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EXPLORING TOURISTS INTENTION TO STAY AT GREEN HOTEL: THE INFLUENCES OF ENVIRONMENTAL ATTITUDES AND HOTEL ATTRIBUTES

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Abstract

The hospitality industry as a whole is being pressures by many forces to become more environmentally friendly. Hotels are becoming more aware of their impact and are taking initiatives and participating in green initiatives. As more tourists are becoming increasingly concerned regarding the environment and environmentally products, it is crucial for the hotel industry to explore this concept of green hotels in more detail. In the hotel industry, green hotels are defined as lodging establishments that have made a commitment to diverse ecologically sound practices such as saving water, energy, and reducing solid waste. This study examines the influence of environmental attitudes and hotel attributes on tourists' intention to choose green hotels as their preferred accommodation. By using intercept survey method, data were collected from tourists at the international airport in Malaysia. Present study confirms previous findings on the relationship between attitudes towards the environment and environmental-friendly behavior, that is, tourists with high environmental attitudes are more willing to stay at green hotel. The present study found a positive and significant relationship of green hotel attributes and intention to stay at green hotel among tourists. This implies that tourists who have greater interest with green hotels are more likely to identify which hotels that conduct a higher degree of green practices. The theoretical implications and managerial implications of these findings are discussed.

Keywords: TOURISTS INTENTION, GREEN HOTEL, ENVIRONMENTAL ATTITUDES, HOTEL ATTRIBUTES

1. INTRODUCTION

Tourism, which being a major source of income and employment for many countries depends heavily on environmental resources that include pristine beaches, warm climate, clean air, landscape formation among others (Kasimu, Zaitun & Hassan, 2012). Among the various components of tourism, the hotel industry is an industry of which activities constitute a threat to the environment due to its high consumption in energy, water and non-durable goods (Kasimu, Zaleha, & Hassan, 2012; Kasim, 2009). The hotel industry, which is key of tourism business may not be the primary one that creates substantial environmental pollution and consumes significant amount of global resources; however because of its primary purposes of providing

comfortable services/supplies (hot water, food, drinks, linens, towels, lighting, air conditioning, limousines, water, swimming pools), hotels clearly consume gross amounts of water, energy, non-recyclable, goods, and natural resources, thus directly or indirectly harming the environment (Han et al., 2011).

As been noted by Millar and Baloglu (2013), tourist expects that the hotel industry to pay attention to environmental concerns and to operate sustainably. Mindful of these concerns, hoteliers recognizing the green shifts in consumer behaviours and the importance of promoting environmentally responsible products/services and proactive management and implementing environmentally conscious practices to improve their competitiveness. As environmental concerns about tourism impacts have increased, the tourist accommodation sector has recognized the need to improve its sustainable management and operation (Lee & Moscardo, 2005).

Nowadays, as more environmental rules/regulation appear and environmental awareness increases, tourists are increasingly searching for eco-friendly hotels over conventional hotels. Consequently, many hotels are beginning to implement various innovative methods to increase the "greenness" of their operations (Dief & Font, 2010; Manaktola & Jauhari, 2007). The term "green" refers to actions that reduce the impact on the environment, such as eco-purchasing or recycling (Han et al., 2011). In a similar manner, "green hotel" is defined as an eco-friendly hotel operation that performs various environmental friendly practices such as saving water/energy, using eco-friendly purchasing policies and reducing emission/waste disposals to protect the natural environment and reduce operational costs (Green Hotel Association, 2008). The "green" hotel business are terms that refer to a lodging establishment that has made a commitment to various ecologically sound practices such as saving water, saving energy and reducing solid waste (Manaktola & Jauhari, 2007). The term "green" refers to actions that reduce the impact on the environment, such as eco processing or recycling (Han et al., 2011).

