

Environmentally Responsible Behavior: The Roles of Personal Norms, Perceived Value, and Destination Social Responsibility

Ginta Ginting¹⁾; Ike Janita Dewi^{2*)}; Imas Maesaroh³⁾

¹⁾ ginta@ut.ac.id, Universitas Terbuka, Indonesia

²⁾ ikejdewi@usd.ac.id, Universitas Sanata Dharma, Indonesia

³⁾ daniyatulf@gmail.com, Universitas Terbuka, Indonesia

*) Corresponding Author

ABSTRACT

Objective: The objective of the study is to analyze the factors that shape tourists' environmentally responsible behavior. The proposed research model integrates norm activation theory, stakeholder theory, and a utilitarian perspective. From the norm activation theory perspective, two variables, namely awareness of consequences and ascribed responsibility, are included in the model as antecedents of personal norms. Destination social responsibility, as a stakeholder effort to promote environmental protection, can strengthen the influence of personal norms on environmentally responsible behavior. Furthermore, the utilitarian perspective in the form of perceived value, which is the benefit that tourists obtain from traveling to a destination, is also a moderating influence of personal norms on environmentally responsible behavior.

Methodology: This study involved 255 respondents who had visited Yogyakarta. Data were processed using Smart-PLS to determine the relationships between variables.

Finding: The results show that awareness of consequences and ascribed responsibility are factors in forming personal norms. Personal norms have a positive influence on environmentally responsible behavior. Furthermore, the data supported the role of perceived value as a moderator. However, destination social responsibility does not moderate the influence of personal norms on environmentally responsible behavior.

Conclusion: The study concludes that the norms activation theory holds that personal norms are antecedents to environmentally responsible behavior. Personal norms's influence on environmentally responsible behavior is strengthened by perceived value.

Keywords: environmentally responsible behavior; personal norms; perceived value; destination social responsibility.

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INTRODUCTION

The impact of tourism on the environment is one of the issues that receives the most attention. In academic research, the impact of tourism on the environment has been studied in the context of environmentally responsible behavior (ERB). Various studies have been conducted to analyze the factors that shape ERB. The theory includes the role of individual tourists in the form of tourists' norms and the role of other stakeholders in influencing ERB. Norm activation theory (NAT) is one of the most widely used theories. This theory assumes that the individual characteristics of tourists are very important in shaping their environmentally responsible behavior (Fenitra et al., 2022; Gao et al., 2016; Wu et al., 2022; Ünal et al., 2018).

Stakeholder theory (McGahan, 2021) also explains the role of stakeholders in shaping destination image (Fei & Chok, 2024; Liu et al., 2022) and destination social responsibility (Liu et al. 2022; Su et al, 2016; Su et al., 2017; Su et al, 2018; Su et al, 2020a; Su et al., 2020b; Wu et al., 2022). Destination images, both cognitive and affective, are antecedents that are considered important in shaping the perceived value tourists obtain when visiting a destination (Fei & Chok, 2024, 1999; Liu et al., 2022; Imaningsih et al., 2022; Putro, 2024; Soelton et al., 2020). Destination social responsibility, as an effort made by stakeholders to create a responsible destination, is positioned as a moderating variable.

Interestingly, the utilitarian approach is also positioned as an explanation for environmentally responsible behavior. The quality factor of the tourist experience in a place is a mediating variable that determines tourist behavior to be responsible for the environment. The arguments presented by Cabral & Dhar (2020) and Han et al. (2016) are that tourists with personal norms who are responsible for the environment will behave responsibly towards the environment if they have a quality tourism experience. Someone with high personal norms may already have commitments that encourage certain behaviors. Perceived values will strengthen or weaken the influence of personal norms on environmental behavior. Therefore, perceived value would make more sense as a factor that strengthens or weakens the influence of personal norms on ERB.

With various perspectives and results from previous research, there is a research gap that the antecedents of ERB are studied sporadically. There has been no research that integrates and examines the relative importance of each of the antecedents in understanding tourists' ERB. Therefore, this study aims to integrate NAT, stakeholder theory, and the utilitarian perspective (perceived value) in influencing ERB. This study contributes to the perspective that unifies the role of individual and stakeholder characteristics in shaping ERB. With personal norms playing an important role, the antecedents of personal norms are also included in the model. Awareness of consequences and ascribed responsibility are included to further scrutinize the formation of personal norms. By integrating these three perspectives, this research offers a novelty by filling the theoretical gap in understanding tourists' ERB.

This theoretical integration will provide insight both theoretically and practically. Several studies (e.g. Han et al., 2020; Xu et al., 2020) have discussed the role of personal norms in shaping environmentally responsible behavior. In this case, the role of individuals and their intrinsic qualities is very important in forming their environmentally responsible behavior. Meanwhile, other studies (e.g., Cabral & Dhar, 2020; Han et al., 2016, Parzonko et al., 2021) strongly emphasize the important value of the quality of experience gained from travel which can strengthen their behavioral tendencies. When tourists feel that the benefits are greater than the costs, they experience greater tourism experience utility, which stimulates their

environmentally responsible behavior. This represents the utilitarian view, that is, when individuals weigh benefits vis-à-vis costs to be satisfied with their tourism experience. Apart from that, an interesting thing in tourism marketing is the involvement of stakeholders in the destination as shapers of the tourist experience. Apart from a physical product, stakeholder interactions in a destination are very important in shaping the tourism offering. This is where stakeholder theory plays an important role. In research on ERB, stakeholder theory manifests itself as Destination Social Responsibility.

