lee, S., 2011. US restaurant companies' green marketing via company websites: impact on financial performance. *Tourism Economics*, 17(5), pp.1055-1069.
- Heung, V.C. and Gu, T., 2012. Influence of restaurant atmospherics on patron satisfaction and behavioral intentions. *International Journal of Hospitality Management*, 31(4), pp.1167-1177.
- Harrington, R.J., Ottenbacher, M.C. and Way, K.A., 2013. QSR choice: Key restaurant attributes and the roles of gender, age and dining frequency. *Journal of quality assurance in hospitality & tourism*, 14(1), pp.81-100.
- Huang, C.H., 2014. Relationships between consumers' nutritional knowledge, social interaction, and healthconscious correlates toward the restaurants. *J. Int. Manag. Stud*, 9, pp.59-67.
- Hanspal, S. and Devasagayam, P.R., 2017. Impact of consumers' self-image and demographics on preference for healthy labeled foods. SAGE Open, 7(1), p.2158244016677325.
- Hwang, J., Kim, S.S., Choe, J.Y.J. and Chung, C.H., 2018. Exploration of the successful glocalization of ethnic food: A case of Korean food. *International Journal of Contemporary Hospitality Management*.
- Hoque, M.Z., Alam, M. and Nahid, K.A., 2018. Health consciousness and its effect on perceived knowledge, and belief in the purchase intent of liquid milk: Consumer insights from an emerging market. Foods,

- 7(9), p.150.
- Han, H., Moon, H. and Hyun, S.S., 2019. Uncovering the determinants of pro-environmental consumption for green hotels and green restaurants: A mixed-method approach. *International Journal of Contemporary Hospitality Management*.
- Vietnam, N., 2020. Post COVID-19: Preparing for the new normal of Vietnam, agenda.
- Huber, B.C., Steffen, J., Schlichtiger, J., Graupe, T., Deuster, E., Strouvelle, V.P., Fischer, M.R., Massberg, S. and Brunner, S., 2020. Alteration of physical activity during COVID-19 pandemic lockdown in young adults. *Journal of Translational Medicine*, 18(1), pp.1-3.
- Han, H., 2020. Theory of green purchase behavior (TGPB): A new theory for sustainable consumption of green hotel and green restaurant products. *Business Strategy and the Environment*, 29(6), pp.2815-2828.
- Hwang, J. and Lyu, S.O., 2020. Relationships among green image, consumer attitudes, desire, and customer citizenship behavior in the airline industry. *International Journal of Sustainable Transportation*, 14(6), pp.437-447.
- Jeong, E., Jang, S.S., Day, J. and Ha, S., 2014. The impact of eco-friendly practices on green image and customer attitudes: An investigation in a café setting.
   International Journal of Hospitality Management, 41, pp.10-20.
- Kaiser, F.G., Ranney, M., Hartig, T. and Bowler, P.A., 1999. Ecological behavior, environmental attitude, and feelings of responsibility for the environment. *European psychologist*, 4(2), p.59.
- Kim, Y. and Choi, S.M., 2005. Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. ACR North American Advances.
- Kim, Y.E.O.N.S.H.I.N., 2011. Understanding green purchase: The influence of collectivism, personal values and environmental attitudes, and the moderating effect of perceived consumer effectiveness. Seoul Journal of

- Business, 17.
- Kwok, L., Huang, Y.K. and Hu, L., 2016. Green attributes of restaurants: What really matters to consumers?. *International Journal of Hospitality Management*, 55, pp.107-117.
- Lone, T.A., Pence, D., Levi, A.E., Chan, K.K. and Bianco-Simeral, S., 2009. Marketing healthy food to the least interested consumers. *Journal of Foodservice*, 20(2), pp.90-99.
- Lee, J.S., Hsu, L.T., Han, H. and Kim, Y., 2010. Understanding how consumers view green hotels: how a hotel's green image can influence behavioural intentions. *Journal of sustainable tourism*, 18(7), pp.901-914.
- Lee, C.K., Song, H.J., Bendle, L.J., Kim, M.J. and Han, H., 2012. The impact of non-pharmaceutical interventions for 2009 H1N1 influenza on travel intentions: A model of goal-directed behavior. *Tourism management*, 33(1), pp.89-99.
- Lita, R.P., Surya, S., Ma'Ruf, M. and Syahrul, L., 2014. Green attitude and behavior of local tourists towards hotels and restaurants in West Sumatra, Indonesia. *Procedia Environmental Sciences*, 20, pp.261-270.
- Lo, A., King, B. and Mackenzie, M., 2017. Restaurant customers' attitude toward sustainability and nutritional menu labels. *Journal of Hospitality Marketing & Management*, 26(8), pp.846-867.
- Maineri, T., 1997. Green buying: The influence of environmental concern on consumer behaviour. *The Journal of Social Psychology*, 137(2), pp.189-204.
- Milfont, T.L. and Duckitt, J., 2004. The structure of environmental attitudes: A first-and second-order confirmatory factor analysis. *Journal of environmental psychology*, 24(3), pp.289-303.
- Moisander, J., 2007. Motivational complexity of green consumerism. *International journal of consumer studies*, 31(4), pp.404-409.
- Michaelidou, N. and Hassan, L.M., 2008. The role of health consciousness, food safety concern and ethical