In a similar manner, "green hotel" is defined as an eco-friendly hotel operation that performs various environmentally friendly practices/programs such as saving water/energy, using eco-friendly purchasing policies and reducing emission/wate disposals to protect the natural environment and reduce operational costs (Green Hotel Association, 2008). Specifically, unlike conventional hotels, green hotel establishments actively follow eco friendy guidelines and practice environmentally management; committing themselves to carriying out environmental improvements, demonstrating such commitment through eco-labels or the green globe logo and acquiring techniques related to best practices in environmental management with experts' help (Han et al., 2011).

2. LITERATURE REVIEW

According to Ng and Paladino (2009), behavioural intentions is a measure of a person's relative strangth of purpose to execute certain behaviour. In the context of green marketing, Nik Abdul Rashid (2009) defined green purchase intention as the probability and willingness of an individual to give preference to green product over conventional products in their purchase considerations. However, Ramayah, Lee and Mohamad (2010) referred green purchase intention as a determination to act in a certain way. Within the hospitality industry, Han, Hsu and Lee (2009) defined green behavioural intention as the likelihood of the hotel consumers of visiting a green hotel, engage in a positive word of mouth behaviour and willingness to pay more for the green hotel.

• Green Hotel Attributes

Consumers make product choices based on which combination of product attributes best meets their needs based on dimensions of value, cost and prior satiafaction (Kotler, 1997). Product attributes considered may be either core attributes that deliver basic benefits sought by customers or auxiliary or peripheral attributes that provide supplementary benefits and are important for providing added value and differentiation (Fuller, 1999).

From the customers's perspective, the hospitality product consists of core attributes which include its functional performance and non essensial attributes that deliver secondary benefits, which includes its environmental performance (Manaktola & Jauhari, 2007). Environmental performance may relate to the product itself or an aspect of it, like water disposal or use of alternate source of energy and may provide an opportunity for product differentiations. It is difficult to find a hospitality product that is 100 percent environmentally-friendly product (Manaktola & Jauhari, 2007).

In the context of hospitality industry, numerous empirical studies have supported the influence of eco-friendly green hotels on customers; intention to stay (Han et al., 2011; Lee & Moscardo, 2005; Han & Kim, 2010). Han et al. (2011) in their study found that initiatives of the hoteliers to perform green management influence customers stay longer, to recommend it and pay more. Similarly, Han and Kim (2010) discovered that hotel's environmental protection continually attracts public attention. In the same vein, among the backpacker hotel guests, Firft and Hing (1999) found that environmental practices implemented by the hotel influenced the respondents' holiday behaviour. Study conducted in the US by Millar and Baloglu (2013) discovered that business and leisure travellers wanted a room that incorporated a refillable shampoo dispenser, energy efficient light bulbs, and towel and linen re-use policies as well as key card to control power use.

Apart from the positive associations between green hotels and hotel choice among the tourists, there are a few studies conducted which found contradict relationships. Chan and Baum (2007) discovered that ecolodge tourist in Malaysia are more motivated to visit a destination because of actual destination attributes and activities such as the natural scenery, wildlife and eco activities than they are motivated by actual eco-logde itself. This study did not find a significant demand for eco-lodges or green hotels.

A different study in Poland by Bohdanowicz (2006) also found that there is low demand from tourists to be green. They are more concerned with location, price, service, hotel image and environmental record respectively. Bergin-Seers and Mair (2009) conducted a study to determine attitudes and behaviour of active and less active green toursist. Active tourist are interested and actively involved with environmental issues in the tourism and lodging industry while less active tourist are not generally aware of or involved with environmental responsibility. The survey reported that while on a trip, 13.9 percent reported thay made actual tourism purchases based on environmental practices, while 30.7 percent reported they didn't make any decision based on environmental practices. Kasim (2004) reported that even though the tourists were knowledgeable and cared about the environment, they did not consider a hotel's environmental strategy in choosing their hotel. At the same time, these tourists were willing to accept rooms with water saving features, recycling bins, fire safely features, energy saving features and information in local tourism attractions.