This study was conducted in the Yogyakarta Special Region, Indonesia. Yogyakarta is one of the largest tourist destinations in Indonesia, attracting tourists in greater numbers than its population. Threats to environmental quality are also a serious concern because, throughout 2023, the waste problem will be a challenge that has not been fully resolved for this destination. The arrival of tourists in large numbers means greater pressure on environmental quality in Yogyakarta (Pradana & Putra, 2023; Tola, 2023). Therefore, this issue is especially relevant for Yogyakarta. Further, with the mainstreaming of sustainability issues in tourism (UNWTO, 2024), tourists' environmentally responsible behavior is a very important topic to investigate. Various forums and meetings are held by UNWTO's Committee of Tourism and Sustainability to promote and formulate sustainable tourism policies (UNWTO, 2024). This research produces findings that can be the basis for formulating tourism development policies.

LITERATURE REVIEW

Environmentally responsible behavior

The impact of tourism development on environmental sustainability has been widely discussed. One thing that is accused of having a negative impact is the behavior of tourists who are irresponsible for the environment. Therefore, the factors or antecedents that shape tourists' or consumers' environmental behavior have become a widely researched topic (Genoveva & Samukti, 2020; Murtiningsih *et al.*, 2024; Samukti, 2020; Ramli *et al.*, 2020; Rizkiatami, 2023).

Research on ERB has experienced measurement problems. The behavioral domain was not easy to observe. Therefore, ERB measurements were performed as a self-reporting behavior. In addition, ERB measurements vary depending on the theoretical background and the research context. Environmentally responsible behavior is defined as tourist behavior that does not damage or minimize the negative impact of tourism activities on the environment. Theoretical background such as locus of control (Smith-Sebasto and D'Costa, 1995) classifies ERB into six dimensions: civil action, educational action, physical action, financial action, legal action, and persuasive action. In tourism research, ERB is studied as a general and specific behavior. Gao *et al.* (2016), Lee *et al.* (2015), and Wu *et al.* (2022) measured the ERB as a general behavior. Lee *et al.* (2015) provided the general term ERB as an ERB behavior in daily life. Meanwhile, several other studies (for example, Fenitra *et al.*, 2022; Ünal *et al.*, 2018) have measured ERB more specifically in certain behaviors. ERB specifics include recycling, legal behavior, green activities, and educational actions. Ünal *et al.* (2018) specifically defined ERB in the context of waste disposal.

As mentioned previously, multiple perspectives are presented to study the antecedents that shape ERB. Some prominent theories are the Norm Activation Theory and Stakeholder Theory. This research adds the utilitarian perspective that the quality of experience obtained by tourists

(perceived value) strengthens or weakens the influence of personal norms on their environmentally responsible behavior.

Norm Activation Theory

Norm activation theory (NAT) states that a person's behavior starts from their values. The moral obligations that a person has will greatly determine their behavior (Gohary, 2021). Therefore, the essence of NAT is personal norms (PN). Ghazali et al. (2019), Landon & Boley (2018), and Savari et al., (2023) stated that PN consists of 2 (two) main constructs, namely awareness of consequences (AC) and ascribed responsibility (AR). Ascribed responsibility is a person's sense of responsibility for the consequences of his behavior. Feelings of responsibility from personal norms regarding environmental protection. Ascribed responsibility is formed because someone is aware of the impact of their behavior. Without an awareness of the consequences, a sense of responsibility will not be formed. Therefore, the more someone is aware of the consequences of their behavior, the higher their sense of responsibility.

Furthermore, the concept of knowledge-belief norms (K-B-N) states that a person's knowledge determines what is believed. A person who knows environmental protection and the negative impact of tourism activities on the environment will have a sense of moral responsibility to protect the environment. Therefore, awareness of consequences (AC) influences ascribed responsibilities. This reasoning is in line with research by Gao et al. (2016) and Wu et al. (2022) who state that awareness of consequences influences ascribed responsibility.

H1. Awareness of consequences affects ascribed responsibility positively

Awareness of consequences can also directly activate personal norms, which determine whether a person has the value not to harm others (Fenitra et al, 2022, Wu et al., 2022). Therefore, awareness of the consequences of a person's actions can lead to an understanding of what actions they should take to minimize the detrimental effects of their behavior on the environment.

H2. Awareness of consequences affects personal norms positively

Wu et al. (2022) stated that there is a direct link between awareness of consequences, personal norms, and environmentally responsible behavior (AC->PN->ERB). A person with ascribed responsibility towards the protection of the environment will induce personal norms, namely having the value of behaving responsibly towards the environment (Fenitra et al., 2022). Based on these arguments, we propose the following hypotheses.

H3. Ascribed responsibility affects personal norms positively

H4. Personal norms affect environmentally responsible behavior positively

The Moderating Role of Perceived Value

Perceived value is the benefit tourists receive when visiting a destination. Perceived value is a key variable in measuring tourist experience. From a utilitarian perspective, perceived value reflects tourists' assessment of destination attributes. If tourists feel that the benefits of their

tourism experience exceed the costs, they experience greater utility (Cabral & Dhar (2020); Han et al., 2016).

