

## **INTEGRATED MODEL BASED ON GOAL-FRAMING THEORY TO EXPLAIN TOURIST ENVIRONMENTALLY RESPONSIBLE BEHAVIOR**

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**Abstract**-The tourism industry have become increasingly significant over the years. The growth has a positive impact on the economy but besides it caused a challenge to the environment. Previous study have been examined the factor influencing tourist ERB, however this study have been generalized the type of ERB in tourism context. This study overarched an integrated holistic model based on the GFT and underlying theory TPB, KBN and BET to explain a specific TERBI (3R). The proposed model will be test with SEM, using data collected through a self-administrated survey questionnaire. The sample will consist of 500 tourist visiting Bali, Island for tourism or leisure proposed. This study will be the first study to overarch an integrated model based on GFT with an underlying theory to explain the TERB. The finding will provide an additional knowledge to policy maker, destination management, social marketing in shaping a strategic to promote environmental responsible behavior in tourist destination.

**Keyword** : *Goal framing theory, theory of planned behavior, basic emotion theory, knowledge belief norm, TERB, ERB, tourism*

### **Background**

The increasing demand in tourism industry has a potential positive contribution to the global economic as it's considerably one of the global fastest growing market. The growth brings an enormous benefit to the tourist destination area in any sides such as improve the economy, socio-cultural and environment. However, it also bring about a negatives impact on the local communities (Landon et al., 2018), public policy and local environment (Abhijit Biswas, Jane W. Licata et al., 2000). During the past few decades, the concerned about the environmental degradation and destruction have gained much attention. Protecting and conserving the environment and natural resource is a major goal in creating a sustainable industry and prosper economy. Tourism destination strive to promote sustainable tourism in order to reduce and minimize the negative impact on the environmental. Besides, the local destination promote green tourism, eco-friendly activity in tourism destination area, green hospitality to avoid the overconsumption of and to maintain the natural resources.

Tourist environmentally responsible behavior is refers to the tourist engagement to reduce or minimize the negative impact on the environment. This pro-environmental behavior refers to energy conservation, eco-tourism choice and consumption, green behavior, waste reduction. Since waste generation is one of the few major issues caused by the tourism industry. Recent study by Arbulu et al., (2017) reported on the study related to the negative impact of tourism activities. The study reported that waste generation

flows and mass tourism might cause an environmental damage to a tourist destination. The findings, described that 1% tourist growth on arrival would generate 1.25% raise of waste disposal and would lead to an increase of municipal solid waste generation of 0.51%. Yet, another study showed that Tourists have low involvement in accountable to the environment issues, Budeanu., (2005) described that only 1 out 20 tourist are supported the environment by an environmentally friendly consumption behavior. Hence, this studies indicated that tourist plays a significant on waste production.

Few strategic have been implemented by several practitioners shows that the waste issues in subjective. Frist, local government has make an initiative to tackle these issues by implementing policy and regulation in several areas, banning a single use-plastic in few big cities and putting fee for some areas. Second, marketing practitioners promoted an innovative eco-friendly packaging such as an organic shopping bag and packaging (Huang et al., 2020; Nurulhaq, 2019). Third, education institution has implemented an environmental education in their education curriculum. These few examples highlighted that understanding individuals' behavior is crucial in reducing the waste extension. Few studies address this issue in individual context (White et al., 2019; Eby et al., 2019) and household (Tweneboah-koduah et al., 2019; Khan et al., 2019; Fami et al., 2019; Clark et al., 2019), although there seems to be no desirable result because little effort have made to understand and subsequently change the attitude or behavior towards adopting acceptable waste disposal practices.

Tourist environmentally responsible behavior intention has gain much attention by psychology and consumer behavior scholars. Prior research explained this phenomenon by adopting a psychological and behavioral theory such as TRA, TPB (Ibnou-Laaroussi et al, 2020; Wang et al, 2020; Chen et al, 2020; Navratil et al2019; Liu et al, 2019; Hu et al, 2019; Abdullah et al, 2019; Pan et al, 2018), Place Attachment (Douglas et al, 2019; Zhan, 2018), NAM (Kiatkawsin et al, 2020; Confente and Scarpi 2020; Han et al, 2019; Han and Hyun 2017), VBN (Denley et al 2020) . These previous study explained the environmentally responsible behavior of tourist to choice eco-travel packages (Kim and Thapa, 2017), Conservation (Mann et al, 2017; Imran et al, 2014; han , 2014; Wenbin Luo et al, 2020), recycling (Han et al, 2016). It is worth to say that some limitation were occurred on the model construct and measurement, inconsistency of the findings and un-robust model which motivates the present research to implement different construct to bridge the gap (Tweneboah-koduah et al., 2019).