Although our knowledge about tourist intention to choose green hotels appears to be inconsistent and inconclusive, it has often been found that to some extends tourists expect the hotel industry to pay attention to environmental concern and to operate sustainably. Therefore, we hypothesize that:

H1: The higher the green hotel attributes as perceived by the tourist, the higher the tourist intention to choose green hotel

• Eco-friendly Attitudes

Allport (1935) defined attitude as "a mental and neutral state of readiness, which exerts a directing influence upon the individual's response to all objects and situations with which it is related". According to Ajzen (1985), an individual is more likely to undertake a certain behaviour if he/she has a positive attitude toward undertaking the behaviour. Eco-friendly attitudes refers to the individuals value judgement of environmental protection (Lee, 2008). In other words, eco-friendly attitude taps the individuals' cognitive assessment of the value of environmental protection. In 2000, Schultz and Zelezny defined attitudes of environmental concern as rooted in a person's concept of self and it is the degree to which an individual perceives him or herself to be an integral part of the natural environment. Attitude represents what consumers like and dislike (Backwell et al., 2006) and consumers product purchasing decisions are often based on their environmental attitudes (Irland, 1993). Eco-friendly attitude is commonly understood as a cognitive judgement towards the value of environmental protection (Lee, 2008).

Despite the contrasting results found between eco-friendly attitude and behaviour, attitudes are regarded as the most consistent explanatory behaviour in predicting consumers' willingness to pay for green products (Chyong *et al.*, 2006). Tanner and Kast (2003) discovered that green food purchases are strongly facilitated by positive attitude of consumers towards environmental protection. In his study, Balderjahn (1988) concluded that individuals who had a positive attitude towards the environment participated more in the buying and consumption of green products.

Examining consumer eco-friendly attitudes toward hotel green practices and behaviour, Manaktola and Jauhari (2007) concluded that customers who are aware of a hotel's eco-friendly practices show preference to patronize agreen loging property. Further, Roberts (1996) indicated that consumer attitudes are significantly predictors of ecologically conscious consumer behaviour. His findings revealed that encironmnetally conscious people are likely to engage in eco-friendly consumer behaviour and individuals who believe their specific ecological activities can cause positive change are more likely to dsiplay green consumer behaviour. similarly, a recent study by Han et al. (2011) revealed that hotel customer's eco-friendly attitudes positively affect their expressed intention.

Specifically, while some researchers have claimed a positive correlation between eco-friendly attitude and behaviour (e.g. Kotchen & Reiling, 2000), others have concluded that the relationship is either moderate or tenuous (e.g. Davis, 1995). Lee (2009) found that Hong Kong adolescents' eco-friendly attitudes have weak associations with green purchasing intention compared with the impact of environmental concern; which suggests that adolescent consumers green purchasing intention behaviour is governed more by emotions than by rationality. This is consistent with the argument by Shaffer (1994) that adolescent is a stage particularly susceptible to emotional appeals. Volsky *et al.* (1999) perceived that consumers do not always base their

buying decisions on their attitudes towards the environment, even though these attitudes can have a fairly strong influence on their purchases.

The contradictory results in studies of the relationhip between environmental attitude and behaviour challenge the previous assumption that individual's cognition (attitude) will alter their behaviour and these results suggest that further studies are needed to confirm the relationship between environmental attitude and behaviour. Therefore, we hypothesize that:

H2: The more positive the eco-friendly attitude of the tourist, the higher will be the intention to choose green hotel.

3. METHODOLOGY

This study is correlational in nature where data was gathered once, to answer the study's research questions. The study was conducted with the intention to obtain a good grasp of the factors influencing tourist intention to choose green hotels. A survey method was employed because this study strongly believes that survey research is best adopted to obtain personal and social facts, beliefs, and attitudes (Kerlinger, 1973). The unit of analysis for this study was tourist who visited Malaysia. This study treats each tourist's response as an individual data source. For the purpose to measure tourist intention to choose green hotel, a scale adopted from Zeithaml et al. (1996) and Han et al. (2011) consisting of 3 items was used. Perception on green hotel attributes was measured using scale developed by Manaktola and Jauhari (2007) with minor modification on the wording. The instrument is composed of 12 items focusing on the respondent perceptions of green hotel attributes. Eco-friendly attitude was measured using the scale developed by Lee (2009). It requires respondents to assess the extent to which they perceive the value of environmental protection.

