

Article

The Effect of Green Self-Identity on Perceived Image, Warm Glow and Willingness to Purchase: A New Generation's Perspective towards Eco-Friendly Restaurants

Patcharaporn Mahasuweerachai  and Chompoonut Suttikun *

Faculty of Business Administration and Accountancy, Khon Kaen University, Khon Kaen 40002, Thailand

* Correspondence: chomsu@kku.ac.th

Abstract: Compared to other generations, Generation Z (Gen Z) tend to be more concerned with environmental problems, prefer healthier food options, and are willing to pay premium prices for eco-friendly food products. Until now, however, this market segment had not been the focus of any sustainability research in the restaurant context. The present study fills this gap while exploring if green self-identity (one's alignment with environmental concerns) influences perceptions of green restaurants (one's perceived image of green restaurants) and warm glow feeling (one's good feeling from patronizing green restaurants), which in turn affect willingness to pay. Data was collected from 388 Gen Z participants through a questionnaire survey, and covariance-based structural equation modeling (CB-SEM) was used to examine the study's model. The results indicate warm glow is generated when individuals with green self-identity acknowledge restaurants are using green practices, which in turn influences their willingness to pay at green restaurants. Additionally, the findings of this study advance the theoretical viewpoints for social exchange theory (SET), identity theory, and green consumption in the restaurant industry. For practical implementation, restaurateurs can improve their businesses by developing their green image, initiating green design, and incorporating eco-friendly activities to enhance patrons' dining experience.

Keywords: green self-identity; green restaurant image; warm glow; willingness to buy; theory of self-identity; social exchange theory (SET); generation Z; green restaurants



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1. Introduction

The growing global concern for environmental issues and corresponding changes in consumption is encouraging the hospitality industry to adopt green practices and provide ethical products and services [1]. Businesses within this sector are also being pressured by governments, stakeholders, and consumers to engage in green activities and reduce harm to the environment. Consequently, restaurant entrepreneurs are increasingly applying green practices into their operations, such as using eco-friendly packaging, reducing water and energy consumption, offering menu items from local ingredients, minimizing food waste, and establishing recycling systems [2]. Not only does the incorporation of these green practices positively enhance social and environmental support, they also provide restaurant owners financial benefits. Consumers sensitive to environmental impact have positive perceptions of restaurants with a green image resulting in their willingness to pay premium prices [2,3]. Business operators can also gain competitive advantages and attract more consumers by initiating green practices as marketing strategies [4,5]. Additionally, self-identity has been found to be a critical factor in predicting the behavioral intentions of pro-environmental consumers [6,7]. Khare and Pandey [8] suggested, and explained with identity theory, that consumers' inclinations to purchase green products were reflected by their green self-identities.

The younger generation tend to be more aware of environmental issues when they dine in restaurants [9]. Furthermore, Generation Z (Gen Z) (individuals born around the

mid 1990's and later) are the largest segment of the generational cohort in terms of buying power and consequently, restaurant marketers are increasingly paying more attention to Generation Z's attitudes towards purchasing ethical products [10]. With high awareness of sustainable consumption, Generation Z appear to be more concerned with environmental issues, prefer healthier food options, and are willing to pay premium prices for eco-friendly food products compared to other generations [11]. Generation Z are also attracted to making purchasing decisions which contribute positive impacts to society [10]. In addition, Baloglu et al. [4] revealed that a positive feeling, referred to as warm glow feeling, can be generated among Generation Z consumers when they make a decision to purchase environmentally friendly products to enhance their ethically-focused self-identities. For example, young consumers with a green self-identity may experience warm glow feeling and have positive perceptions of restaurants initiating green activities such as those using bio-packaging and eliminating food waste. In turn, these influence their willingness to buy green products.

Even though prior studies have explored consumers' behavioral intentions towards green restaurants [2,12–15], there is a lack of evidence explaining how green self-identity might lead to consumers' perceiving restaurant image and their feeling of warm glow. Warm glow of giving is widely used as a factor to explore consumer attitudes in the context of sustainable consumption, corporate social responsibility (CSR), and charity (such as [16–19]). However, studies investigating consumers' warm glow feeling towards restaurants with socially responsible activities are limited. Giebelhausen et al. [17] found that restaurant customers with prosocial identities developed a warm glow and intentions to revisit after making checkout donations. Other than this, studies exploring the relationship between green self-identity and the feeling of warm glow from patronizing green restaurants do not appear in the literature of green consumption. Warm glow is referred to as "self-satisfaction with the moral responsibility for the actions taken to protect the environment" [20]. In addition, Brekke et al. [21] found that the more one has a moral feeling of social responsibility, the higher the warm glow feeling. To reach a better understanding of green self-identity and willingness to pay at green restaurants, it is necessary to examine warm glow feelings towards eco-friendly restaurants. Thus, the present study aimed to bridge this gap by exploring if green self-identity (one's feeling of being concerned with the environment) influences perceptions of green restaurants (one's perceived image of green restaurants) and warm glow feeling (one's good feeling from patronizing green restaurants). Though several studies confirmed that the green image of hospitality businesses leads to consumers' willingness to pay for green products and services [1,22,23] it is still unclear that the feeling of warm glow influences willingness to visit green restaurants. Therefore, this study further investigated whether consumers' perceived image of green restaurants and the warm glow feeling affect their willingness to buy food from those restaurants.

To extend previous studies, the current research aimed to contribute to the literature of green consumption in the context of the restaurant sector as described. First, the conceptual research model (Figure 1) was proposed to test the integrated framework of green self-identity, perceived image of green restaurants, warm glow feeling, and willingness to pay at green restaurants. Second, the current research principally employed the theories of identity and social exchange theory (SET) to explain consumers' attitudes towards eco-friendly restaurants. SET is used to describe the outcome of sacrificing the cost paid for products in order to receive the products' benefits [24]. The theory of identity also helps predict consumers' future behavior by making a connection between the self and society through identity signals [6,25]. Therefore, the present study uses SET to explain the relationships between perceptions of restaurants that apply green activities and the feeling of warm glow, and willingness to purchase products at green restaurants. The theory of identity was also adopted to support the association of environmentally conscious consumers and their perceived image and warm glow feeling of green restaurants. Third, whereas most previous studies of green consumption at restaurants did not distinguish between consumer groups [3,13,26–28], this research focused on the one market segment of

Generation Z consumers. As Generation Z is the largest demographic group compared to other cohorts [10] and is considered the most environmentally conscious group [11], it is important to understand this segment's attitudes which lead them to support eco-friendly businesses. With these three main contributions, this paper enriches the green consumption literature in the context of the restaurant industry. Restaurant entrepreneurs can benefit from the results of this study by utilizing green practices to enhance their restaurant image in order to increase the number of patrons and their willingness to pay.