In marketing science, perceived value is the difference between the costs and benefits obtained from a product or service purchased (Keni & Callista, 2021; Kotler et al., 2021; Saratian et al. (2024). This perceived value produces a positive attitude that stimulates behavior. When tourists feel that the benefits are greater than the costs, they experience greater tourism experience utility, which stimulates their environmentally responsible behavior (Cabral & Dhar, 2020; Han et al., 2016, Parzonko et al., 2021). Tourists who experience positive perceived value are encouraged to help maintain the beauty of the tourist destinations they visit. They behave in a way that is not detrimental and will have a positive impact on the destination.

If personal norms are intrinsic qualities that cause environmentally responsible behavior, the quality of experiences at the destination will strengthen or weaken the influence of personal norms on behavior. This moderating, and not mediating, role of perceived value shows the important role of tourists' character and moral obligations in shaping behavior. However, what consumers feel when enjoying a tourist destination results in differences in the intensity of their behavior. Based on these arguments, this research proposes H5.

H5. Perceived value strengthens the influence of personal norms on environmentally responsible behavior

The Moderating Role of Destination Social Responsibility

There are various stakeholders at tourist destinations. These stakeholders include destination management organizations, tour operators, hotels and restaurants, transportation services, tourist attractions, tourists, and residents of the destination. These major stakeholders can work together to implement environmental protection programs at tourist destinations (Su and Swanson, 2017). The policies undertaken by destination management organizations usually support sustainable tourism development. In sustainable tourism development, tourism development optimizes economic impacts by minimizing negative impacts on the cultural and natural environment. Many tourism service businesses, such as accommodations, should also (Saratian, 2023) implement more environmentally friendly business practices. The efforts of these stakeholders are similar to the Corporate Social Responsibility (CSR) carried out by the private sector. Tourism service businesses are often involved in community empowerment, environmental management, and education. Previous studies provide empirical evidence that CSR carried out by companies has an impact on public perceptions of the company's responsibility in dealing with social problems.

Based on stakeholder theory (McGahan, 2021), the collective efforts of all stakeholders have an impact on all stakeholders, including tourists. Similar to the CSR efforts carried out by companies, DSR initiatives will also increase the positive image of the destination. According to the social exchange theory (Su and Swanson, 2017), social behavior is influenced by the benefits and costs of an exchange process. Tourists, as stakeholders of a destination, also gain positive benefits from the DSR initiative. The main assets of tourism are nature and culture. Therefore, protecting nature and culture will also increase tourist attractions. Specific environmental protection efforts, such as those related to waste management, will increase the cleanliness of the destination, which will certainly increase travel comfort (Su et al, 2016; Su et al., 2017; Su et al, 2018; Su et al, 2020a; Su et al., 2020b).

Previous research has placed DSR as a moderating variable that determines the influence of antecedent variables on ERB (Lee and Oh, 2018, Liu et al. 2022; Wu et al., 2022). This research examines the influence of tourists' norms on their behavior towards the environment. Whether in the form of an enhanced positive image of the destination or benefits gained by tourists as a result of destination responsibility, DSR strengthens the influence of personal norms on ERB. Based on these arguments, H6 is formulated as follows:

H6. Destination Social Responsibility strengthens the influence of personal norms on environmentally responsible behavior.

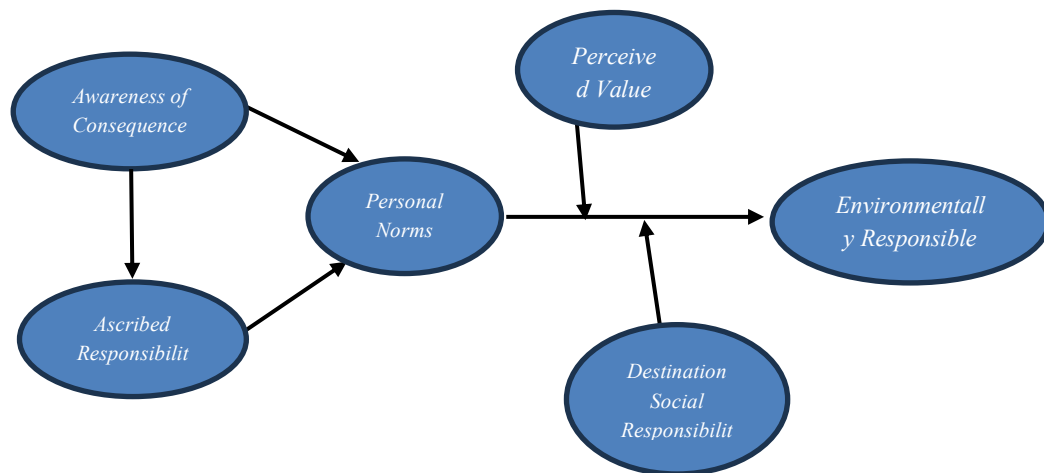


Figure 1 – The Conceptual Framework

METHOD

This research is quantitative research that tests the causal relationships between variables. The population in this study comprised tourists visiting Yogyakarta in 2023. The sample was selected non-randomly by submitting the criterion that tourists were more than 17 years old. The questionnaire was created in Google Forms and distributed on various platforms. Online questionnaires are effective in obtaining large numbers of responses in a short period (Bryman and Bell, 2014). The minimum sample size suggested by Hair et al. (2019) was between five and ten times the number of indicators. The number of samples in this study was 245, which means that it met the minimum sample size requirement.