Table 1 summarizes the reliability test of the measures. As shown, the Cronbach Alphas of the measures were all comfortably above the lower limit of acceptability that is $\alpha > 0.60$ (Sekaran *et al.*, 2000). Hence, all the measures were highly reliable.

Table 1: Reliabilities of Variables

Variables	Reliability
Intention to choose green hotel	.91
Perception of green hotel attributes	.85
Eco-friendly attitudes	.73

The sampling procedure used for the present study was intercept survey whereby respondents are intercepted in airport. In the present study, the survey was conducted at KLIA international airport. KLIA International Airport was chosen since it is the main entrance for visitors to Malaysia. For data collection purposes, 300 questionnaires were distributed to international tourists at KLIA airport. Out of this number, 84 were excluded because they were incomplete. Thus, a total of 216 responses were usable and used for subsequent analysis, giving a response rate of 72 percent.

Regarding the profile of the respondents, 56.9% of them are males and 43.1% are females. With regards to age of the respondents, majority of the respondents (90.8%) are at the ages of 26 to 40 years old. Respondents below 20 years old constitute 7.4% followed by respondents of ages 21-25 (1.9%). Regarding the marital status of the respondents, majority of the respondents (67.6%) are married. Those who are single constitutes 19% and a minimal 13.4 % are divorced. With regards to the country of origin of the respondents, 38% come from asia regions, followed by 27.8% from Europe and 12.5% from Middle East. Tourists come from United States/Canada are 11.6% followed by 13% from African countries.

As shown in Table 2, the mean value for intention to choose green hotel falls is 2.43 (based on 5-point Liket scale); indicating that respondents tend to have moderate level of intention to choose green hotel. Similarly, with the mean value of 2.39 and 2.41, respondents generally have moderate level of perception of green hotel attributes and eco-friendly attitudes.

Table 2: Descriptive Statistics of Variables

Variables	Mean	Standard deviation
Intention to choose green hotel	2.43	.55
Perception of green hotel attributes	2.39	.63
Eco-friendly attitudes	2.41	.69

Table 3 provides results of the correlation analysis. The computation of the Pearson correlation coefficients was performed to obtain an understanding of the relationship between all the variables in the study. The values of the correlation coefficients (r) indicate the strength of the relationship between variables. The overall correlation values of the variables showed correlations coefficients with values below 0.5 indicate weak associations between variables.

Table 3: Relationships between Dependent and Independent Variables

	Intention to choose green hotel	Perception of green hotel attributes	Eco-friendly attitudes
Intention to choose green hotel	1.0		
Perception of green hotel attributes	.52*	1.0	
Eco-friendly attitudes	.32		1.0

^{*}p≤0.05

Table 4 provides evidence of the influence of perception of green attributes and eco-friendly attitudes on intention to choose green hotel. The F-statistic (F=14.1, p < .01) indicates that the relationships between independent variables and dependent variables are significant. The R^2 obtained indicates that perception of green attributes and eco-friendly attitudes account for 18 percent of the variation in intention to choose green hotel. Therefore, hypothesize 1 and 2 are supported.

Table 4: Summary of Multiple Regression Analysis for Factors Influencing Intention to Choose Green Hotel (N=216)

Independent Variable	В	SE B	В
Green hotel attributes	.42	.10	.28**
Eco friendly attitudes	.76	.15	.47**

Note: R²= .18; F=14.10; Sig. F= .00; **p<.01

B=Unstandardized Coefficient; SE B=Standard error of coefficient; β =Beta coefficient