- identity on attitudes and intentions towards organic food. *International journal of consumer studies*, 32(2), pp.163-170.
- Mesanovic, E., Kadic-Maglajlic, S. and Cicic, M., 2013. Insights into health consciousness in Bosnia and Herzegovina. *Procedia-Social and Behavioral* Sciences, 81, pp.570-575.
- Moon, S.J., 2021. Investigating beliefs, attitudes, and intentions regarding green restaurant patronage: An application of the extended theory of planned behavior with moderating effects of gender and age. *International Journal of Hospitality Management*, 92, p.102727.
- Nielsen, N.V., 2015. We are what we eat: Healthy eating trends around the world. *New York, USA: The Nielsen Company*.
- Namkung, Y. and Jang, S., 2017. Are consumers willing to pay more for green practices at restaurants?. *Journal* of Hospitality & Tourism Research, 41(3), pp.329-356.
- Nhamo, G., Dube, K. and Chikodzi, D., 2020. Counting the cost of COVID-19 on the global tourism industry. Springer Nature.
- Papadas, K.K., Avlonitis, G.J. and Carrigan, M., 2017.
   Green marketing orientation: Conceptualization, scale development and validation. *Journal of Business Research*, 80, pp.236-246.
- Seymour, J.D., Yaroch, A.L., Serdula, M., Blanck, H.M. and Khan, L.K., 2004. Impact of nutrition environmental interventions on point-of-purchase behavior in adults: a review. *Preventive medicine*, 39, pp.108-136.
- Schubert, F., Kandampully, J., Solnet, D. and Kralj, A., 2010. Exploring consumer perceptions of green restaurants in the US. *Tourism and Hospitality Research*, 10(4), pp.286-300.
- Sweitzer, S.J., Briley, M.E., Roberts-Gray, C., Hoelscher, D.M., Harrist, R.B., Staskel, D.M. and Almansour, F.D., 2011. Psychosocial outcomes of Lunch is in the Bag, a parent program for packing

- healthful lunches for preschool children. *Journal of nutrition education and behavior*, 43(6), pp.536-542.
- Song, H.J., Lee, C.K., Kang, S.K. and Boo, S.J., 2012.
   The effect of environmentally friendly perceptions on festival visitors' decision-making process using an extended model of goal-directed behavior. *Tourism Management*, 33(6), pp.1417-1428.
- Shin, Y.H., Moon, H., Jung, S.E. and Severt, K., 2017. The effect of environmental values and attitudes on consumer willingness to pay more for organic menus: A value-attitude-behavior approach. *Journal of Hospitality and Tourism Management*, 33, pp.113-121.
- Tsai, C.W. and Tsai, C.P., 2008. Impacts of consumer environmental ethics on consumer behaviors in green hotels. *Journal of Hospitality & Leisure Marketing*, 17(3-4), pp.284-313.
- Tan, B.C. and Yeap, P.F., 2012. What drives green restaurant patronage intention?. *International Journal of Business and Management*, 7(2), p.215.

- Trang, H.L.T., Lee, J.S. and Han, H., 2019. How do green attributes elicit pro-environmental behaviors in guests? The case of green hotels in Vietnam. *Journal of Travel & Tourism Marketing*, 36(1), pp.14-28.
- Verma, V.K., Chandra, B. and Kumar, S., 2019. Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of Business Research*, 96, pp.206-216.
- Wardle, J., Haase, A.M., Steptoe, A., Nillapun, M., Jonwutiwes, K. and Bellisie, F., 2004. Gender differences in food choice: the contribution of health beliefs and dieting. *Annals of behavioral medicine*, 27(2), pp.107-116.
- <a href="https://www.numerator.com/resources/blog/impact-covid-19-consumer-behavior">https://www.numerator.com/resources/blog/impact-covid-19-consumer-behavior</a>
- https://www.netscribes.com/consumer-habits-post-covid-19/

# Appendix Survey Instrument

Constructs	Items
Health Consciousness (HC)	I'm mindful of my health condition.  I assume responsibility for the condition of my health.  I view myself as a health consciousness person.
Environmental Consciousness (EC)	I cannot Ignore the environmental issues.  I am conscious about saving environment.  I figure out we should think often about environmental issues.
Perceived Risk of Pandemic (PRP)	People around me appear to avoid visiting any restaurants due to coronavirus.  Due to fear of pandemic I will not enjoy food at green restaurant.  As far as I might be concerned I will not enjoy visiting a green restaurant due to pandemic post covid.
Green Purchase Attitude ( GPA )	I feel confident due to green practices adopted by restaurant.  I believe that dining at green restaurant will enable me to protect environment.  I belief that dining at green restaurant will provide me fresh and healthy food.
Green Purchase Intentions ( GPI )	I am willing to dine at green restaurant post pandemic.  I care for my health and I am willing to pay extra for eating at green restaurant.  I have intention to dine at green restaurant as there are less cases of pandemic.  I am willing to dine at green restaurant with my family in future during post Covid.