The measurement of variables was carried out using a Likert Scale ranging from 1 (strongly disagree) to 5 (strongly agree). Measurements of the variables were obtained from previous studies. Measures of the awareness of consequences, ascribed responsibility, and personal norms were taken from Wu et al. (2022). We adapted measurements from Liu et al. (2022) to develop measures of destination social responsibility and perceived value. Measurements for environmentally responsible behavior were adapted from Liu et al. (2022) and Wu et al. (2022). Before administering the questionnaire to respondents in the main study, a pre-study was conducted to assess the validity and reliability of the instrument. Data were analyzed using Partial Least Square-Structural Equation Modelling (PLS-SEM). Metode ini cocok digunakan untuk understand the relationship between the variables. Fernandes et al. (2019) and Ying et al. (2017), also state that PLS-SEM provides a reliable and adaptable method for testing causal

models. This method also has relatively few limits on data and measurement scales (Hair et al., 2019).

In analyzing data using PLS-SEM, we first examine the outer model to assess the validity and reliability of the measurements. Having assessed the outer model, we proceed with the bootstrapping process to assess the model fitness and examine the significance of the direct and indirect paths as hypothesized.

RESULTS AND DISCUSSION

Results

This study, which involved 245 respondents, consisted of tourists with various characteristics. Respondents varied in terms of age, gender, educational background, socioeconomic class, visit status, and most-liked destination type (see Table 1). Although the sample was taken non-randomly, the diversity of respondent characteristics showed sufficient variation among respondents.

Table 1. Respondents' Profile

Description	N	%		N	%
Age in years			Monthly expenditure		
17-25	45	18.37	< 1 million	12	4.89
26-35	89	36.32	1-5 million	45	18.37
36-45	57	23.27	5.1-10 million	91	37.14
46-55	22	8.98	>10 million	97	39.59
56 or older	32	13.06			
			Visit frequency		
Gender			First time	5	2.04
Male	125	51.02	Second time	34	13.87
Female	120	48.98	Third time	44	17.96
			Fourth time or more	162	66.12
			Most liked destination type		
Educational background			Culture-based	80	32.65
Less than high school	21	8.4	Nature-based	91	37.14
High school	105	42.86	Man-made	60	24.89
Bachelor degree	99	40.40	Others	14	5.71
Postgraduate degree	18	7.34			

