Attitude of customers towards eco-friendly practices: An exploratory study in star category hotels of Uttar Pradesh

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Abstract---Hotel industry worldwide is rolling out a plethora of sustainable initiatives to reduce the malicious impact on the environment. With comprehensive eco-attributes and concepts in market, it becomes vital to determine which eco-friendly attitude serves meaningful to the business. The primary aim of the present research paper is to examine customer attitude towards eco-friendly practices adopted in star category hotels and identify correlation between attitudes towards eco-friendly practices with reason to stay. The data for the research paper was collected through structured questionnaire from the customers staying in star category hotels. Total of 360 responses were recorded. Analysis revealed that none of the demographics except gender, age and employment showed difference in attitude towards eco-friendly practices. Secondly, findings also indicated high correlation between reason to stay and customer attitudes towards eco-friendly practices.

Keywords---Sustainability, eco-friendly practices, customer attitude, star category hotels.

Introduction

The increasing demand and consumption of natural resources influence several establishments in the society, intensifying responsiveness and severity towards sustainability over the coming future. (McDonagh, P. & Prothero. 2014). Hotel industry is the largest industry for excessive consumption of non- recyclable natural resources which significantly contributes to environmental degradation

worldwide. However, practising sustainable attributes during the operations can protect natural resources to a great extent. The Government is also emphasizing on the sustainable eco-friendly practices.

The Indian government inaugurated the National Air Quality Index (NAQI) in the year 2015 to decrease carbon emissions from 33% to 25% by the year 2030 (The Christian Science Monitor, 2015) and in February 2016 announced green tax on the sales of cars to combat against air pollution (Reuters, 2016). Similar researches revealed that approximately 88% of consumers are satisfied while purchasing sustainable products for their day to day use (Unilever, 2017). Studies have highlighted association between social responsibility and sustainability and concluded that there is a positive effect of sustainable practices on the stakeholders of the firm (De Grosbois.2016; Rahimi.2017). The idea of sustainability was first devised in Brundtland Report in the year 1987, states "Sustainable development is meeting the needs of current generation without compromising the ability of future generations to meet their own needs" (United Nations World Commission on Environment and Development, 1987). It's a model comprising economic, environmental and socio-cultural dimensions (United Nation Economic Commission for Europe, 2017). This concept is not new to the hotel industry and hoteliers are increasingly incorporating eco-friendly strategies that integrates socially responsible practices and comprehensive environmental policies. The term eco-friendly practices in hotel refers to lodging establishments responsible for commitment to implementing environmental friendly practices. Various researchers have illustrated that hotel benefits by implementing eco-friendly practices from two prospective: firstly, green practices reduces hotels operational cost in the long run and secondly it acts as a marketing tool for attracting environment friendly customers (Park et al.2014; Kapera.2018). Lodging establishments should raise their awareness about eco-friendly practices to their customers by promoting sustainable practices like towel and linen-reuse programs, installation of aerated faucets etc. Hospitality professionals and marketers need to gain deeper understanding of customers' attitude and behaviour towards eco-friendly practices to design efficient and effective sustainable initiatives for guest awareness.

The declaration of COVID 19 as pandemic by WHO on 11th March 2020 was an eye opening experience that has obligated customers to analyse their negative impact on the surrounding environment. Rather (2021) in the study stated that COVID-19 pandemic negatively affected the attitudes of the customer. Since the inception of pandemic, 70% of the travellers want to travel and stay in hotels more sustainable in future. (Hotelier India, Feb 2021). The COVID -19 pandemic has caused 87% downfall in international tourist arrivals in year 2021 however has an alarming rise in the domestic tourism (UNWTO, 2021). Likewise, Uttar Pradesh is the second largest contributor to Indian economy but hospitality sector especially hotel industry is in its nascent stage. Indian national database on accommodation establishments states that the total number of approved star category hotels are 24 in Uttar Pradesh (MOT, Government of India, 2020).Stemming from the above data, the purpose of this study is to explore customer attitude towards eco-friendly practices adopted in star category hotels and identify correlation between attitude towards eco-friendly practices with reason to stay.

