20. Indicators to Measure Local Communities' Environmental Conservation Behavior in A Rural Tourism Destination

Supina Supina 1,2*, Jeetesh Kumar 1,3 and Seyyed Mostafa Rasoolimanesh 3,4

Keywords: Environmental conservation behavior; Local community; Rural tourism; Social exchange theory; Theory of planned behavior

EXTENDED ABSTRACT

In rural tourism, sustainability indeed stimulates a significant number of new businesses and broader employment opportunities that contribute to an escalation in government revenue which is expected to return to local people (Kumar et al., 2015). This research was conducted in Bogor Regency, West Java, Indonesia, to identify the influencing factors of local communities' environmental conservation behavior and to sustain local authorities in determining their focus when developing priorities and strategic directions to increase local communities' environmental conservation behavior to have sustainability.

What defines environmental conservation behavior is so complex that a single framework or graphic cannot represent it. This study has integrated three strands of theories about factors influencing environmental conservation behavior that have previously been pursued in various directions and proposes an environmental conservation behavior model. Still, based on the examination of the 384 respondents' responses to the questionnaire and analyzed using SmartPLS version 3, awareness of the environmental implications and environmental attitudes have a detrimental impact on environmental conservation behavior, which goes against the SET concept. Therefore, local management must go to great lengths to ensure that when favorable circumstances negatively affect environmental conservation behavior, more research with additional factors is required.

LITERATURE REVIEW

Nature conservation depends on human behavior (Reddy et al., 2016). In reverse, it is also the source of environmental problems. To overcome any negativity about nature and achieve the aims of an environmentally sustainable destination, one must understand the governing laws of the environment (Asadzadeh & Mousavi, 2017). Environmental conservation behavior, which is derived from the theory of reasoned action and the theory of planned behavior (Ajzen, 1985), encompasses a wide range of pro-environmental consumer behaviors, and gets to Zhang et al. (2017), who successfully established an understanding of environmental conservation behavior. According to Zhang et al. (2017), the elements of awareness of environmental consequences have a vital role in predicting environmental conservation behavior and in more specific environmental parts. Social Exchange Theory has been extensively used (Byrd et al., 2009). Ap (1992) proposed the social exchange hypothesis as a theoretical framework for capturing the motives that lead inhabitants to have a positive or negative attitude toward tourism. (Gannon et al., 2020) also examined local communities' community attachment and environmental attitudes.

¹ School of Hospitality, Tourism & Events, Taylor's University, Malaysia

² Faculty of Social Sciences and Humanities, Bunda Mulia University, Indonesia

³Centre for Research and Innovation in Tourism, Taylor's University, Malaysia

⁴ Faculty of Social Sciences and Leisure Management, Taylor's University, Malaysia

^{*}Correspondence: supina@bundamulia.ac.id

- H1 Awareness of the environmental consequences has a positive direct effect on environmental conservation behavior.
- *H2* Environmental attitudes have a positive direct effect on environmental conservation behavior.
- H3 Local communities' attachments have a positive direct effect on environmental conservation behavior.

RESEARCH METHOD

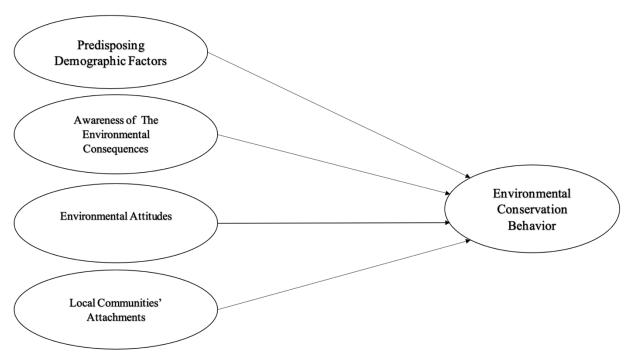


Figure 1: Conceptual Framework of the Study

This research is purely quantitative in design, with a questionnaire being used as the only survey instrument. The questionnaire distributions were both printed and online, containing demographic profiles, four variables in 20 items with a purposive-homogeneous sampling technique during Mar–Jun 2022 to a 384 sample size of respondents based on Krejcie and Morgan's (1970) sample size determination formula, and SmartPLS was used for the measurement model and the structural models to assess instantaneously and to confirm the convergence and discriminate validity of the measure with the use of SmartPLS ver3. SEM is becoming more widely employed in ecological research, and it has enormous future potential for ecologists (Fan et al., 2016).

EXPECTED RESULTS AND DISCUSSION

Most respondents are male (n = 244), with five age ranges starting from 17-25 years old up to more than 45 years old, and most are in the more than 45 years old age range group (n = 185). Most of the respondents completed their Diploma or Bachelor's degree (n = 200), with only 13 finishing from elementary to junior high school. In terms of monthly net income, most respondents earn more than Rp. 10.000.000, -(n = 110). Most respondents (n = 256) are natives of Bogor, West Java, with (n = 269) of the respondents being directly or indirectly involved with tourism activities.