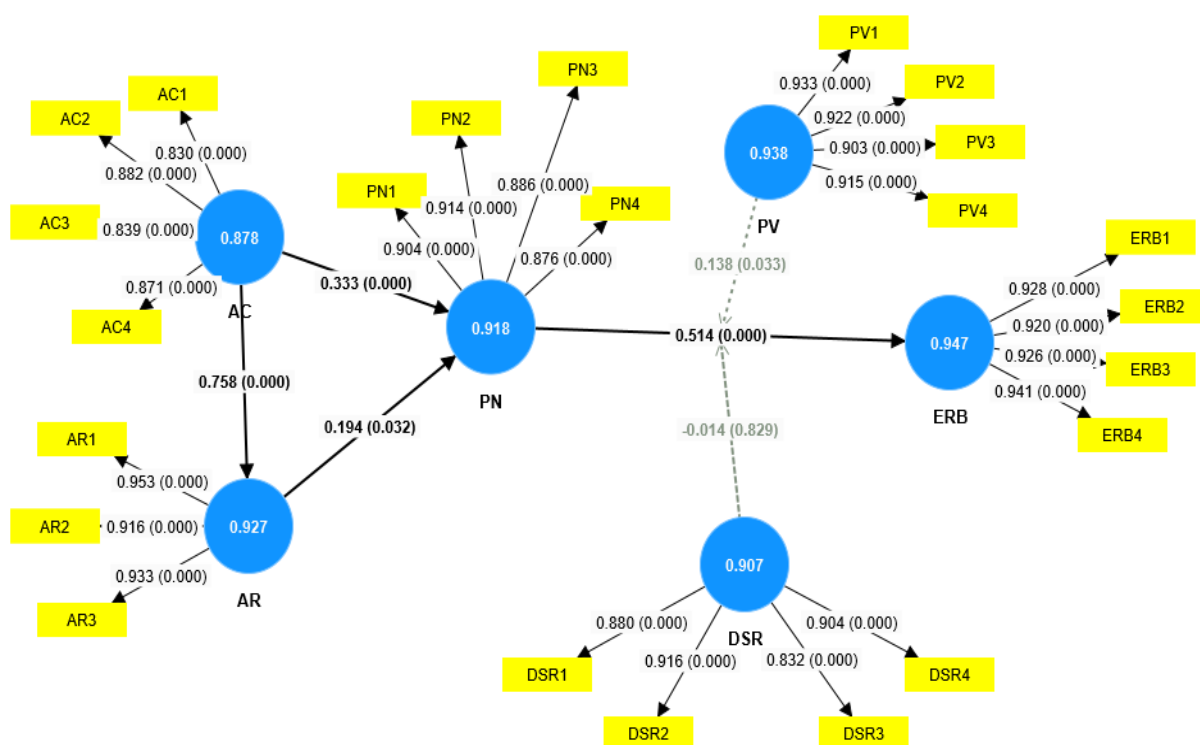


Figure 2. Graphical Results of the Outer and Inner Model

It is important to mention that before the final instrument presented in this article, initial testing was carried out on the instrument involving 30 respondents. The results of the pre-test resulted in the deletion of one item each for the personal norms and one item for the destination social responsibility variables. However, these two items were not included in the main study.

We tested these instruments by examining their validity and reliability. Table 2 presents the reliability scores of the instrument. The Cronbach's alpha for the constructs ranged from 0.878 to 0.947. These scores are higher than the suggested cut-off rate of 0.70 (Hair et al., 2019). Composite reliability scores (0.879–0.949) were also higher than those suggested by Fornell and Larcker (1981). These results demonstrate the internal consistency of all constructs.

The validity of the instruments was tested based on convergent and discriminant validity. Convergent validity was examined using the factor loading of each item. The factor loading shows the contribution of each item to the respective constructs. The factor loadings were greater than 0.830 and were significant at the 0.001 level (Anderson and Gerbing, 1988). These scores were satisfactory. Furthermore, the average variance extracted (AVE) of the constructs ranged from 0.732 to 0.862. This means that an adequate portion of the variance is explained by the constructs (Hair et al., 2020).

The discriminant validity of the instrument was examined using the cross-loadings of the items. The results in Table 2 show that all the items were loaded accordingly. We also assessed discriminant validity by comparing the square root of average variance extracted (AVE) with the correlation coefficient between the constructs. Table 3 also depicts that all the correlation coefficients were less than 0.658. Further, Table 4 shows that all the square roots were greater

than 0.732. This confirms the convergent validity of the measurements (Hair et al., 2019a; Hair et al., 2020).

Table 2. Validity, Reliability, and Mean Values

Item Code	Factor Loading	Cronbach Alpha	Composite Reliability	AVE	Mean Values
Awareness of Consequences					4.212
AC1	0.830				4.328
AC2	0.882	0.878	0.879	0.732	4.172
AC3	0.839				4.049
AC4	0.871				4.299
Ascribed Responsibility					3.900
AR1	0.953				3.898
AR2	0.916	0.927	0.928	0.872	3.910
AR3	0.933				3.893
Personal Norms					4.017
PN1	0.904				3.980
PN2	0.914	0.918	0.922	0.802	4.041
PN3	0.886				3.988
PN4	0.876				4.061
Perceived Values					4.270
PV1	0.933				4.295
PV2	0.922	0.938	0.940	0.844	4.238
PV3	0.903				4.242
PV4	0.915				4.307
Destination Social Responsibility					4.181
DSR1	0.880				4.201
DSR2	0.916	0.907	0.924	0.781	4.148
DSR3	0.832				4.230
DSR4	0.904				4.148
Environmentally Responsible Behavior					3.918
ERB1	0.928				3.885
ERB2	0.920	0.947	0.949	0.862	3.934
ERB3	0.926				3.914
ERB4	0.941				3.939

Table 3. Construct Validity (Fornell-Larcker Criteria)

	AC	AR	DSR	ERB	PN	PV
AC	0.855					
AR	0.658	0.934				
DSR	0.050	0.034	0.883			
ERB	0.301	0.244	0.107	0.929		
PN	0.480	0.446	0.036	0.563	0.895	
PV	-0.100	-0.061	0.005	-0.149	-0.106	0.918

Table 4. Cross Loading

	AC	AR	DSR	ERB	PN	PV	PV x PN	DSR x PN
AC1	0.830	0.588	0.067	0.273	0.405	-0.061	0.115	-0.137
AC2	0.882	0.682	0.040	0.282	0.424	-0.091	0.155	-0.083
AC3	0.839	0.677	0.025	0.254	0.395	-0.090	0.143	0.009
AC4	0.871	0.639	0.040	0.221	0.419	-0.099	0.190	-0.029
AR1	0.738	0.953	0.039	0.223	0.416	-0.080	0.105	-0.074
AR2	0.679	0.916	-0.006	0.228	0.431	-0.060	0.037	-0.067
AR3	0.705	0.933	0.062	0.234	0.405	-0.030	0.089	-0.056
DSR1	0.041	0.027	0.880	0.107	0.056	0.010	-0.009	-0.069
DSR2	0.122	0.087	0.916	0.104	0.032	0.016	-0.032	-0.076
DSR3	-0.055	-0.040	0.832	0.089	0.038	-0.023	-0.046	-0.066
DSR4	0.057	0.042	0.904	0.068	-0.012	0.011	-0.036	-0.101
ERB1	0.308	0.255	0.132	0.928	0.558	-0.161	0.227	-0.119
ERB2	0.275	0.238	0.097	0.920	0.507	-0.134	0.208	-0.107
ERB3	0.272	0.221	0.103	0.926	0.510	-0.114	0.255	-0.113
ERB4	0.260	0.190	0.063	0.941	0.511	-0.141	0.234	-0.036
PN1	0.453	0.417	0.052	0.531	0.904	-0.109	0.222	-0.126
PN2	0.465	0.452	0.072	0.527	0.914	-0.109	0.259	-0.135
PN3	0.407	0.361	-0.024	0.497	0.886	-0.097	0.240	-0.185
PN4	0.388	0.360	0.024	0.454	0.876	-0.058	0.223	-0.107
PV1	-0.099	-0.063	-0.009	-0.134	-0.136	0.933	0.067	-0.012
PV2	-0.126	-0.057	0.036	-0.144	-0.105	0.922	0.058	-0.007
PV3	-0.097	-0.071	-0.018	-0.129	-0.075	0.903	0.035	-0.017
PV4	-0.045	-0.033	0.005	-0.140	-0.071	0.915	0.055	-0.068
DSR x PN	-0.068	-0.070	-0.086	-0.102	-0.154	-0.029	-0.026	1.000
PV x PN	0.177	0.083	-0.033	0.249	0.264	0.059	1.000	-0.026