The findings of this research will be significant to hotel marketers in recognising how customers respond to eco-friendly practices and which kind of green practices a hotel should promote in future for their potential customers.

Literature Review
Eco-friendly attributes and sustainability

Eco-friendly practices are an important component that initiates to eliminate negative impact on the environment and look for future sustainability. The term eco is an acronym for ecology and friendly implies positive relationship with the environment. An accommodation unit following ecological practices like recycling of amenities and products, guest green involvement programmes,effective management system to support environment and incorporate sustainability in their decision making are known as green hotels. (Green Hotels Association, 2018). The phrase eco-friendly uses a variety of expressions such as environmental friendly", "green" or "sustainable" to advertise their green illustration (Chen & Chang, 2013).

Hence the term eco-friendly hotel has been used interchangeably as environment friendly, green or sustainable hotel. In a study conducted by Slevitch et al. (2013), mentioned existence of a positive relationship between hotel practicing green attributes with higher guest satisfaction and reason to stay intentions. Through an online review services like Trip advisor where customers get the advantage to evaluate and share their experiences; stated in the context of hotel stays, customers are cautious about environmental issues and ethical self-identity affects stay intentions. Data furthermore revealed that green practices are more extreme in higher star category hotels. Another interesting revelation by (Zhang et al. (2020) was identification of indoor air quality as the most satisfied eco-friendly attribute by customers and may make hotels more appealing in the future. To sum up, eco-friendly hotels are based on green infrastructure, conservation of natural resources, green services and products and environmental protection. As forecasted by international tourism partnership (ITP, 2020) 2.4 million new hotels are on global pipeline in coming years. The hotel industry would save 42 million tonnes of $CO2$ each year by 2030 if sustainable architecture and operations are implemented.

Attitudes towards eco-friendly practices

Consumers expect tangible and visible demonstrations towards green practices like linen re-use option or organic menu on the table. Numerous elements, such as an individual's knowledge, attitudes, and ability to do the behaviour in an ecologically responsible manner, may influence their purchasing intentions. Previous research has identified two types of eco-friendly attitudes: general and particular. In general, a person's attitude toward a behaviour can be defined as the degree to which an individual views the behaviour favourably or negatively (Ajzen, 2001). The specific attitude denotes a judgement of one's behaviour in relation to environmentally friendly things, such as staying in a green hotel or eating organic food. In line with this, author (Wang et al., 2014) have claimed that customers with higher ecological concern depict pro-environmental attitudes and adopt environmentally responsible consumption behaviour Thus, attitude towards

eco-friendly practices shows how a customer behaves or reacts towards a hotel which is environmentally sound.

Kahn et al. (2019), revealed it is essential to investigate the acceptance of customers for eco-friendly attributes as hotel guests practically cannot obtain benefit from water and energy conservation practices. Although eco-friendly practices are societally beneficial, these practices necessitate additional expenses for customers and hotels. Customers may need to pay extra premium price for eco-green hotels and sacrifice luxury by reusing the high quality linen in the bathroom. Earlier studies by Manaktola & Jauhari (2007) in NCR Delhi, explored a vital correlation between consumer behaviour and attitudes towards eco-friendly practices in hotel industry but only 15% of the consumers were ready to pay price premium for green lodging establishments. Supporting to the findings of Manaktola and Juhari ; Karavasilis et al. (2015), conducted a research in Greece, indicating that Y generation are highly environmentally concisions but carry limited knowledge and are unaware about micro level practices like linen recycle programmes. The study also concludes Generation Y not willing to pay price premium despite having a positive outlook towards the environment. Hence it becomes essential for hotels to comprehend the attitude of the customers towards sustainable attributes during their stay. The 21st century individuals are more aware about the negative impacts on the environment due to various commercial undertakings and may demonstrate pro-environmental behaviour. A study by Yadav et al. (2017) revealed that customers attitude towards eco-friendly products appeared as the most significant factor for green purchase intention and reason to stay. Verma et al.2019 revealed customer's environmental concern play a significant contributor in determining their attitude towards eco-friendly hotels. Ahmad et al. (2020) stressed the significance of personal cultural values, resultant self- transcendence and resultant conservation helps in increasing tourists' visiting attitude and behaviour towards eco-friendly destinations. The study also concluded that biosphere values found to be the most important dimension of customers attitude towards green hotel whereas customers with greater altruistic values like welfare of society depict higher environmental concern.