4. DISCUSSION

As the amount of green products continue to increase in the marketplace worldwide, understanding the factors influencing tourist intention to choose green hotel become more important to both academics and practitioners. Despite some mixed results regarding attitudebehaviour relationship, the present study shows that environmental attitude is an important factor influencing tourist intention to choose green hotel. Present study confirms previous findings on the relationship between attitude towards the environment and green purchase behavior, that is, tourists with high environmental attitudes are more willing to stay at green hotel. This result is in line with the earlier studies; for instance, Han et al. (2011) who found that hotel customers' ecofriendly attitudes positively expressed their expressed intention. In a similar vein, Choo et al. (2004) and Laroche et al. (2001) who upon studying antecedents to new product purchasing behavior, found that attitudes had significant effect on behavioral purchase behavior among innovative Indian consumers. This is consistent with the argument of Tsen et al. (2006) that attitudes have consistent explanatory factor in predicting consumers' willingness to pay for green products. This finding also confirms many previous studies which found that environmental attitudes positively affect pro-environmental behavior (e.g. Arcury & Christianson, 1990; Chan, 1999). Since an attitude is an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment (Hawkins, Best & Coney, 1995), people who have strong environmental attitudes take responsibility in protecting the environment. Therefore, tourists with positive environmental attitudes tend to choose green hotels.

The present study found a positive and significant relationship of green hotel attributes and intention to stay at green hotel among tourists. This implies that tourists who have greater interest with green hotels are more likely to identify which hotels that conduct a higher degree of green

practices which may be enduring, distinctive and able to fulfill their green practice perceptions. This is consistent with Lee and Moscardo (2005) who found that satisfying tourist experiences in ecotourism accommodation with green hotel attributes will increase their environmental attitudes and behavioural intentions but contradict to Kasim (2004) who found that even though the tourists were knowledgeable and cared about the environment, they did not consider a hotel's environmental strategy in choosing their hotel.

5. IMPLICATIONS FOR GREEN HOTEL OPERATORS

This study provides managerial implications for comprehending the influencing factors of tourists' intentions to visit green hotel. In view of the growing trend of higher environmental awareness among Asian countries, environmentally related products pose both threats and opportunities. The closer the move to understand what causes individuals to pay for green products, the more able marketers will be to develop strategies specifically targeted at this particular group. Knowing the green profile of tourists who prefer green hotels allows hoteliers to develop strategies specifically targeted to this segment.

Since attitude towards the environment is found to be an important factor that influences the intention to choose green hotel among the tourists, hoteliers should convince consumers that the protection and preservation of the environment is not the sole responsibility of business entities and that each individual can also make a difference. In view of this, green hoteliers should cautiously work out a proper communication plans that able to assist favorable attitudinal changes of their target audiences. For instance, since tourists' attitude toward green hotel is strongly affected by salient attitudinal beliefs such as "safer" and "healthier", green hoteliers in their communication campaigns should point out clearly how their hotels help bring safe and healthier life style and exactly what advantages or values their hotels deliver to consumers and the environment.

As the findings imply, the green hoteliers have to work on improving green tourists' attitudes, which may differ and need to be observed over time. The government and other parties involved in the environmental awareness campaign should always track and monitor the level of the environmental concern among the public as a whole. Depending on the outcome, they should find the most effective and efficient marketing strategies to be developed and implemented as necessary. Unless this is done, we are going to waste millions of dollars on unsuccessful campaigns because they basically "don't work".

Another interesting finding is this study is the positive relationship between green hotel attributes and intention to choose green hotel. From a practical standpoint, the findings suggested that green hotel operators should pursue the excellent green attributes and services that stimulate customers' positive evaluations and encourage the development of favourable attitudes toward visits green hotels. In addition, the findings suggested that hotel operators should expand their strategies to enhance their image by advertising their environment-friendly activities. These various efforts would add value to build customers' strong intention to choose green hotel.

Last but not least, to elicit tourists' behavioural intention, green hotel operators should focus on enhancing the hotel image to portray that the hotel cares about the environment. This goal can be accomplished by adopting tangible and intangible observable green practices in the hotel properties. On top of that, maximizing hotel guests' involvement in executing green practices can be the key strategy to improve the green image of the hotel, which in the long—run improves the

guests' behavioural intention to the hotel. Thus, managers should establish green attributes to offer direct experience opportunities to the guests.