The quality of the model (predictive power) was assessed using the R-squared value. Hair et al. (2019c) suggested that R² values for endogenous latent variables are assessed as follows: 0.26 (substantial), 0.13 (moderate), and 0.02 (weak). R-squared (adjusted) scores ranged from 0.240 to 0.572. Based on these criteria, the R-square of the model was considered moderate (for PN) and substantial (for AR and ERB).

Table 5. R- square

	R-square	R-square adjusted
AR	0.574	0.572
ERB	0.346	0.332
PN	0.247	0.240

Furthermore, we assessed the fitness index of the model. The SRMR (Standardized Root Mean Square Residual) of the model was 0.042. SRMR is a goodness-of-fit measure for PLS-SEM that can be used to avoid model misspecifications (Danks et al, 2020). An SRMR score of less than 0.08 is considered a good fit (Bayonne et al., 2020). Therefore, the SRMR score of the model indicates a good fit. The Normed Fit Index (NFI) can also be used as an indicator of a model's fitness (Hair et al., 2019b). The NFI of the present model is 0.854, which also indicates an adequate fit.

Table 7 presents the results of hypothesis testing. The results are discussed in the section below to be directly contextualized with conceptual discussions.

Table 7 – Results of Hypothesis Testing

Relationship between Variables	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ((O/STDEV))	P values	Conclusion for hypothesis testing
AC -> AR	0.758	0.757	0.027	27.842	0.000	H1 is supported
AC -> PN	0.333	0.334	0.083	4.021	0.000	H2 is supported
AR -> PN	0.194	0.194	0.090	2.143	0.032	H3 is supported
PN -> ERB	0.514	0.508	0.058	8.887	0.000	H4 is supported
PV x PN -> ERB	0.138	0.146	0.065	2.133	0.033	H5 is supported
DSR x PN -> ERB	-0.014	-0.015	0.065	0.215	0.829	H6 is not supported

Discussion

The results of the data analysis show that of the 6 (six) hypotheses proposed, 5 (five) are supported by data, while 1 (one) hypothesis is not supported by data. Table 7 shows that awareness of consequences (AC) has a positive effect on ascribed responsibility (AR) (B=0.758, p=0.000). These results confirm the Norm Activation Theory (Gohary, 2021). This means that the individual characteristics of tourists greatly determine their environmentally responsible behavior. Individual tourists are aware of the negative impacts they can have on their environment. Awareness of the consequences of environmentally unfriendly behavior makes a very large contribution to ascribed responsibility (B=0.758, p=0.000). An individual's responsibility is greatly influenced by his awareness of the negative impacts of irresponsible behavior on the environment. This indicates that H2 is supported by the data. What is surprising about these results is the large influence of AC on AR (B=0.758). A person's sense of responsibility is formed because he is aware of the negative impact of irresponsible travel behavior on the destination and the local community at that destination.

Two factors that form personal norms, AC and AR, influence the formation of personal norms. AC had a positive effect on PN (B=0.333, B=0.00), supporting H3. AR also had a positive effect on PN (B=0.194, P ≤0.005). Thus, H4 is supported. If we compare the magnitude of the influence of AC vis-à-vis AR on PN, the influence of AC is greater. This again shows that awareness of the impact of irresponsible behavior has a significant influence on the formation of personal norms. In this case, tourists' moral obligations are influenced more by awareness of impacts than by a sense of responsibility.

Furthermore, this study provides empirical evidence for NAT. NAT holds because personal norms have a positive effect on environmentally responsible behavior ($B=0.514$, $p=0.000$). Thus, Hypothesis 4 is supported. The results of this study show that an individual's role is very important in determining their behavior. If we compare it with the Stimulus-Organism-Response theory, which states that an individual will respond to the stimulus they receive in a certain context (Hu et al., 2021; Su et al., 2018), the results of this study emphasize the importance of a person's knowledge and commitment in shaping their behavior. The moral obligation of a tourist will make him behave responsibly towards the environment.