In this current study, we aim to clearly understand the tourist environmentally responsible behavior particularly the tourist intention to engage in 3R (reduce, reuse, recycle)

when traveling. This present study will provide a comprehending on specific tourist environmentally responsible behavior. To the best of our knowledge this study is the first study to give an holistic concept based on the Goal Framing Theory GFT (Lindenberg and Steg, 2007) underlying and integrated the Theory of Planned Behavior TPB (Ajzen, 1991) (subjective norm, Attitude, PBC, Intention), Knowledge-Belief-Norm KBN (Ayca et al., 2017) (knowledge, Values, Belief, Personal Norm), and Basic Emotion Theory BET (Rahmani et al, 2018). This proposed model will be relevant to environmentally responsible behavior intention in tourism context.

GFT is considered as the most relevant theory to explain pro-environmental behavior. In the theory, Lindenberg, (2001) proposed that that individual possess multiple goals that govern behavior and action namely; Hedonic goal refers to one's seeking for inner pleasure or happiness, this goal reflect to hedonic driven behavior. The BET suggests that positive emotion experience influence our behavior to act in certain way (Rahmani et al, 2018). Gain goal is ones' seeking for a benefit to improve personal resource or possession, this is reflect to self-interest driven behavior such as TPB (Ajzen, 1991). Normative goal is ones' action appropriateness, this reflect to moral-based theory (Ayca et al., 2017). Scholars suggested that Attitude (Ibnou-Laaroussi et al 2020, Liu et al 2019, Hu et al 2019, Wang et al 2019), Subjective norm (Ibnou-Laaroussi et al 2020, Liu et al 2019, Hu et al 2019, Wang et al 2019), and Perceived Behavior Control (Hu et al 2019, Wang et al 2019) positively influence TERBI. Prior study have established that norm based behavior can explain TERB (Kiatkawsin et al 2020, Han 2020, Hu et al 2019, Han et al 2018, Han et al 2017, Han et al 2017, Han et al 2016, Liu et al 2019). There is lack study investigated the tourist goals to reduce the environmental negative impact when traveling.

Further, much research has been done in explaining the ERB in tourism context but not much study has examined the influence of positive emotion experience and Knowledge. Most of the study on TERB were conducted in China (Wenbin Luo et al, 2020; Wang et al, 2020; Su et al, 2019; Li et al, 2020; Zhou et al, 2020; Chow et al, 2019; Xu et al, 2019; Liu et al, 2019; Wang & Lyu, 2019; Zhang et al, 2019), South Korea (Kim and Stepchenkova, 2020; Kiatkawsin et al, 2020; han, 2020; Han et al, 2019; Kim and Thapa, 2017; Han et al, 2017), Taiwan (Lin and Lee, 2020; Chen et al, 2020; Lee & Jan 2019; Pan et al, 2018), Hong Kong (Chueng et al, 2020; Cheng et al, 2018; Chueng and Fok, 2014), Australia (Alonso-Vazquez et, 2018; Hardiman and Burgin, 2017), and South Africa (Douglas et al; 2019; Jacqueline et al, 2019; Mann et al, 2017; Mann-Lang et al, 2016). Thus the prior findings might limited to these location. There is not enough studies related conducted in emerging country like Indonesia focusing on in tourist context.

This study will provide a holistic model to explain TERB in order to fill the gap. This study will be conducted in Indonesia, findings will contribute to the literature of ERB specifically in waste reduction (3R) in tourism context.

### Research question

1. Does Goal Framing Theory construct positively influence tourist environmentally responsible behavior Intention?

2. Does Theory of Planned Behavior construct positively influence tourist environmentally responsible behavior Intention?
3. Does Basic Emotion Theory construct positively influence tourist environmentally responsible behavior Intention?
4. Does Knowledge-Belief-Norm positively influence tourist environmentally responsible behavior Intention?

### Objective

1. To explore the positive influence of TPB construct on TERBI
2. To determine the positive influence of KBN construct on TERBI
3. To Identify the positive influence of BET construct on TERBI

### Contribution

The key contribution of this research is that we will provide scholars and researcher an extensive comprehend on TERB specifically on reducing waste while traveling (3R). Second, the findings will expand the findings and the theory from related areas and empirically strength and validates theory and practices, and provide an holistic model based on GFT to explain the TERB with and underlying theory namely TPB, KBN, and BET.