6. LIMITATIONS AND FUTURE RESEARCH SUGGESTIONS

Despite the fact that hotels have begun incorporating green policies into their management practices and despite the belief that hotel guests seek such policies, there is dearth of research about this subject. This study was based on a cross-sectional perspective, which limits the knowledge of the long-term impact of the factors in our model. A longitudinal future research in this area is needed to unveil with clarity and greater certainty, the relationship between consumers' behavior towards green products over time. As with any other studies using a consumer sample, the findings of this study might not represent tourists at large. A replication of this study with more general tourists of a wide range in their characteristics might be necessary to attest the applicability of the model to the broader public.

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References

Anderson, T. and Cunningham, W.H. (1972). The socially conscious consumers. *Journal of Marketing*, 36, 7, pp. 23-31.

Balderjahn, I. (1988). Personality variables and environmental attitudes as predictors of ecologically responsible consumption patterns. *Journal of Business Research*, 17, 1, pp. 51-6.

Banytne, J., Brazioniene, L., and Gadeikiene, A. (2010). Investigation of green consumer profile: A case of Lithuanian market of eco-friendly products. *Economics and Management*, 15, pp. 374-384.

Benerjee, B. and McKeage, K. (1994). *How green is my value: Exploring the relationship between environmentalism and materialism*". In Allen, C.T. and John, D.R. John. Advances in Consumer Research, 21, pp. 147-152. Provo. UT, Association for Consumer Research.

Berkowitz, L. and Lutterman, K. (1968). The traditional socially responsible personality. *Public Opinion Quarterly*, 32, pp. 169-185.

Bourgeouis, J.C., and Barnes, J.G. (1979). Viability and profile of the consumerist segment. *Journal of Consumer Research*, 5, pp. 217-228.

Buttel, F.H., and Flinn, W.L. (1978). The politics of environmental concern: The impacts of party identification and political ideology on environmental attitudes. *Environment and Behaviour*, 10, pp. 17-35.

Chan, R., and Lau, L. (2000). Antecedents of green purchase: A survey in China. *Journal of Consumer Marketing*, 17, pp. 338-357.

Chan, R.Y.K. and Lau, L. (1998). A test of the Fishbein-Ajzen behavioral intentions model under Chinese cultural settings: Are they any differences between PRC and Hong Kong consumers?. *Journal of Marketing Practice: Applied Marketing Science*, 4, 3, pp. 85-101.

Chen, T.B. and Chai, L.T. (2010). Attitude towards the environment and green products: Consumer perspective. *Management Science and Engineering*, 4, 2, pp. 27-39.

D'Souza, C., Taghian, M. Lamb, P. and Peretiatkos, R. (2007). Green decisions: Demographics and consumer understanding of environmental labels. *International Journal of Consumer Studies*, 31, 4, pp. 371-376.

Do Paco, A. and Raposo, M. (2009). Green segmentation: An application to the Portuguese consumer market. *Marketing Intelligence & Planning*, 27, 3, pp. 364-379.

Eagles, P. and Muffitt, S. (1990). An analysis of children's attitudes towards animals. *Journal of Environmental Education*, 21, pp. 41-44.

Eagly, A.H. (1987). Sex Differences in Social Behaviour: A Social-Role Interpretation. Lawrence Erlbaum Associates: Hillsdale, N.J.

Engel, J.F., Blackwell, R.D. and Miniard, P.A. (1995). *Consumer Behaviour (8th ed.)*. The Dryden Press: Forth Worth.

Fergus, J. (1991). *The Greening of Business*. Gower Publishing Company: Forth Worth.

Gurau, C. and Ranchhod, A. (2005). International green marketing: A comparative study of British and Romanian firms. *International Marketing Review*, 22, 5, pp. 547-561.

Harris, P.G. (2006). Environmental perspectives and behaviour in China: Synopsis and bibliography. *Environment and Behaviour*, 38, 1, pp. 5-21.