Objectives of the study
1. To examine attitude of customers towards eco-friendly practices.
2. To analyse correlation between customer eco-friendly attitude and reason to stay

Hypotheses:
$H_0 1$: Demographics do not show a significant difference in attitude of customer towards eco-friendly practices.
H1: Demographics show a significant difference in attitude of customer towards eco-friendly practices.
$H_0 2$: Attitude towards eco-friendly practices and reason to stay are not correlated
H2: Attitude towards eco-friendly practices and reason to stay are correlated

Research Methodology

An organized survey was conducted to collect the required responses. Books, journals, Government websites and interaction with hotel industry professionals facilitated in the assortment of secondary information. The study includes both primary and secondary data. Nonparametric tests were used to find differences between demographic profile with attitude towards eco-friendly practices. Similarly, correlation was applied to test the relationship between attitude towards eco-friendly practices with reason to stay. Data was collected from 360 customers from who had visited star category hotels of Lucknow, Agra and Varanasi using convenience sampling. Collection was done through online Platform Google forms as well as personally received responses from customers using offline questionnaire.

Analysis and Finding

Frequency table was created to observe the demographic profile of respondents. The demographic variables considered in the current study are gender, age, qualification, employment, salary, nationality, hotel visit frequency, category of hotel Preferred, stay duration and location of hotel. The details are displayed in table 1.

Table 1
Demographic characteristics of the respondents

Demographic Variable	Value	Percentage
Gender	Female	28.6
	Male	71.4
Age	18-30 Years	40.8
	31-40 Years	27.8
	41-50 Years	23.2
	51-60 Years	6.8
	Above 60 Years	1.4
Qualification	Undergraduate	21.0
	Graduate	28.9
	Post Graduate	38.8
	Doctorate	2.5
	Professional Course	8.8
Employment	Student	26.1
	Government Employee	13.9
	Private Sector	36.5
	Self Employed	19.3
	Retired	2.0
	Unemployed	2.3
Salary	Not Earning	29.5
	Up to 5 Lakhs	11.0
	5-10 Lakhs	19.3
	10-15 Lakhs	15.6
	Above 15 Lakhs	24.6

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Nationality	Indian	96.3
	Foreigner	3.7
Hotel Visit Frequency	Once A Year	28.3
	Twice A Year	19.5
	Thrice A Year	8.8
	4 Times A Year	11.0
	More Than 4 Times	32.3
Category of Hotel Proffered	1 and 2 Star	43.9
	3 Star	32.3
	4 Star	17.0
	5 Star	6.8
Stay Duration	1-3 Days	75.4
	4-7 Days	22.4
	8-10 Days	.3
	More Than 10 Days	2.0
Location of Stay	Agra	30.3
	Lucknow	36.5
	Varanasi	33.1