The research model also includes 2 (two) moderating variables that strengthen the influence of personal norms on environmentally responsible behavior. Hypothesis testing showed that perceived value strengthens the influence of personal norms on environmentally responsible behavior ($B=0.138$, $p\leq 0.05$). This finding is interesting because the quality of a tourist destination can encourage environmentally responsible tourist behavior. As stated by Cabral & Dhar (2020), Han et al. (2016), and Kotler et al. (2021), tourists who are satisfied with the quality of their travel experience are encouraged to behave in a way that has a positive impact on the destination. This utilitarian perspective also shows that a responsible destination must first have high-quality products and services. The quality of tourism products and services at a destination has a positive impact on tourists. Tourists with moral responsibility and good intentions are more motivated to behave responsibly at their destination because they have a high-quality travel experience.

However, the destination factors hypothesized to moderate the influence of personal norms on environmentally responsible behavior were not supported by the data. The results showed that Destination Social Responsibility did not moderate the effect of PN on ERB ($B=-0.014$, $p>0.05$). This finding does not support previous research showing that DSR is a factor that can strengthen the influence of PN on ERB. Although tourists gave quite high scores for DSR for the Yogyakarta destination (mean value =4.181), variations in these scores do not explain variations in ERB scores.

Stakeholder theory (McGahan, 2021) states that stakeholder efforts provide a positive signal to consumers to behave according to the issues raised in these efforts. However, in the case of tourist destinations that involve many stakeholders, the impact of DSR may not be as clear as that of CSR carried out by certain companies. Tourism experiences involve interactions with multiple stakeholders, including the community (Madanaguli et al., 2022; Wiweka & Arcana, 2019). Interaction with the host community may be even more important. DSR is interpreted as a systematic and coordinated effort by the destination management organization. Although tourists receive the impression that DSR is implemented, their behavior may be more influenced by specific interactions with particular tourism service providers.

Although this study does not propose hypotheses for indirect effects, the analysis of indirect effects provides insights (see Table 8). The indirect effect of $AC \rightarrow AR \rightarrow PN \rightarrow ERB$ was significant ($p\leq 0.05$). This strengthens the argument in this study that AR mediates the influence of AC on PN, and that PN mediates the influence of AR on ERB. In addition, PN had a mediating role in the influence of AR on ERB ($p\leq 0.05$) and in the influence of AC on ERB ($p=0.000$). Consistent with the previous discussion, the indirect effect of $AC > PN > ERB$ has a larger coefficient ($B=0.171$ compared to $B=0.100$). This shows that AC has a large influence on PN and ERB. Although in general the findings in this research support norm activation theory (Ghazali et al., 2019; Landon & Boley, 2018; Savari et al., 2023), the very significant

role of awareness of consequences in the formation of personal norms provides fresh insight. Tourists must be educated about the negative impacts that can result from behavior that is not environmentally friendly. Awareness of the bad consequences of environmentally unfriendly actions turns out to be more real than a sense of responsibility which may still be in the moralistic realm.

CONCLUSION

The theoretical contribution of the research is as follows. To the objectives of this research, a research model that integrates norm activation theory (NAT), stakeholder theory, and the utilitarian perspective (perceived value) in influencing tourists' environmentally responsible behavior (ERB) has been constructed. Based on these theories, theoretical modeling places awareness of consequences and ascribed responsibility as antecedents for personal norms (PN). Meanwhile, perceived value and destination social responsibility are positioned as moderators. However, the model that has been built theoretically is still not successful in describing the role of destination social responsibility as a variable that strengthens the antecedent role in tourists' environmentally responsible behavior (ERB).

As already elaborated in the results and discussion section, this research produces important findings in analyzing the factors that shape tourists' environmentally responsible tourist behavior. The findings of this study indicate that individual factors play a very important role in shaping a person's behavior. Personal norms shape a person's behavior. Furthermore, personal norms are formed by two factors: awareness of consequences and ascribed responsibility. This research provides the important insight that a person must be fully aware of the dangers of behavior that harms the environment. Awareness of the consequences is a very important factor in forming personal norms directly or indirectly through ascribed responsibility.

Furthermore, the importance of personal norms is further demonstrated by their positive influence on environmentally responsible behavior. The role of PN is strengthened by perceived value; that is, the quality of the tourism experience obtained by tourists. The realization of personal norms that are still attitudinal toward behavior is strengthened by the quality of the perceived tourist experience. However, integrated stakeholder efforts in the form of DSR did not strengthen or weaken the influence of PN on ERB.

This study showed that ERB is influenced by multiple factors. The results of this research support Zhao's (2022) finding that personal factors shape a person's environmentally friendly behavior. This research also examines the factors that form personal factors which are represented as personal norms. Moral obligations are formed because of certain antecedents. This study includes two antecedents that form personal norms: awareness of consequences and ascribed responsibility. The inclusion of antecedents of personal norms brings about theoretical implications that personal norms are formed depending on other factors that should be further explored. Findings from this research show that awareness of consequences is a significant form of ascribed responsibility and personal norms.

Theoretically, this research also shows that tourists still have utilitarian motivations for their choice of action. Tourists who feel that they are getting a quality travel experience will be more encouraged to behave responsibly towards the environment according to their personal norms. On the other hand, tourists who do not have a high-quality experience will also be less

enthusiastic about behaving in an environmentally responsible manner. The significance of the utilitarian factor in this research shows that the translation of internal values into behavior is, to some extent, transactional. Future research should include other utilitarian- and transaction-based factors. Such factors can be positioned not just as moderating variables, but also as mediating variables.