Henion, K. E. (1972). The effect of ecologically relevant information on detergent sales. *Journal of Marketing Research*, 9, 2, pp. 10-14.

Jin, B. and Kang, F.H. (2011). Purchase intention of Chinese consumers toward a US apparel brand: A test of a composite behaviour intention model. *Journal of Consumer Marketing*, 28, 3, pp. 187-199.

Kangun, L., Carlson, L. and Grove, S. (1991). Environmental advertising claims: A preliminary investigation. *Journal of Public Policy and Marketing*, 10, 2, pp. 47-58.

Kerlinger, F.N. (1973). Foundations of Behavioural Research. (2nd edition). Holt, Rinehart & Winston: New York.

Kinnear, T.C., Taylor, J.R. and Ahmed, S.A. (1974). Ecologically concerned consumers: Who are they?, *Journal of Marketing*, 38, pp. 20-24.

Laroche, M., Bergeron, J. and Barbaro, F.G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18, 6, pp. 503-520.

Lee, C. and Green, R. (1991). Cross cultural examination of the Fishbein behavioural intentions models. *Journal of International Business Studies*, 22, 2, pp. 289-305.

Lee, K. (2008). Opportunities for green marketing: Young consumers. *Marketing Intelligence & Planning*, 26, 6, pp. 573-586.

Li, J.J. and Su, C.C. (2007). How face influences consumption: A comparative study of American and Chinese consumers. *International Journal of Market Research*, 49, 2, pp. 237-256.

Lustigman, A. (1994). SGB environmental consumer survey. Sporting Good Business, 27, 4, pp. 53-54.

Mainieri, T., Barnett, E., Valdero, T., Unipan, J. and Oskamp, S. (1997). Green buying: The influence of environmental concern on consumer buying. *Journal of Social Psychology*, 137, 2, pp. 189-204.

Manaktola, K. and Jauhari, V. (2007). Exploring consumer attitude and behaviour towards green practices in the lodging industry in India, *International Journal of Contemporary Hospitality Management*, 19, 5, pp. 364-377.

Martin, B. and Simintiras, A.C. (1995). The impact of green product lines on the environment: Does what they know affect how they feel?. *Marketing Intelligence*, 13, 4, pp. 16-23.

McDoughall, G.H.G. (1993). The green movement in Canada: Implications for marketing strategy. *Journal of Consumer Marketing*, 5, 3, pp. 69-87.

McIntyre, R. P., Meloche, M.S. and Lewis, S.L. (1993). *National culture as a macro tools for environmental sensitivity segmentation*, in Cravens, D. W. and Dickson, P. R. (Eds). *AMA* Summer Educators' Conference Proceedings, American Marketing Association, Chicago, IL, 4, pp. 153-9.

Mostafa, M.M. (2006). Antecedents of Egypian consumers' green purchase intentions: A hierarchical multivariate regression model. *Journal of International Consumer Marketing*, 19, 2, pp. 97-125.

Mostafa, M.M. (2007). Gender differences in Egypian consumers' green purchase behaviour: The effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31, 3, pp. 220-209.

Muller, T.E. and Taylor, D.W. (1991). *Eco-literacy among consumers: How much do they know about saving their planet?*," in Burkhardt, Vandenburgh (Eds). Preparing for a Sustainable Economy, Riverson Polytechnical Institute.

Murphy, P.E. (1991). Introduction to the special issue. *Journal of Public Policy and Marketing*, 10, 2, pp. 23-34.

Osterhus, T.L. (1997). Pro-social consumer influence strategies: When and how do they work? *Journal of Marketing*, 61, 4, pp. 16-29.

Ottman, J. A. and Reilly, W.R. (1998). Green marketing. Opportunity for innovation. (2nd edition). *Prentice Hall*, New York.

Ottman, J.A., Stafford, E.R. and Hartman, C.L. (2006). Avoiding green marketing myopia: Ways to improve consumer appeal for environmentally preferable products. *Environment*, 48, 5, pp. 22-36.