### Methodology

This study will be carried out in Bali, Island, Indonesia which aims to address the research questions by employing quantitative research design. This method will be suitable for our objective and our target sample size (Tweneboah-koduah et al., 2019).

The population for this research is tourist in Bali Island, Indonesia. The sample use will consist about 500 tourists. This study is focused to understand the tourist environmentally responsible behavior intention (reduce, reuse, and recycle). The data used in this study will be collected from tourist with survey questionnaire. The survey questionnaires will be self-administrated (in tourism destination) using convenience sampling technique which is appropriate in order to collect information from tourist about their waste reduction intention behavior (Saunders, Lewis, & Thornhill, 2012; (Kumar, 2019; Nguyen et al., 2017; Pikturienė & Bäuml, 2016); Tweneboah-koduah et al., 2019). Therefore participant required to be an individual above 18 years old who come to Bali for tourist/leisure visit purpose and possess a general knowledge about research topic.

Each construct comprised an items adopted from prior research and have been well established and validated in various context. Each variable will be measured trough a self-reported using seven-point likert scale questionnaire ranging from 1 (strongly agree) to 7 (strongly disagree) adapted from previous study (Ciocirlan et al., 2020). The usable data collated from the survey will be processed and analysis with AMOS 23. CFA will be conducted to evaluate and ensure the

reliability and validity of the measurement and construct. Structural Equation Modeling (SEM) will be conducted to statistically analyze and test the hypothesis.