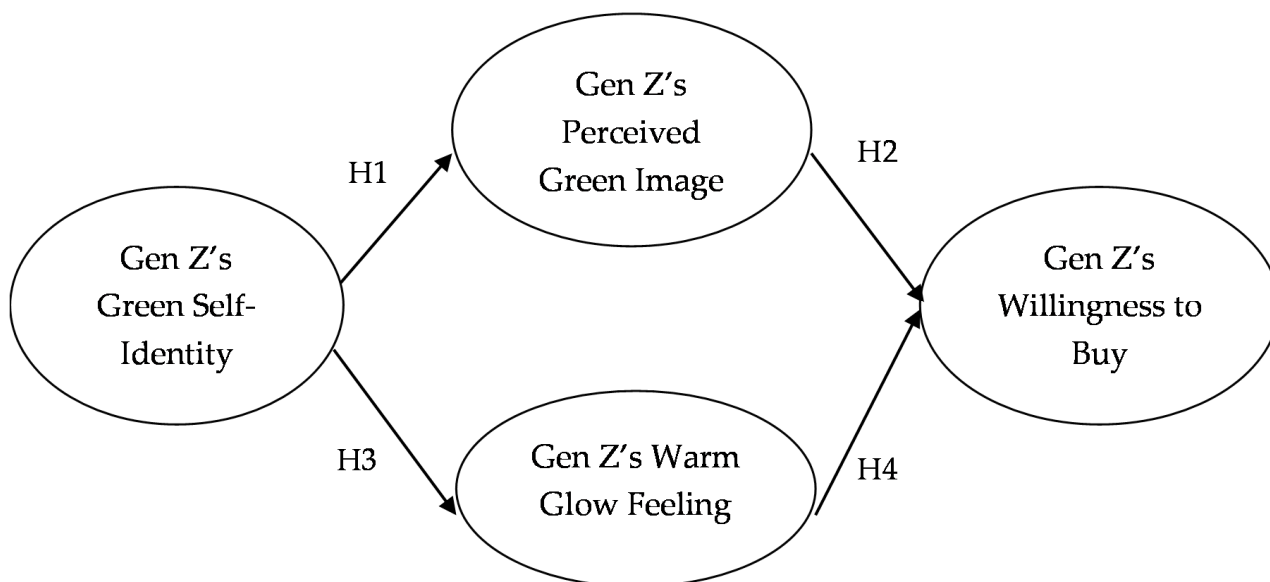


Figure 1. Conceptual model.

2. Literature Review and Hypothesis Development

2.1. Social Exchange Theory (SET), Identity Theory, Generation Z, and Eco-Friendly Restaurants

Both social exchange theory and identity theory were used as theoretical frameworks for this study. Social Exchange Theory (SET) provides insight into understanding the transactions of resources between individuals and groups [29]. In this understanding, transactions are viewed as interdependent upon both parties' behavior, and allows for positive relationships to develop when transactions are mutually beneficial [30]. Here it is presumed that a transaction's participants can each offer what the other requires and that each try to optimize the value received by considering the cost-benefit and alternatives [29]. Individuals perceive value based on beliefs and attitudes formed through social norms [31]. If society places importance on green behavior, it can then be expected that the benefits, such as warm glow, derived from participating in these behaviors has an influence on individuals' patronage of green restaurants.

Self-identity is also integral to determining individuals' green intentions and behavior [32]. Self-identity is the way in which individuals describe their personal motivations and expectations of those they interact with [7]. In this study, in the green restaurant context, and as in Sharma et al. [6], green self-identity relates to individuals' attachment to environmental issues. Individuals with strong green identities, identified as "green consumers" [8], are those who would participate in environmentally conscious behaviors such as recycling, sustainable food diets, and choosing consumer options that have low impacts on the environment [7].

As individuals seek consistency in their expressions of self-identity, consistency is an important factor in studying repeat green behaviors [7], such as everyday purchase intentions and consumer decisions [6]. Furthermore, it is believed that self-identity also helps ascribe meaning to behaviors regardless of individuals' attitudes towards those behaviors. In this way, a person may undertake an action or make a decision that aligns with a perceived self-identity despite having an attitude that would otherwise not be

conducive to doing it [25]. In a prior study, self-identity was identified as a motivator for consumers to replace regular plastics with bioplastic products when the perceived value of those products was positively enhanced [33]. This was also found to be the case in another study of eco-friendly product purchases in India [6].

Identity theory can provide an explanation as to why self-identity can be used to predict consumer intentions. This theory posits that self-identity is reliant upon both individual and social factors [6] and is a multi-faceted construct formed through an individual's internal negotiation of how they see themselves with the roles expected of them by society [8]. Therefore, when an individual acts within a social context with the purpose of signaling a certain identity to others, self-identity can reasonably predict future behavior [25].

In line with this, the current study aimed to develop a theoretical model explaining how green self-identity influences consumers' eco-friendly behavior in the context of green restaurants. This study is among the first to examine the relationships among green self-identity, perceived green image, warm glow feeling, and their effects on green behavior intentions. In sum, based on identity theory, we proposed that green self-identity positively affects the perceived green image and warm glow feeling, which in turn influences consumers' willingness to purchase products from eco-friendly restaurants.