This research has limitations and therefore offers a direction for future research. The current research failed to gain empirical support for the moderating effects of DSR. Other researchers, such as Lee and Oh (2018) and Lu et al. (2022), have established DSR as a moderating variable. As discussed in the previous section, DSR may have a different nuance from CSR. This means that the signal conveyed by social responsibility efforts may not be the same as the similar efforts carried out by corporations. Tourist destinations involve complex stakeholders. Therefore, future research should examine the DSR construct further, including developing types of DSR and dimensions within the DSR.

Although this research follows previous research in terms of the measurement of ERB as a self-report behavior, further research needs to be conducted using different measurement methods. The ERB needs to be observed as an actual behavior. Perhaps, the frequency of actual environmentally responsible behavior and engagement in environmentally friendly organizations or movements could be a more accurate measurement.

Future research also needs to carry out breakdown analyses or multigroup analyses because differences in respondent profiles may influence their personal norms, perceived values, perceptions about destination social responsibility, and even their environmentally responsible behavior. Tourists' educational background can be researched further to see whether the level of education determines personal norms and environmentally responsible behavior.

The practical implication of the research is as follows. This study provides policy implications for destination management organizations (DMOs) to encourage tourists' environmentally responsible behavior. The results showed that the AC factor is very important in the formation of AR and PN. Therefore, DMOs must raise awareness of the negative consequences that could occur if the destination environment is damaged. Campaigns regarding the possible negative impacts must be implemented intensively. This aspect of consequences needs special emphasis to ensure that tourists are aware of the negative consequences that could occur if they damage the environment. In campaigns to raise awareness of the consequences, fear appeals can even be used to give a deep impression of the consequences that irresponsible tourism activities can have on the environment. Campaigns and education regarding the impact of irresponsible activities are important to generate a sense of responsibility among tourists to behave in an environmentally friendly manner.

Education regarding negative impacts on the environment needs to be carried out systematically. We believe that moral obligations are formed through systematic efforts, both in raising awareness of consequences and ascribed responsibility. Education on environmental protection can be implemented as part of the educational curriculum as early as possible. Local wisdom and religious values can even be explored in such a way as to strengthen awareness and responsibility towards the environment. Personal norms are formed if this behavior is internalized by tourists.

The results of this study also provide important implications for DMOs and tourism service business managers. However, the quality of tourism products and services is of the utmost

importance. Quality tourism experiences can encourage environmentally responsible behavior. If a quality tourism experience is linked to an environmentally friendly value chain, a quality tourism experience itself is an environmentally friendly tourism activity. We believe that an environmentally friendly tourism experience will strengthen awareness and a sense of responsibility towards the environment.

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Appendix – Measurements for the Constructs

Variable	Item Code	Item
Awareness of Consequences (AC) (Wu et al., 2022)	AC1	Environmentally irresponsible behavior can cause ecological degradation and exhaustion of natural resources
	AC2	Environmentally irresponsible behavior may cause greater environmental impacts on the local community in Yogyakarta
	AC3	Environmentally irresponsible behavior can cause environmental deterioration in Yogyakarta
	AC4	Environmentally responsible behavior helps to reduce waste and minimize environmental deterioration.
Ascribed Responsibility (AR) (Wu et al., 2022)	AR1	I believe that every traveler is partly responsible for environmental problems caused by the travel industry
	AR2	I feel that every tourist is jointly responsible for the environmental deterioration caused by tourists' environmentally irresponsible behavior
	AR3	Every tourist must take responsibility for environmental problems caused by the trip.
Personal Norms (Wu et al., 2022)	PN1	I feel that it is important to reduce the harm to the environment
	PN2	I feel it is important that lake travelers behave eco-friendly when traveling
	PN3	I feel an obligation to reduce the negative impact on the host community during the trip
	PN4	Regardless of what other people do, because of my values/principles, I feel that I should behave in an environmentally responsible way while traveling in Yogyakarta
Perceived Values (Liu et al., 2022)	PV1	I think all the expectations of the Yogyakarta tours can be realized basically.
	PV2	I think I enjoyed the tour in Yogyakarta a lot.
	PV3	I think I made more friends with this tour in Yogyakarta
	PV4	I think the tour in Yogyakarta is worth the money.
Destination Social Responsibility (DSR) (Liu et al., 2022)	DSR1	This tourism destination tries its best to assume environmental responsibility and pay attention to environmental protection.
	DSR2	This tourism destination tries its best to improve the local community.
	DSR3	This tourism destination treats tourists, residents, and other stakeholders well.

	DSR4	This tourism destination has successfully created and utilized its tourism income.
Environmentally Responsible Behavior (ERB)	ERB1	I will take the initiative to prevent damage to the environment in this tourism destination
	ERB2	I will actively participate in some local environmental protection activities in Yogyakarta
	ERB3	I will discuss environmental protection with my friends and relatives in this tourism destination
	ERB4	I try to convince my companions to adopt positive behavior in the natural environment of Yogyakarta

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