## Reference

1. Ayça Berfu Ünal<sup>1</sup>, Linda Steg<sup>1</sup>, and Madelijne Gorsira (2017), Values Versus Environmental Knowledge as Triggers of a Process of Activation of Personal Norms for Eco-Driving. *Environment and Behavior* 1–27. DOI: 10.1177/0013916517728991
2. Anneli Douglas, Jan-Albert Wessels, Jenny Pope, Angus Morrison-Saunders, Mike Hughes (2019), Measuring Kruger visitors' place attachment to specific camps. *KOEDOE - African Protected Area Conservation and Science* ISSN: (Online) 2071-0771, (Print) 0075-6458
3. Arbulu, I., Lozano, J., & Rey-Maqueira, J. (2017). Waste Generation Flows and Tourism Growth: A STIRPAT Model for Mallorca. *Journal of Industrial Ecology*, 21(2), 272–281. <https://doi.org/10.1111/jiec.12420>
4. Alice S.Y. Chow<sup>1</sup>, Anson T.H. Ma<sup>2,\*</sup>, Gwendolyn K.L. Wong<sup>1</sup>, Theresa W.L. Lam<sup>3</sup> and Lewis T.O. Cheung (2019), The Impacts of Place Attachment on Environmentally Responsible Behavioral Intention and Satisfaction of Chinese Nature-Based Tourists
5. Ciocirlan, C. E., Gregory-Smith, D., Manika, D., & Wells, V. (2020). Using Values, Beliefs, and Norms to Predict Conserving Behaviors in Organizations. *European Management Review*.
6. <https://doi.org/10.1111/emre.12388>
7. Chang Wang, Jinhe Zhang\*, Jinkun Sun, Min Chen, Jinhua Yang (2020), Public environmental facilities: Hygiene factors for tourists' environmental behaviour. *Environmental Science and Policy* 106 (2020) 40–47
8. Clark, E., Mulgrew, K., Kannis-Dymand, L., Schaffer, V., & Hoberg, R. (2019). Theory of planned behaviour: predicting tourists' pro-environmental intentions after a humpback whale encounter. *Journal of Sustainable Tourism*, 27(5), 649–667. <https://doi.org/10.1080/09669582.2019.1603237>
10. Eby, B., Carrico, A. R., & Truelove, H. B. (2019). The influence of environmental identity labeling on the uptake of pro-environmental behaviors. *Climatic Change*, 155(4), 563–580. <https://doi.org/10.1007/s10584-019-02501-x>
11. Fami, H. S., Aramyani, L. H., Sijtsema, S. J., & Alambaigi, A. (2019). Determinants of household food waste behavior in Tehran city: A structural model. *Resources, Conservation and Recycling*, 143(August 2018), 154–166. <https://doi.org/10.1016/j.resconrec.2018.12.033>
12. Heesup Hana, Jinsoo Hwanga\*, Myong Jae Leeb, Joohyun Kima (2019), Word-of-mouth, buying, and sacrifice intentions for eco-cruises: Exploring the function of norm activation and value-attitude-behavior. *Tourism Management* 70 (2019) 430–443
13. Heesup Han, (2014), The norm activation model and theory-broadening: Individuals' decision-making on environmentally-responsible convention attendance. *Journal of Environmental Psychology* 40 (2014) 462e471
14. Heesup Han & Sunghyup Sean Hyun (2016): Fostering customers' pro-environmental behavior at
15. a museum, *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2016.1
16. Heesup Han & Sunghyup Sean Hyun (2017): Drivers of customer decision to visit an environmentally responsible museum: merging the theory of planned behavior and norm activation theory, *Journal of Travel & Tourism Marketing*, DOI:10.1080/10548408.2017.1304317 259318
17. Heesup Han & Sunghyup Sean Hyun (2017): Drivers of customer decision to visit an environmentally responsible museum: merging the theory of planned behavior and norm activation theory, *Journal of Travel & Tourism Marketing*, DOI:10.1080/10548408.2017.1304317
18. Huan Hu, Jinhe Zhang , ChangWang, Peng Yu, Guang Chu, (2019), What influences tourists' intention to participate in the Zero Litter Initiative in mountainous tourism areas: A case study of Huangshan National Park, China. *Science of the Total Environment* 657 (2019) 1127–1137
19. ICEK AJZEN, (1991). The Theory of Planned Behavior. *ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES* 50, 179–211 (1991)
20. Ilenia Confente<sup>1</sup> and Daniele Scarpi, (2020), Achieving Environmentally Responsible Behavior for Tourists and Residents: A Norm Activation Theory Perspective. *Journal of Travel Research*. DOI: 10.1177/0047287520938875
21. Judy Brenda Mann , Roy Ballantyne & Jan Packer (2017): Penguin Promises: encouraging aquarium visitors to take conservation action, *Environmental Education Research*, DOI: 10.1080/13504622.2017.1365355
22. Jacqueline J. MANGWANE, Ndivhuwo N. TSHIPALA, Athenkosi NTANJANA, Beverly M.
23. MAKOPO (2019), SEGMENTING TOWNSHIP RESIDENTS BY THEIR ATTITUDES, BEHAVIOURS, AND OPINIONS TOWARDS RESPONSIBLE TOURISM PRACTICES. *GeoJournal of Tourism and Geosites Year XII*, vol. 27, no. 4, 2019, p.1357-1366 ISSN 2065-1198, E-ISSN 2065-0817 DOI 10.30892/gtg.27420-439
24. J. B. MANN-LANG<sup>1,2</sup>, R. BALLANTYNE<sup>2</sup> & J. PACKER (2016), Does more education mean less fun? A comparison of two animal presentations. *Int. Zoo. Yb* (2016) 50: 155–164 DOI:10.1111/izy.12114
25. J. Navratil a, K. Picha b, M. Buchecker c, S. Martinat d, g, \*, R. Svec e, M. Brezinova a, J. Knotek f (2019), Visitors' preferences of renewable energy options in “green” hotels. *Renewable Energy* 138 (2019) 1065e1077
26. Jingyan Liua<sup>1</sup>, Jialin Snow Wub, , Tianting Cheb (2019), Understanding perceived environment quality in affecting tourists' environmentally responsible behaviours: A broken windows theory perspective. *Tourism Management Perspectives* 31 (2019) 236–244
27. Kamal Rahmani<sup>1</sup>, Juergen Gnoth<sup>1</sup>, and Damien Mather (2018), A Psycholinguistic View of Tourists' Emotional Experiences. *Journal of Travel Research* 1–15. DOI: 10.1177/0047287517753072
28. Kiattipoom Kiatkawsin , Ian Sutherland and Seul Ki Lee (2020), Determinants of Smart Tourist Environmentally Responsible Behavior Using an Extended Norm-Activation Model. *Sustainability* 2020, 12, 4934; doi:10.3390/su12124934
29. Khan, F., Ahmed, W., & Najmi, A. (2019). Understanding consumers' behavior intentions towards dealing with the plastic waste: Perspective of a developing country. *Resources*,