Generation Z (Gen Z) are people born from between the mid 1990's and early 2010 [34]. Djafarova and Foots [10] explained that these people are differentiated from those of other generations by the emerging technology and socioeconomic trends specific to this period. Gen Zs constitute around 32% of the global population, making them the largest of the generational groups. They also form the strongest market by buying power. Su et al. [11] proposed that Gen Z is the generation most concerned for the environment, most aware of sustainable practices, and most likely to use those practices in their daily lives. Relevant to this study, these practices include choosing eco-friendly options and pursuing healthy food choices. Gen Z values ethical consumerism. They hold strong moral norms and attitudes toward environmental and social issues concerning their consumption footprint on society and future generations [10]. The research found that this generation cohort is willing to patronage eco-friendly restaurants and pay a premium for green products [35]. They are also very tech-savvy and socially responsible with 59% of them expressing the desire to make positive changes in their communities [11]. As such, Gen Z form a significant segment of the green restaurant market and are deserving of study so as to gain a greater understanding of their perceptions and motivations.

2.2. Green Self-Identity, Perceived Green Image, and Willingness to Purchase

Image is defined as the public's perception of a business or brand in terms of people's beliefs and impressions [23]. Following this, a green image can be seen as consumers' perceptions of how well a business meets their demands for eco-friendly products and services [36]. Having a positive image is essential to developing relationships and loyalty behaviors with customers, such as return intentions and positive word of mouth [23]. Remarkably, due to consumers' increased demand for environmentally responsible products and services from the hospitality industry, the green image has begun to supersede overall image in importance [22]. As businesses within the food and beverage industry become aware of this, an increased number are implementing green products and practices such as recyclable or biodegradable single-use items such as spoons and straws [23].

According to studies, green self-identity is connected with the purchase intentions of green products [6]. As stated earlier, self-identity encompasses the appropriate actions an individual takes within their place in society [6]. Thus, having a green self-identity would involve a self-appraisal of one's actions within a society's expectations of green behaviors [8]. Recent studies have shown that these expectations or norms have an influence on a business's perceived image [37]. This can be attributed to social norms increasing behavioral intentions and influencing perceptions of businesses that conform with those norms. In such a way, businesses that conduct more sustainable practices will be viewed as more environmentally conscious. With these ideas in play, along with identity theory,

the researchers of this study expected that a consumer's perception of a restaurant's green image would be enhanced by his/her self-perception regarding supporting pro-environmental causes. We thus proposed the following hypothesis:

H1. *Green self-identity has a positive influence on perceived green image.*

Prior studies have investigated the effect of restaurant image on consumer behavior, and some have found that a green image increased loyalty behaviors of customers including positive word-of mouth, intention to revisit, and willingness to pay premium prices [1,23]. Assaker et al. [22], however, did not find any significant correlation between hotel green image and guests' future behaviors. In this study, we expected that consumers' green self-identity improved a restaurant's green image, in turn, enhancing consumers' willingness to purchase at the green restaurant. Thus, to clarify the inconsistencies of previous results, we hypothesized H2 as follows:

H2. *Perceived green image has a positive influence on willingness to purchase.*

2.3. Green Self-Identity, Warm Glow Feeling and Willingness to Purchase

Warm glow feeling is a positive emotion acquired through participation in prosocial or green behavior [38]. As explained by warm glow theory, perceptions of a prosocial self motivate individuals to engage in prosocial behavior, and the accomplishment of those acts results in this positive emotion or warm glow [39]. Clark et al. [38] note that this feeling is in addition to the explicit features or objectives of the product or activity. As Bezençon et al. [40] explain, warm glow may arise upon purchasing ethical products as consumers feel their money, and hence their actions, have contributed positively to society.

By consuming green products, the needs of individuals with green self-identity are met and their satisfaction increased [41]. Petruzzellis et al. [42] took this further by positing that positive emotions and satisfaction can be obtained through the act of shopping itself, irrespective of any purchases made. In such cases, just the process of shopping allows individuals to experience a gratification of and connection with their self-identity which arouses positive emotions. In this way, shopping might be elevated beyond merely an act in which one purchases products as an act of self-expression and personal fulfillment. In a study within the tourism context, it was found that people visiting a heritage site who identify with or have a connection to it have more powerful experiences while there and gain more satisfaction as a result [43]. Following from this, it can be anticipated that by taking on green behaviors consistent with their self-identity, people involved in these socially recognized behaviors would feel higher levels of warm glow [39,41]. Thus, we proposed the following hypothesis:

H3. *Green self-identity has a positive influence on warm glow feeling.*

Most studies imply that warm glow feeling can be used to predict green behavior. For example, one study found that individuals who experience warm glow from participating in corporate social responsibility (CSR) activities are likely to further engage in those activities in the future [44]. Another study demonstrated that people who experience warm glow from recycling develop more intentions to recycle [45]. In contrast to these studies, Nguyen et al. [46] did not find a correlation between warm glow and green purchase intentions. In this study, we expected that consumers' green self-identity would increase warm glow feeling, and in turn, influence the consumers' willingness to purchase at green restaurants. Thus, to clarify the inconsistencies of previous results, we hypothesized H4 as follows:

H4. *Warm glow feeling has a positive influence on willingness to purchase.*

Figure 1 presents the conceptual model and its hypotheses, which were developed based on the identity theory and empirical results from the literature.

3. Method

3.1. Sample and Data Collection

The target population of this study was green restaurant consumers aged between 18 and 25 years (the participants who were born between 1997 and 2004). We employed a voluntary, self-administered questionnaire which was conveniently distributed to participants at community mall areas in Khon Kaen city via QR code during May 2022. The survey was conducted in Khon Kaen because it is Thailand's fourth most populous province. To qualify for the survey, respondents must have dined at an eco-friendly restaurant within the past three months. Specifically, the questionnaire included two screening questions. The first question was used for verifying whether the participants were aged between 18 and 25. The second question was used for identifying whether the participants had been to a green restaurant over the preceding three months. For the second screening question, the potential respondents were asked to read the definition of "green restaurant" and verify if they have been to a green restaurant. For this study, a green restaurant was defined as "a restaurant that offers a selection of green food menu items that use locally grown or organic certified food, as well as one that implements green practices, such as a recycling program, the efficient use of energy and water, and the reduction of solid waste" [47]. Only participants who answered yes to these two questions continued to complete the following sections of the questionnaire including the questions measuring green self-identity, perceived green image, warm glow feeling, willingness to buy, and respondents' demographic profiles (gender and monthly income). The respondents were also asked to answer the questions based on their most recent eco-friendly dining experience. A total of 420 completed questionnaires were collected within three weeks, but only 388 valid responses were obtained and retained for the analysis.