Pornpitakpan, C. (2001). The environmental concern in Thailand: Managerial implications. *Journal of International Consumer Marketing*, 14, 2/3, pp. 123-135.

Ramlogan, R. (1997). Environment and human health: A threat to all. *Environmental Management and Health*, 8, pp. 51-66.

Reizenstein, R.C., Hills, G.E. and Philpot, J.W. (1974). Willingness to pay for control of air pollution: A demographic analysis, in Curhan, R.C. Combined Proceedings. *American Marketing Association*, Chicago, IL. pp. 323-8.

Robert, J. A. (1996). Green consumers in the 1990s: Profile and implications for advertising. *Journal of Business Research*, 36, 3, pp. 217-32.

Roberts, J.A. and Bacon, D.R. (1997). Exploring the subtle relationships between environmental concern and ecologically conscious consumer behavior. *Journal of Business Research*, 40, 1, pp. 79-89.

Roper Organization. (1990). The environment: Public attitudes and individual behavior. Princeton: New Jersey.

Roper Organization. (1992). Environmental Behaviour. North America: Canada, Mexico, United States. Johnson and Son, Inc, New Jersey.

Sachs, C., Blair, D. and Richter, C. (1987). Consumer pesticide concerns: A 1963 and 1984 comparison. *Journal of Consumers Affairs*, 21, pp. 96-107.

Sandahl, D.M. and Robertson, R. (1989). Social determinants of environment concern. *Environment and Behaviour*, 21, 1, pp. 57-81.

Schlegelmilch, B.B., Bohlen, G.M. and Diamantopoulos, A. (1996). The link between green purchasing decisions and measures of environmental consciousness, *European Journal of Marketing*, 30, pp. 35-40.

Schwartz, J. and Miller, T. (1991). The earth's best friends. *American Demographics*, February, pp. 26-35.

Shamdasani, P., Chon-Lin, G. and Richmond, D. (1993). Exploring green consumers in an oriental culture: Role of personal and marketing mix, *Advances in Consumer Research*, 20, pp. 488-493.

Shrivastava, P. (1995). Environmental technologies and competitive advantage, *Strategic Management Journal*, 16, pp. 83-200.

Stern, P., Dietz, T. and Kalof, L. (1993). Value orientations, gender and environmental concern, *Environment and Behaviour*, 25, pp. 322-348.

Stisser, P. (1994). A deeper shade of green, American Demographics, 16, 3, pp. 24-29.

Straughan, R.D. and Roberts, J. (1999). Environmental segmentation alternatives: A look at green consumer behaviour in the new millennium, *Journal of Consumer Marketing*, 16, 6, pp. 558-575.

Strong, C. (1996). Features contributing to the growth of ethical consumerism: A preliminary investigation. *Marketing Intelligence & Planning*, 14, 5, pp. 5-13.

Tarkiainen, A. and Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107, 11, pp. 808-822.

Tikka, P., Kuitunen, M. and Tynys, S. (2000). Effects of educational background on students' attitudes, activity levels and knowledge concerning the environment. *Journal of Environmental Education*, 31, 1, pp. 12-19.

Tsen, C., Phang, G., Hasan, H. and Buncha, M.R. (2006). Going green: A study of consumers' willingness to pay for green products in Kota Kinabalu. *International Journal of Business and Society*, 7, 2, pp. 40-54.

Van Liere, K., and Dunlap, R. (1981). Moral norms and environmental behaviour: An application of Schwartz's norm-activation model to yard burning. *Journal of Applied Social Psychology*, 8, pp. 174-288.

Wasik, J. (1992). Green marketing: Marketing is confusing, but patience will pay off, *Marketing News*, 26, 21, pp. 16-17.

Zimmer, M.R., Stafford, T.F. Stafford, M.R. (1994). Green issues: Dimensions of environmental concern. *Journal of Business Research*, 30, 1, pp. 63-67.

Zucarro, C. and Fortin, D. (1992). Reassessing the socially responsible consumer. *Marketing Proceedings of ASAC Conference*, 13, 6, pp. 209-217.