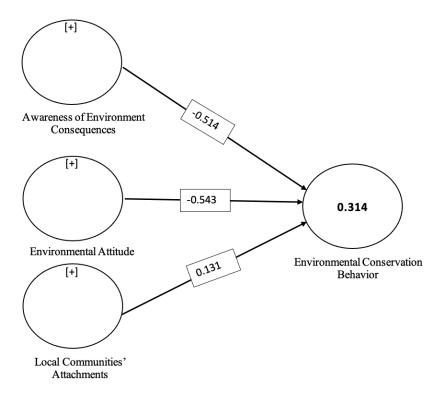


Figure 2: Result of Path Coefficients' Analysis

Table 1: Assessment Results of the Measurement Model

Construct	CR	Composite Reliability
Awareness of Environment Consequences	0,921	0,936
Environmental Attitude	0,835	0,870
Local Communities' Attachment	0,734	0,743
Environmental Conservation Behavior	0,868	0,896

For the latent variables' convergent validity to be deemed acceptable, their AVEs must be higher than 0.5. (Hair et al., 2011). The AVEs of the construction were higher than 0.5, and most loading factors were higher than 0.07. The measurement model exhibits satisfactory reliability if all the latent variables Cronbach's Alpha are greater than 0,70. If the composite reliability values are more significant than 0,7, all the instruments consistently measure the same construct (Hair et al., 2011). The validity of discrimination was also investigated, with the result that discriminant validity was acceptable across the data for each variable, as the square root of each construct's AVE has a greater value than the correlations with other latent constructs (Hair et al., 2014). As for the HTMT ratio for correlation, the value of the HTMT is no higher than 0.90, which means there is no lack of discriminant validity (Gold & Arvind, 2001).

Table 2: Results of Hypotheses Testing

	Original Sample (O)	P Values
Awareness of The Environmental Consequences ->	-0,154	0,020
Environmental Conservation Behavior	-0,134	0,020
Environmental Attitudes -> Environmental Conservation	-0,543	0,000
Behavior	-0,343	0,000
Local Communities' Attachments -> Environmental	0.121	0.104
Conservation Behavior	0,131	0,104

The findings show that environmental conservation behavior is negatively impacted by awareness of the environmental implications (H1). Given that the association was significant, yet the bad outcome was the exact reverse of what was anticipated, this hypothesis should be disproved. The same applies to (H2), environmental attitudes and environmental conservation behavior. However, there is no significant relationship between local communities' attachment to environmental conservation behavior (H3).

IMPLICATIONS AND LIMITATIONS

The findings of this study raise some concerns for the management of the rural as they are inconsistent with the Social Exchange Theory's concept of positive and negative hedonic value, with the average scale for Awareness of Environmental Consequences is 3.78 from 5, Awareness of Environmental Attitudes is 3.89 from 5. Local Communities' Attachments is 4.09 from 5, a large-scale review of the existing settings in these rural tourism destinations must be conducted to see whether the settings of tourism management is too neglecting natural conservation principles.

SUGGESTIONS FOR FUTURE RESEARCH

More research is needed in this area to understand how environmental awareness and attitudes can negatively impact environmental conservation behavior. Examining the environmental conservation behavior variables from all linked individuals needs to be added to research that examines environmental conservation behaviors, including other influencing factors.

REFERENCES

- Ajzen, I. (1985). From intentions to action: A theory of planned behaviour. In J. Kuhl & J. Beckman (Eds.), *Action control: From cognitions to behaviours* (11–39). New York: Springer.
- Ap, J. (1992). Residents' perceptions on tourism impacts. Annals of Tourism Research, 19(4), 665–690.
- Asadzadeh, A., & Mousavi, M. (2017). The Role of Tourism on the Environment and Its Governing Law. *Electronic Journal of Biology, 13*(2), 152-158.
- Byrd, E. T., Bosley, H. E., & Dronberger, M. G. (2009). Comparison of stakeholder perceptions of tourism impacts in rural eastern NorthCarolina. *Tourism Management*, *30*(5), 693-703
- Fan, Y., Chen, J., Shirkey, G., John, R., Wu, S. R., Park, H., & Shao, C. (2016). Applications of structural equation modeling (SEM) in ecological studies: an updated review. *Ecological Processes*, 5(1), 1-12.
- Gannon, M., Rasoolimanesh, S. M., & Taheri, B. (2020). Assessing the Mediating Role of Residents' Perception toward Tourism Development. *Journal of Travel Research*. 60(1), 149-171.
- Gold, A. H., Malhotra. A., Segars, A. (2001). Journal of Management Information Systems, 18(1), 185-214
- Hair, J., Hult, G. T. M., Ringle, C., Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Los Angeles: SAGE Publications, Incorporated
- Hair, J, F., Ringle, C.M., Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19 (2). 139-152
- Kumar, J., Hussain, K., & Kannan, S. (2015). Positive vs negative economic impacts of tourism development: A review of economic impact studies. *Conference proceedings Developments of the new tourism paradigm in the Asia Pacific region* (pp. 405–413). APTA.
- Reddy, S. M., Montambault, J., Masuda, Y. J., Keenan, E., Butler, W., Fisher, J. R., & Gneezy, A. (2016). Advancing conservation by understanding and influencing human behavior. *Conservation Letters*, 10(2), 248–256.
- Zhang, Y., Zhang, J., Zhang, H., Zhang, R., Wang, Y., Guo, Y., & Wei, Z. (2017). Residents' environmental conservation behaviour in the mountain tourism destinations in China: Case studies of Jiuzhaigou and Mount Qingcheng. *Journal of Mountain Science*, 14(12), 2555–2567