3.2. Measurement

Measurement items for all four constructs in this study were developed based on well-established empirical studies. Specifically, green self-identity was measured by four items adapted from Confente et al. [33]. Perceived green image was measured by a four-item scale developed by Jeong et al. [48]. Warm glow feeling was captured by three items adapted from Lin et al. [49]. Willingness to purchase was measured with three items adapted from Ghali et al. [50]. All measurement items were measured using a seven-point Likert-type scale (1 = strongly disagree to 7 = strongly agree). The questionnaire survey was administered in Thai. Thus, we followed a forward and backward translation method to ensure translation validity between English and Thai versions.

3.3. Data Analysis

We used covariance-based structural equation modeling (CB-SEM) to test the effect of green self-identity on perceived green image and warm glow feeling, which in turn influence the willingness to purchase products from eco-friendly restaurants. CB-SEM was preferred for this analysis because it accounts for measurement errors. Before testing the hypotheses with CB-SEM, we assessed the measurement model using confirmatory factor analysis (CFA). Data were analyzed using the software SPSS 28 and Mplus 8.

3.4. Common Method Bias

We employed Harman's one-factor test [51] to detect common method bias (CMB). First, we ran exploratory factor analysis (EFA) by loading all 14 measurement items on a single factor. The result revealed that the single factor accounted for 44.156% of shared variance among variables. Then, we tested CFA of the single factor model, and the result of CFA indicated that the model poorly fit the data ($\chi^2_{(77)} = 1455.227$, $p < 0.001$; $\chi^2/\text{df} = 18.896$; RMSEA = 0.215; CFI = 0.581; TLI = 0.505; SRMR = 0.127) (Hair et al., 2010). Therefore, CMB was not a concern for this study.

4. Results

4.1. Profile of Respondents

Of the 388 respondents, 232 (59.8%) were female, and 156 (40.2%) were male. In terms of monthly income, 188 (48.5%) reported an income range of THB 10,001 to THB 15,000, 114 (29.4%) had a monthly income of THB 5001 to THB 10,000, 49 (12.6%) indicated an income of higher than THB 15,000 per month, and 37 (9.5%) had an income of less than THB 5000 per month.

4.2. Measurement Model

We employed CFA to evaluate the measurement model of the four constructs. The results of the goodness of indices supported a good fit measurement model ($\chi^2_{(70)} = 146.056$, $p < 0.001$; $\chi^2/df = 2.086$; RMSEA = 0.053; CFI = 0.977; TLI = 0.970; SRMR = 0.04). Further, the reliability and validity of the measurement model were tested. As presented in Table 1, the results showed that the standardized factor loadings ranged from 0.666 to 0.880. Cronbach's alpha of all constructs, average variance extracted (AVE), and composite reliability (CR) values were higher than the recommended cut-off values of 0.7, 0.5, and 0.7 [52], respectively. Thus, the reliability and convergent validity of the measurement model were acceptable. Discriminant validity was also satisfied because the values of the square root of the AVE of each pair of constructs were higher than its correlation coefficient (see Table 2).

Table 1. Measurement model results.

	Measurement Items	Standardized Loading	Cronbach's Alpha	CR	AVE
	Green self-identity		0.869	0.856	0.600
GSI1	I think of myself as someone who is concerned about environmental issues.	0.666			
GSI2	I think of myself as a 'green' consumer.	0.702			
GSI3	Buying products from this restaurant would make me feel like a green consumer.	0.831			
GSI4	I would feel totally satisfied with myself if I bought products from this restaurant.	0.880			
	Warm glow feeling		0.849	0.850	0.655
WG1	With this restaurant, I can feel good because I help to protect the environment.	0.783			
WG2	With this restaurant, I have the feeling of contributing to the well-being of humanity and nature.	0.828			
WG3	With this restaurant, I can feel better because I don't harm the environment.	0.816			
	Perceived green image		0.905	0.907	0.709
IMG1	This restaurant behaves in a socially conscious way.	0.821			
IMG2	I have the impression that this restaurant is very responsive to environmental issues.	0.874			
IMG3	This restaurant is concerned about the preservation of the environment.	0.845			
IMG4	I have the feeling that this restaurant is not only concerned about profit, but also concerned about the environment and other consumers.	0.826			
	Willingness to purchase		0.86	0.860	0.673
WTB1	I would consider purchasing from this green restaurant again.	0.859			
WTB2	I'd still purchase from this green restaurant even if other restaurants reduced their prices.	0.750			
WTB3	There is a strong likelihood that I will purchase from this green restaurant again.	0.848			

Table 2. Discriminant validity results.

Construct	Mean	SD	Green Self-Identity	Warm Glow Feeling	Perceived Green Image	Willingness to Purchase
Green self-identity	5.588	1.017	0.775			
Warm glow feeling	5.542	1.088	0.559	0.809		
Perceived green image	5.739	1.113	0.482	0.357	0.842	
Willingness to buy	5.436	1.169	0.688	0.37	0.497	0.820

Note: Diagonal (bold) values are the square root of average variance extracted.

4.3. Structural Model and Hypothesis Testing

The conceptual model presented in Figure 1 was tested with CB-SEM, and the goodness of fit indices indicated a reasonable fit model ($\chi^2_{(72)} = 230.966$, $p < 0.001$; $\chi^2/\text{df} = 3.207$; RMSEA = 0.075; CFI = 0.952; TLI = 0.939; SRMR = 0.079) [53]. The results in Figure 2 show that all hypothesized paths were statistically significant at the 0.01 level. Consumers' green self-identity positively influenced their perceptions of the restaurant's green image ($\beta = 0.505$, $t = 11.449$) and their feelings of warm glow ($\beta = 0.591$, $t = 13.605$), supporting Hypotheses 1 and 3. The results also indicated that perceived green image ($\beta = 0.423$, $t = 8.397$), and warm glow feeling ($\beta = 0.268$, $t = 4.832$), had significant positive effects on willingness to pay for green restaurants, supporting Hypotheses 2 and 4. Perceived green image and warm glow feeling jointly explained 31.8% of willingness to purchase.