Internal consistency of scales were measured using Cronbach's alpha, scale to measure attitude = .978, which was found to be adequate and in acceptable range. Hence further exploratory analysis could be performed. The results of KMO and Bartlett's test of sphericity (Kaise-Meyer –Olkin Measure of Sampling Adequacy: .965; Barlett's test of Sphericity-significance: .000). As an outcome, the primary conditions for using factor analysis were considered. The researcher further performed Principal Component Analysis, on 25 items regarding various parameters identified for attitude towards eco-friendly practices. Those items which had extraction value of communalities < 0.5 and almost the same factor loading, indicates that they did not fit well with the factor were dropped (attitude for green plantation, low water consumption with factor loading .381, .346, .472, .473, .174 and attitude for star rating equipment with factor loading.300, .461, .496, .442, .146).Further Kaiser's criterion analysis was used; the scree plot graph indicated clear three factors solution. The 5 components together account for 81.43% variance. Items that had eigenvalue >1 were considered for respective components. The number of iterations considered was 25. The component matrix uses the factors identified in Kaiser's criterion. The criterion analysis reflects that the 5 factors show loading of 0.5 and above. According to the findings of Scree plot, Component Matrix and Criterion analysis, it was revealed that 5 factors explain attitude towards eco-friendly practices significantly.

The components are expressed as Component 1: Attitude towards amenities; Component 2: Attitude towards energy usage; Component3: Attitude towards water usage; Component4: Attitude towards waste control; Component5: Attitude sustainability practices. The normality of data was checked by using the K-S test (Significance p:.000; p<.05). It was found that the data is non-normal, thus Mann-Whitney U test and Kruskal-Wallis were used to find differences created by the demographics on the dependent variables (5 factors of attitude towards eco-friendly practices).It was observed that gender creates a difference in all the factors of attitude except attitude towards amenities (p=0.593; p>.05), as

displayed in Table 2, it is evident from the mean rank that females create more difference in attitude.

Table 2
Mann-Whitney U Test

Component	Attitude_towards_ amenities	Attitude_towards energy _usage	Attitude_towards_ water_usage	Attitude_towards _waste_control	Attitude_sustain ability_practices
Mann-Whitney U	12274.500	10858.000	11228.000	11113.500	11050.500
Asymp. Sig. (2-tailed)	.593	.027	.048	.050	.047
Mean Rank	NA	Female (195.50)	Female (191.83)	Female (192.97)	Female (193.59)
	NA	Male (169.59)	Male (171.06)	Male (170.60)	Male (170.35)

Using Kruskal Wallis Test (Non Parametric test equivalent to ANOVA), it was also observed that Age (p=.019; highest mean rank in 51-60 years) and Employment (p=.001; highest mean rank in unemployed) created difference only in attitude towards energy usage.Further, it is   also observed that demographic variables which does not create any difference in the factors of attitude are Qualification, Nationality, Hotel Visit Frequency, Category of hotel preferred, duration of stay and location of stay.

Thus, nulls hypothesis $H_0 1$: Demographics do not show a significant difference in attitude of customer towards eco-friendly practices is *partially* rejected and alternate hypothesis H1: Demographics show a significant difference in attitude of customer towards eco-friendly practices *partially* accepted. Further analyzing the data it was found that reason for   stay is positively correlated with all the factors of attitude, as represented in Table 3

Table 3
Correlation between reason of stay and factors of attitude

Components		Attitude towards amenities	Attitude towards energy usage	Attitude towards water usage	Attitude towards waste control	Attitude sustainabili ty practices
Purpose of stay: Professional	Pearson Correlation	.122*	.126*	.137*	.139**	.138**
	Sig. (2-tailed)	.022	.017	.010	.009	.010
Purpose of stay: Personal	Pearson Correlation	.242**	.242**	.279**	.267**	.280**
	Sig. (2-tailed)	.000	.000	.000	.000	.000

It was found that though correlation between hotel selection and factors of attitude are positively correlated but the strength of correlation is very weak. Thus, second nulls hypothesis $H_0 2$: attitude towards eco-friendly practices and hotel selection are not correlated is fully rejected and alternate hypothesis H2:

attitude towards eco-friendly practices and reason to stay are correlated is fully accepted.