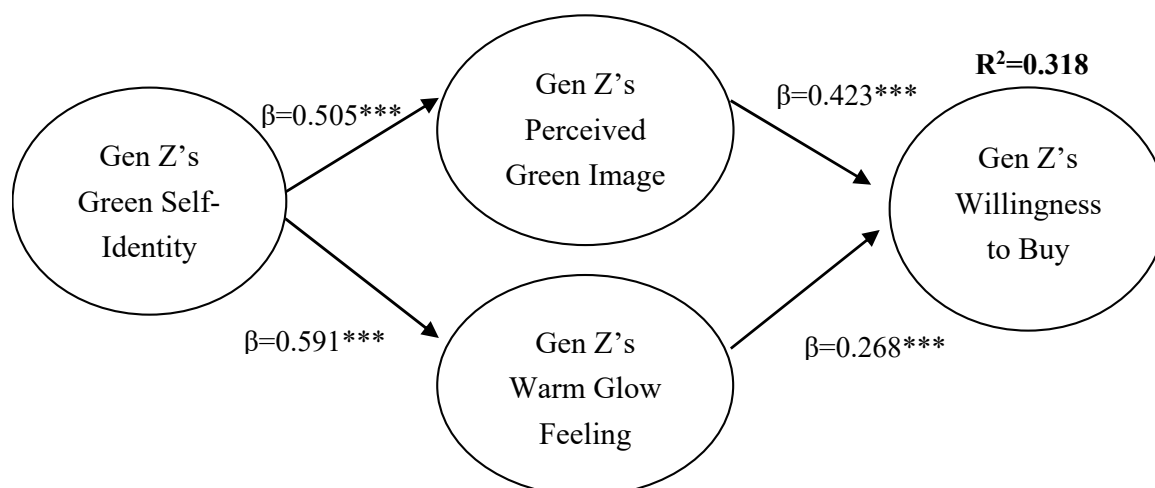


Figure 2. Hypothesis testing results. Note: *** $p < 0.001$, β = standardized path coefficient; goodness of fit indices ($\chi^2_{(72)} = 230.966$, $p < 0.001$; $\chi^2/\text{df} = 3.207$; RMSEA = 0.075; CFI = 0.952; TLI = 0.939; SRMR = 0.079).

5. Conclusions, Discussion, and Implications

According to Grazzini et al. [54], consumers with eco-friendly behavior are influenced by their personal motivations of self-concept relating to “individual moral norms and to feeling good about oneself when doing good”. Pro-environmental consumers tend to perceive the image of restaurants that initiate green practices differently, which affects their purchasing and loyalty behaviors [22]. However, previous research did not clearly distinguish consumers' eco-friendly attitudes and behavior by their generations. Nguyen et al. [46] revealed that environmental self-identity informed young consumers' decisions to purchase green products. As generation Z consumers are considerably the largest segment [10] and increasingly pay higher attention to environmental issues compared to other generations [11], the present research thus specifically explored Generation Z's attitudes towards green restaurant consumption.

The goal of this study was to explore if green self-identity affects consumers' perceptions of restaurants with a green image and their feelings of warm glow, which in turn

make them more willing to buy food at those restaurants. The findings of the current research found that green self-identity influences how Gen Z perceive restaurant image and their feeling of warm glow. We found that green self-identity consumers tend to perceive restaurants with eco-friendly practices as being responsible to society and the environment rather than focusing on profitability, and they are more likely to feel good about restaurants which make an effort to protect the environment. These findings confirm previous research that environmentally conscious consumers tend to seek out restaurants' information through websites, and consequently elevate their perceptions of restaurants with sustainable practices [14]. Similarly, Assaker et al. [22] found that a green hotel image can encourage customers' visiting intentions. Therefore, supporting Whitmarsh and O'Neil [7], the current study suggested that green self-identity is an important factor directing consumers' attitudes towards green consumption. The scholars found that green self-identity was a crucial factor in predicting participants' attitudes towards businesses and their pro-environment behavioral intentions, such as to reduce waste, water usage, and energy consumption.

Additionally, our results point out that the feeling of warm glow can influence Generation Z consumers to buy products from green restaurants, conflicting with the results of Nguyen et al. [46]. Nguyen et al. [46]'s research focused on factors encouraging consumers to purchase energy electrical appliances. In that context, consumers might have perceived that those products would cost more than regular products and therefore more effort would be required of them in order to act prosocially. However, our research explored consumers' attitudes of sustainability in a different context and thus, their attitudes and behavioral intentions might be affected differently. This could be explained by Sun et al. [41] who found that consumers incorporated the time cost of searching for and researching green products into the perceived cost of those products and that the loss of time was one of the major obstacles to green consumption. Therefore, it is possible that Gen Z consumers with the feeling of warm glow are more likely to purchase food products that require little in the way of time to research, in contrast to buying electrical appliances that are considerably more complex purchases. Furthermore, although appliances might differ greatly in price, Gen Z might perceive food prices at green restaurants as reasonably priced when compared to other restaurants which would make decisions easier when purchasing food products.

5.1. Theoretical Implications

The results of the present study expand the literature of green consumption in the hospitality industry. Despite previous research extensively investigating consumers' behavioral intentions towards green hotels and restaurants [1,2,9,14,22,23,26], scholars rarely explored Gen Z's attitudes of dining in green restaurants. The current study provides a more in-depth understanding by exploring Gen Z consumers' attitudes towards green restaurants since this generational cohort is apparently the most environmentally conscious group. Thus, the findings of this study enrich the knowledge of sustainability in the restaurant context.

The examination of the warm glow construct has been widely employed as a measurement and discovered to be an important factor influencing consumers' attitudes towards sustainable consumption [17,18,44,45,55]. However, limited studies used warm glow as a unique construct to determine consumers' willingness to pay for green restaurants. This research extends the existing literature of sustainable consumption within the restaurant industry by exploring the relationships among green self-identity, warm glow, and willingness to pay for eco-friendly restaurants. The results indicate the feeling of warm glow is generated when Gen Zs with green self-identity acknowledge restaurants with green practices, which in turn influences their willingness to pay for green restaurants.

Additionally, the research model of this study analyzed Generation Z's behavioral intentions towards green restaurants through a combination of two theories, including identity and social exchange theories (SET). This study aimed to utilize identity theory to describe how green self-identity affects perceived green image and warm glow feeling. The

results of this research significantly contribute to this theory by identifying that Gen Zs with green self-identity tend to have positive perceptions of restaurant image and warm glow feeling towards eco-friendly restaurants. Furthermore, SET was adopted to explain why one would sacrifice him/herself to pay for green restaurants. Jiang and Kim [24] found that consumers expect a certain outcome of staying at green hotels by paying premium prices. Young consumers may accept paying a higher price if they perceive benefits of obtaining eco-friendly products and services. Sheikh et al. [56] revealed that people perceive the quality of green products to be more important than the price. Based on the findings of this research, young consumers tend to have a positive warm glow feeling and positive restaurant image of eco-friendly restaurants when they notice the restaurants doing good things for the environment, which in turn influence their willingness to pay for this type of restaurant. Therefore, the current study advances the theoretical viewpoints of both SET and green self-identity consumption in the restaurant industry.

5.2. Practical Implications

The current research emphasizes the importance of green self-identity influencing perceived green restaurant image and warm glow feeling, which in turn affect willingness to pay for green restaurants. The research model of this study provides essential implications for restaurant operators to create green marketing strategies to enhance consumers' willingness to pay for green restaurants. First, restaurant marketers should design effective advertising campaigns representing eco-friendly restaurants in order to raise the awareness of young consumers with green self-identity. Restaurateurs can promote their green operational activities (such as establishing recycling systems and illustrating methods of how to reduce water and energy consumption within the restaurants, etc.) via restaurants' official websites and social media, and the owners can also gain a green restaurant reputation by acquiring green certificates [26]. Marketers should deliver clear messages of being environmentally friendly and allow consumers to experience green practices at the restaurants such as by introducing eco-friendly utensils to patrons [23]. Not only do the messages enhance consumers' positive emotional feelings, but the restaurants' green image would be improved as well. Consumers acknowledge restaurants with green initiatives providing environmental and social benefits and are more likely to visit and be willing to pay for green restaurants. Furthermore, the current study focused on investigating Generation Z consumers' attitudes towards green restaurants. The findings of this study suggest that restaurant operators should create advertisements which promote green restaurants associating with Generation Z's green self-identity. Linking a connection between green restaurant image and Generation Z green self-identity will encourage this generational segment to affiliate themselves with eco-friendly restaurants by visiting these types of restaurants [16]. Second, operators can improve the restaurants by incorporating green design, such as creating eco-friendly ambiance and using environmentally friendly materials, to increase patrons' dining experience [15]. Restaurant owners should also include information about how their establishments apply green practices and put signs inside the restaurants so as to improve the green image and increase awareness of the eco-conscious Generation Z. Once young consumers receive pleasurable experiences from green restaurants, they are more likely to share positive feelings about those restaurants to peers through social media or face-to-face communication [9]. Consequently, restaurateurs gain more profit from both customer loyalty and new customers. Third, restaurant managers could consider creating eco-friendly activities for younger consumers to engage with so as to attract them to dining in their restaurants. For example, managers can introduce a campaign of "bring your own bags or containers" for take home food and offer discounts or collection of points in order to motivate young consumers to visit green restaurants. Consumers would help contribute to the restaurants' intentions of supporting the environment by participating in eco-friendly activities, which results in their willingness to pay for green restaurants.

6. Limitations and Future Research

Despite this research paper providing benefits for both research scholars and managerial operators in the hospitality industry, some limitations should be considered for further studies. The current study emphasized exploring consumers' attitudes towards restaurants applying green practices such as establishing recycling programs, reducing food waste, and using biodegradable packaging. Nevertheless, consumers might not only acknowledge green restaurants through eco-friendly operational activities, but they might also consider other elements such as sustainable food items. Based on the findings of Remar et al. [14]'s research, restaurants offering sustainable food menus can enhance their patrons' perceptions of a sustainable restaurant image. Thus, investigating sustainable food menus as a measurement should be included in further studies in order to have a better understanding of consumers' attitudes and behavior towards the green restaurant image and warm glow feeling. Additionally, the results from this study might not be generalizable across restaurant segments since restaurant types were not distinguished. To expand the present study, different types of restaurants initiating green practices should be identified, such as fast food, fast-casual, and casual restaurants, when collecting the data. Clearer results would allow restaurant entrepreneurs to improve their restaurant's green image in order to increase the willingness to pay for eco-friendly restaurants.