Conclusion

The findings of this study concluded that female gender creates more difference in all the parameters of attitude except attitude towards amenities. Earlier research mentioned that women depict high sustainable consumption since they have stronger environmental apprehension and attitude. (Tung et al. 2017).It was also concluded that customers of age group 51-60 years and employee status as unemployment creates difference in attitude towards energy usage. This coincides with the previous studies (Robin at al.2016; Nguyen et al .2019) that people with higher age group has the strongest relationship with sustainability, especially towards energy conservation. This result is concurrent with the studies (Han et al. 2011; Shwetha, G. Y. (2019), who mentioned unemployed youngsters express more concern towards renewable energy and depict attitude of environmental concern. Further, it was observed that though attitude towards eco-friendly practices are co-related to the reason of stay but the correlation co-efficient was weak.

Limitations and Recommendations

The sampling method used in the current study is coincidental sampling. Further, the study can be done to unearth the deeper reasons of different demographics on attitude towards eco-friendly practices. Though almost all eco-friendly practices followed in hotels have been taken into account but might have omitted some which the hotels may have started during Covid-19 era. The results could have been different based on those practices. The data was collected during lockdown period when hotel industry was facing a downturn with very limited guests or zero guests coming in. Similarly, the output would have been different if the data could be obtained from guests currently staying in hotels and not customers who stayed long back. Non availvility of foreign nationalities due to the on-going pandemic was another factor which might have given bias result related to various parameters of attitude. The research design of the current study is cross-sectional. But longitudinal research on the same population by creating a difference in their demographics might reveal the exact behaviour concerning the eco-friendly practices. Further, the data was collected from three major cities of Uttar Pradesh. The results might vary if data is collected from other parts of India.

Reference

1. Ahmad, W., Kim, W. G., Anwer, Z., & Zhuang, W. (2020). Schwartz personal values, theory   of   planned behavior and environmental consciousness: How tourists' visiting   intentions   towards eco-friendly destinations are shaped?. *Journal of Business   Research*, *110*,   228-236.
2. Ajzen, I. (2001). Nature and operation of attitude. Annual Review of Psychology, 52(1), 27-58.
3. Chen, Y. S., & Chang, C. H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of business ethics*, *114*(3), 489-500.

4. De Grosbois, D. (2016). Corporate social responsibility reporting in the cruise tourismindustry: A performance evaluation using a new institutional theory based model.   Journal of Sustainable Tourism, 24(2), 245–269.

5. Green Hotels Association. (2018). *What are green hotels.* Retrieved fromhttp://greenhotels.com/index.php

6. Han, H., Hsu, L. T. J., Lee, J. S., & 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), 345-355.

7. Hotelier   India.   (2021).   Retrieved   May   10,   2021   from https://www.hotelierindia.com/business/13624-green-travel-a-rapidly-growing concept-in-the-tourism-industry

8. Jeon, S. M., Jeong, W., & Kim, D. (2015). The effects of green hotel practices on hotelimage,   visit   intention,   and   word-of-mouth: Focusing   on   the moderating roles of   consumer   environmental   worldviews. *PEOPLE: International Journal of Social   Sciences,   Special*, (1), 1.

9. Kapera, I. Sustainable development in the hotel industry: Between theory and practice in   poland. *Turyzm* 2018, *28*, 23–30.

10. Karavasilis, G., Nerantzaki, D. M., Pantelidis, P., Paschaloudis, D., & Vrana, V. (2015). What   generation y in Greece thinks about green hotels. *World Journal of Entrepreneurship,   Management and Sustainable Development*.

11. Lit review Kahn, M.E., and P.P. Liu. 2015. Utilizing "Big Data" to Improve the Hotel Sector's   Energy   Efficiency   Lessons   from   Recent   Economics Research. Cornell Hospitality   Quarterly 57:202-2

12. McDonagh, P., & Prothero, A. (2014). Sustainability marketing research: Past, present and   future. *Journal of Marketing Management*, *30*(11-12), 1186-1219

13. Ministry of Tourism, Government of India.(2020).National database for accommodation   units. Retrieved   on   July   24,2020,   from https://hotelcloud.nic.in/MOT

14. Nguyen, N., Greenland, S., Lobo, A., & Nguyen, H. V. (2019). Demographics of sustainable   technology consumption in an emerging market: The significance of education to   energy efficient appliance adoption. *Social Responsibility Journal*.