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References

1. de Leaniz, P.M.G.; Crespo, A.H.; López, R.G. Customer responses to environmentally certified hotels: The moderating effect of environmental consciousness on the formation of behavioral intentions. *J. Sustain. Tour.* **2018**, *26*, 1160–1177. [\[CrossRef\]](#)
2. Riva, F.; Magrizos, S.; Rubel, M.R.B.; Rizomyliotis, I. Green consumerism, green perceived value, and restaurant revisit intention: Millennials' sustainable consumption with moderating effect of green perceived quality. *Bus. Strategy Environ.* **2022**. [\[CrossRef\]](#)
3. Namkung, Y.; Jang, S. Effects of restaurant green practices on brand equity formation: Do green practices really matter? *Int. J. Hosp. Manag.* **2012**, *41*, 85–95. [\[CrossRef\]](#)
4. Baloglu, S.; Raab, C.; Malek, K. Organizational motivations for green practices in casual restaurants. *Int. J. Hosp. Tour. Adm.* **2022**, *23*, 269–288. [\[CrossRef\]](#)
5. Hu, H.-H.; Parsa, H.; Self, J. The dynamics of green restaurant patronage. *Cornell Hosp. Q.* **2010**, *51*, 344–362. [\[CrossRef\]](#)
6. Sharma, N.; Saha, R.; Sreedharan, V.R.; Paul, J. Relating the role of green self-concepts and identity on green purchasing behaviour: An empirical analysis. *Bus. Strategy Environ.* **2020**, *29*, 3203–3219. [\[CrossRef\]](#)
7. Whitmarsh, L.; O'Neill, S. Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *J. Environ. Psychol.* **2010**, *30*, 305–314. [\[CrossRef\]](#)
8. Khare, A.; Pandey, S. Role of green self-identity and peer influence in fostering trust towards organic food retailers. *Int. J. Retail. Distrib. Manag.* **2017**, *45*, 969–990. [\[CrossRef\]](#)
9. Le, A.; Tan, K.-L.; Yong, S.-S.; Soonsap, P.; Lipa, C.J.; Ting, H. Perceptions towards green image of trendy coffee cafés and intention to re-patronage: The mediating role of customer citizenship behavior. *Young Consum.* **2021**, *ahead-of-print*. [\[CrossRef\]](#)
10. Djafarova, E.; Foots, S. Exploring ethical consumption of generation Z: Theory of planned behaviour. *Young Consum.* **2022**, *23*, 413–431. [\[CrossRef\]](#)
11. Su, C.-H.; Tsai, C.-H.; Chen, M.-H.; Lv, W.Q. US sustainable food market generation Z consumer segments. *Sustainability* **2019**, *11*, 3607. [\[CrossRef\]](#)
12. Alsetoohy, O.; Ayoun, B.; Abou-Kamar, M. COVID-19 Pandemic Is a Wake-Up Call for Sustainable Local Food Supply Chains: Evidence from Green Restaurants in the USA. *Sustainability* **2021**, *13*, 9234. [\[CrossRef\]](#)
13. Hwang, K.; Lee, B. Pride, mindfulness, public self-awareness, affective satisfaction, and customer citizenship behaviour among green restaurant customers. *Int. J. Hosp. Manag.* **2019**, *83*, 169–179. [\[CrossRef\]](#)

14. Remar, D.; Sukhu, A.; Bilgihan, A. The effects of environmental consciousness and menu information on the perception of restaurant image. *Br. Food J.* 2021, *ahead-of-print*. [\[CrossRef\]](#)
15. Yu, Y.S.; Luo, M.; Zhu, D.H. The effect of quality attributes on visiting consumers' patronage intentions of green restaurants. *Sustainability* **2018**, *10*, 1187. [\[CrossRef\]](#)
16. Bhattacharya, A.; Good, V.; Sardashti, H.; Peloza, J. Beyond warm glow: The risk-mitigating effect of corporate social responsibility (CSR). *J. Bus. Ethics* **2021**, *171*, 317–336. [\[CrossRef\]](#)
17. Giebelhausen, M.; Lawrence, B.; Chun, H.H.; Hsu, L. The warm glow of restaurant checkout charity. *Cornell Hosp. Q.* **2017**, *58*, 329–341. [\[CrossRef\]](#)
18. Hwang, J.; Choi, J.K. An investigation of passengers' psychological benefits from green brands in an environmentally friendly airline context: The moderating role of gender. *Sustainability* **2017**, *10*, 80. [\[CrossRef\]](#)
19. Iweala, S.; Spiller, A.; Meyerding, S. Buy good, feel good? The influence of the warm glow of giving on the evaluation of food items with ethical claims in the U.K. and Germany. *J. Clean. Prod.* **2019**, *215*, 315–328. [\[CrossRef\]](#)
20. Hwang, J.; Kim, H. Examining the Importance of Green Food in the Restaurant Industry: Focusing on Behavioral Intentions to Eat Insects. *Int. J. Environ. Res. Public Health* **2021**, *18*, 1905. [\[CrossRef\]](#)
21. Brekke, K.A.; Kverndokk, S.; Nyborg, K. An economic model of moral motivation. *J. Public Econ.* **2003**, *87*, 1967–1983. [\[CrossRef\]](#)
22. Assaker, G.; O'Connor, P.; El Haddad, R. Examining an integrated model of green image, perceived quality, satisfaction, trust, and loyalty in upscale hotels. *J. Hosp. Mark. Manag.* **2020**, *29*, 934–955. [\[CrossRef\]](#)
23. Lee, J.; Hsu, L.-T.; Han, H.; Kim, Y. Understanding how consumers view green hotels: How a hotel's green image can influence behavioural intentions. *J. Sustain. Tour.* **2010**, *18*, 901–914. [\[CrossRef\]](#)
24. Jiang, Y.; Kim, Y. Developing multi-dimensional green value. *Int. J. Contemp. Hosp. Manag.* **2015**, *27*, 308–334. [\[CrossRef\]](#)
25. Lalot, F.; Quiamzade, A.; Falomir-Pichastor, J.M.; Gollwitzer, P.M. When does self-identity predict intention to act green? A self-completion account relying on past behaviour and majority-minority support for pro-environmental values. *J. Environ. Psychol.* **2019**, *61*, 79–92. [\[CrossRef\]](#)
26. Park, E.O.; Chae, B.K.; Kwon, J.; Kim, W.H. The effects of green restaurant attributes on customer satisfaction using the structural topic model on online customer reviews. *Sustainability* **2020**, *12*, 2843. [\[CrossRef\]](#)
27. Teng, Y.M.; Wu, K.S. Sustainability development in hospitality: The effect of perceived value on customers' green restaurant behavioral intention. *Sustainability* **2019**, *11*, 1987. [\[CrossRef\]](#)
28. Tung, T.; Koenig, H.F.; Chen, H.L. Effects of green self-identity and cognitive and affective involvement on patronage intention in eco-friendly apparel consumption: A gender comparison. *Sustainability* **2017**, *9*, 1977. [\[CrossRef\]](#)
29. Kim, T.; Yun, S. Research Framework Built Natural-Based Solutions (NBSs) as Green Hotels. *Sustainability* **2022**, *14*, 4282. [\[CrossRef\]](#)
30. Say, A.L.; Guo, R.A.; Chen, C. Altruism and social utility in consumer sharing behavior. *J. Consum. Behav.* **2021**, *20*, 1562–1574. [\[CrossRef\]](#)
31. Suess, C.; Baloglu, S.; Busser, J.A. Perceived impacts of medical tourism development on community wellbeing. *Tour. Manag.* **2018**, *69*, 232–245. [\[CrossRef\]](#)
32. Han, H.; Lee, K.-S.; Radic, A.; Ngah, A.H.; Kim, J.J. The extended self-identify- based electric product adoption model and airline business strategy: A new theoretical framework for green technology products. *J. Travel Tour. Mark.* **2021**, *38*, 247–262. [\[CrossRef\]](#)
33. Confente, I.; Scarpi, D.; Russo, I. Marketing a new generation of bio-plastics products for a circular economy: The role of green self-identity, self-congruity, and perceived value. *J. Bus. Res.* **2020**, *112*, 431–439. [\[CrossRef\]](#)
34. Tang, J.; Tosun, C.; Baum, T. Do Gen Zs feel happy about their first job? A cultural values perspective from the hospitality and tourism industry. *Int. J. Contemp. Hosp. Manag.* **2020**, *32*, 4017–4040. [\[CrossRef\]](#)
35. Ottenbacher, M.C.; Kuechle, G.; Harrington, R.J.; Kim, W.-H. QSR customer sustainable behaviors and brand practice perceptions on willingness to pay a premium. *Int. Hosp. Rev.* **2019**, *33*, 106–125. [\[CrossRef\]](#)
36. Wang, J.; Wang, S.; Xue, H.; Wang, Y.; Li, J. Green image and consumers' word-of-mouth intention in the green hotel industry: The moderating effect of Millennials. *J. Clean. Prod.* **2018**, *181*, 426–436. [\[CrossRef\]](#)
37. Kamalanon, P.; Chen, J.-S.; Le, T.-T. Why Do We Buy Green Products? An Extended Theory of the Planned Behavior Model for Green Product Purchase Behavior. *Sustainability* **2022**, *14*, 689. [\[CrossRef\]](#)
38. Clark, C.F.; Kotchen, M.J.; Moore, M.R. Internal and external influences on pro-environmental behavior: Participation in a green electricity program. *J. Environ. Psychol.* **2003**, *23*, 237–246. [\[CrossRef\]](#)
39. Boobalan, K.; Nachimuthu, G.S.; Sivakumaran, B. Understanding the psychological benefits in organic consumerism: An empirical exploration. *Food Qual. Prefer.* **2021**, *87*, 104070. [\[CrossRef\]](#)
40. Bezençon, V.; Girardin, F.; Lunardo, R. When does an ethical attribute matter for product evaluation? The role of warm-glow feelings for low-rated products. *Psychol. Mark.* **2020**, *37*, 1571–1585. [\[CrossRef\]](#)
41. Sun, Y.; Li, T.; Wang, S. "I buy green products for my benefits or yours": Understanding consumers' intention to purchase green products. *Asia Pac. J. Mark. Logist.* 2021, *ahead-of-print*. [\[CrossRef\]](#)
42. Petruzzellis, L.; Colladon, A.F.; Visentin, M.; Chebat, J.-C. Tell me a story about yourself: The words of shopping experience and self-satisfaction. *J. Retail. Consum. Serv.* **2021**, *63*, 102703. [\[CrossRef\]](#)
43. Alrawadieh, Z.; Prayag, G.; Alsameen, M. Self-identification with a heritage tourism site, visitors' engagement and destination loyalty: The mediating effects of overall satisfaction. *Serv. Ind. J.* **2019**, *39*, 541–558. [\[CrossRef\]](#)