15. Park, J., Jeong Kim, H., & McCleary, K. W. (2014). The impact of top management's environmental attitudes on hotel companies' environmental management. *Journal of Hospitality & Tourism Research*, *38*(1), 95-115.

16. Rahimi, R. (2017). Organizational culture and customer relationship management: A simple   linear regression analysis. *Journal of Hospitality Marketing & Management*, *26*(4),443-449.

17. Rather, R. A. (2021). Monitoring the impacts of tourism-based social media, risk perception   and fear on tourist's attitude and revisiting behaviour in the wake of COVID-19   pandemic. *Current Issues in Tourism*, 1-9.

18. Reuters, 2016. India slaps levy on new car sales in fight against pollution and congestion.   https://in.reuters.com/article/india-budget-autos/india-slaps-levy-on-new-car-sales-in   fight-against-pollution-and-congestion-idINKCN0W21SB (accessed 1st April 2021).

19. Robin, C. F., Valencia, J. C., Muñoz, G. J., Astorga, P. S., & Martínez, D. Y. (2016). Attitude   and behavior on hotel choice in function of the perception of sustainable   practices. *Tourism & Management Studies*, *12*(1), 60-66.

20. Shwetha, G. Y. (2019). A Descriptive Study on Attitude of Generation Z towards Green   Behaviour. *Cape Comorin Research J*, *1*(1), 30-35.

21. Slevitch, L., Mathe, K., Karpova, E., & Scott-Halsell, S. (2013). "Green" attributes and   customer satisfaction: Optimization of resource allocation performance. *International   Journal   of   Contemporary   Hospitality Management*.

22. Taufique, K. M. R., & Vaithianathan, S. (2018). A fresh look at understanding Green consumer behavior among young urban Indian consumers through the lens of The   of Planned Behavior. *Journal of cleaner production, 183*, 46-55.

23. The Christian Science Monitor, 2015. India's plan to reduce carbon emissions: Could it really   work? https://www.csmonitor.com/Environment/2015/1003/India-s-plan-to-reduce   carbon-emissionsCould-it-really-work

24. Tung, T., Koenig, H. F., & Chen, H. L. (2017). Effects of green self-identity and cognitive andaffective involvement on patronage intention in eco-friendly apparel consumption: A gender comparison. *Sustainability*, *9*(11), 1977.

25. Unilever. (2017). Report shows a third of consumers prefer sustainable brands https://www.unilever.com/news/Press-releases/2017/report-shows-a-third-of consumersprefer-sustainable-brands.

26. United Nation Economic Commission for Europe (2017). Sustainable development – concept   and action. Retrieved October 16th, 2017 from http://www.unece.org/oes/nutshell/20042005/focus_ sustainable_development.html

27. United Nations World Commission on Environment and Development. (1987), August 2. Our   Common Future, Report of the World Commission on Environment andDevelopment. http://www.un---documents.net/ocf---ov.htm--- Retrieved on 20March 2021

28. UNWTO.   (2021).   Retrieved   May   10,   2021   from https://www.unwto.org/taxonomy/term/347

29. Verma, V. K., Chandra, B., & Kumar, S. (2019). Values and ascribed responsibility to predict consumers' attitude and concern towards green hotel visit intention. *Journal of   Business Research*, *96*, 206-216.

30. Wang, P., Liu, Q., & Qi, Y. (2014). Factors influencing sustainable consumption behaviors: a   survey   of   the   rural   residents   in China. *Journal of Cleaner Production*, *63*, 152-165.

31. Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in   a   developing nation: Applying and extending the theory of planned   behavior. *Ecological   economics*, *134*, 114-122.

32. Zhang, L., Chen, L., Wu, Z., Xue, H., & Dong, W. (2018). Key factors affecting informed consumers' willingness to pay for green housing: A case study of Jinan, China. *Sustainability, 10*(6), 1711.