44. Ahn, Y.; Lee, J. The Effect of Participation Effort on CSR Participation Intention: The Moderating Role of Construal Level on Consumer Perception of Warm Glow and Perceived Costs. *Sustainability* **2020**, *12*, 83. [[CrossRef](#)]
45. Zhang, J.; Zhao, L.; Hu, S. Visualizing recycling: Promoting recycling through mental simulation. *Resour. Conserv. Recycl.* **2021**, *174*, 105783. [[CrossRef](#)]
46. Nguyen, T.N.; Lobo, A.; Nguyen, B.K. Young consumers' green purchase behaviour in an emerging market. *J. Strateg. Mark.* **2018**, *26*, 583–600. [[CrossRef](#)]
47. Jang, Y.J.; Kim, W.G.; Bonn, M.A. Generation Y consumers' selection attributes and behavioral intentions concerning green restaurants. *Int. J. Hosp. Manag.* **2011**, *30*, 803–811. [[CrossRef](#)]
48. Jeong, E.; Jang, S.S.; Day, J.; Ha, S. The impact of eco-friendly practices on green image and customer attitudes: An investigation in a café setting. *Int. J. Hosp. Manag.* **2014**, *41*, 10–20. [[CrossRef](#)]
49. Lin, J.; Lobo, A.; Leckie, C. The role of benefits and transparency in shaping consumers' green perceived value, self-brand connection and brand loyalty. *J. Retail. Consum. Serv.* **2017**, *35*, 133–141. [[CrossRef](#)]
50. Ghali, Z.Z. Effect of utilitarian and hedonic values on consumer willingness to buy and to pay for organic olive oil in Tunisia. *Br. Food J.* **2020**, *122*, 1013–1026. [[CrossRef](#)]
51. Fuller, C.; Simmering, M.J.; Atinc, G.; Atinc, Y.; Babin, B.J. Common methods variance detection in business research. *J. Bus. Res.* **2016**, *69*, 3192–3198. [[CrossRef](#)]
52. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Pearson: New York, NY, USA, 2010.
53. MacCallum, R.C.; Browne, M.W.; Sugawara, H.M. Power analysis and determination of sample size for covariance structure modeling. *Psychol. Methods* **1996**, *1*, 130. [[CrossRef](#)]
54. Grazzini, L.; Rodrigo, P.; Aiello, G.; Viglia, G. Loss or gain? The role of message framing in hotel guests' recycling behaviour. *J. Sustain. Tour.* **2018**, *26*, 1944–1966. [[CrossRef](#)]
55. Jia, L.; Linden, S. Green but not altruistic warm-glow predicts conservation behavior. *Conserv. Sci. Pract.* **2020**, *2*, e211. [[CrossRef](#)]
56. Sheikh, F.Z.; Mirza, A.A.; Aftab, A.; Asghar, B. Consumer green behaviour toward green products and green purchase decision. *Int. J. Multidiscip. Sci. Eng.* **2014**, *5*, 1–9.