- Conservation and Recycling, 142(November 2018), 49–58. <https://doi.org/10.1016/j.resconrec.2018.11.020>
30. Kumar, A. (2019). Exploring young adults' e-waste recycling behaviour using an extended theory of planned behaviour model: A cross-cultural study. *Resources, Conservation and Recycling*, 141(June 2018), 378–389. <https://doi.org/10.1016/j.resconrec.2018.10.013>
31. Landon, A. C., Woosnam, K. M., & Boley, B. B. (2018). Modeling the psychological antecedents to tourists' pro-sustainable behaviors: an application of the value-belief-norm model. *Journal of Sustainable Tourism*, 26(6), 957–972. <https://doi.org/10.1080/09669582.2017.1423320>
32. Lujun Sua, Maxwell K. Hsub, , Robert E. Boostrom Jr. (2019), From recreation to responsibility: Increasing environmentally responsible behavior in tourism. *Journal of Business Research xxx (xxxx) xxx–xxx*
33. Luo W, Tang P, Jiang L, Su MM, Influencing Mechanism of Tourist Social Responsibility Awareness on Environmentally Responsible Behavior, *Journal of Cleaner Production*, <https://doi.org/10.1016/j.jclepro.2020.122565>.
34. Marisol Alonso-Vazquez, Jan Packer, Sheranne Fairley & Karen Hughes (2018): The role of place attachment and festival attachment in influencing attendees' environmentally responsible behaviours at music festivals, *Tourism Recreation Research*, DOI: 10.1080/02508281.2018.1545393
35. Min-Seong Kim 1,\* , Brijesh Thapa 1 ID and Hany Kim (2017), International Tourists' Perceived Sustainability of Jeju Island, South Korea. *Sustainability* 2018, 10, 73; doi:10.3390/su10010073
36. Nguyen, T. N., Nguyen, H. V., Lobo, A., & Dao, T. S. (2017). Encouraging Vietnamese household recycling behavior: Insights and implications. *Sustainability (Switzerland)*, 9(2), 1–15. <https://doi.org/10.3390/su9020179>
37. Nigel Hardiman & Shelley Burgin (2017) Nature tourism trends in Australia with reference to the Greater Blue Mountains World Heritage Area, *Journal of Sustainable Tourism*, 25:6, 732-745, DOI: 10.1080/09669582.2016.1231807
38. Pikturnienė, I., & Bäumle, G. (2016). Predictors of recycling behaviour intentions among urban Lithuanian inhabitants. *Journal of Business Economics and Management*, 17(5), 780–795. <https://doi.org/10.3846/16111699.2014.951957>
39. Samah Ibnou-Laaroussi 1, Husam Rjoub 2,\* and Wing-Keung Wong (2020): Sustainability of Green Tourism among International Tourists and Its Influence on the Achievement of Green Environment: Evidence from North Cyprus, *Sustainability* 2020, 12, 5698; doi:10.3390/su12145698
40. Siti Intan Nurdiana Wong Abdullaha,b, Zaiton Samdina\*, Phuah Kit Tenge and Bernard Lim Jit Hengd (2019), The impact of knowledge, attitude, consumption values and destination image on tourists' responsible environmental behaviour intention. *Management Science Letters* 9 (2019) 1461–1476
41. Sophia Imran a,b,\* , Khorshed Alam a,b, Narelle Beaumont (2014), Environmental orientations and environmental behaviour: Perceptions of protected area tourism stakeholders. *Tourism Management* 40 (2014) 290e299
42. Siegwart Lindenberga\* and Linda Steg , (2007), Normative, Gain and Hedonic Goal Frames Guiding Environmental Behavior. *Journal of Social Issues*, Vol. 63, No. 1, 2007, pp. 117— 137
43. Su-Lan Pan 1 ID , Ju Chou 2, Alastair M. Morrison 3,\* ID , Wen-Shiung Huang 4 ID and Meng-Chen Lin, (2018), Will the Future Be Greener? The Environmental Behavioral Intentions of University Tourism Students. *Sustainability* 2018, 10, 634; doi:10.3390/su10030634
44. Tweneboah-koduah, E. Y., Adams, M., Nyarku, K. M., Yaw, E., Adams, M., & Nyarku, K. M. (2019). Using Theory in Social Marketing to Predict Waste Disposal Behaviour among
45. Households in Ghana. *Journal of African Business*, 00(00), 1–16. <https://doi.org/10.1080/15228916.2019.1597323>
46. Tara J. Denley, Kyle Maurice Woosnam, Manuel Alector Ribeiro, B. Bynum Boley, Christy Hehir
47. Jesse Abrams (2020): Individuals' intentions to engage in last chance: applying the value-belief-norm model, *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2020.1762623
48. Tweneboah-koduah et al., 2019 Clark, E., Mulgrew, K., Kannis-Dymand, L., Schaffer, V., & Hoberg, R. (2019). Theory of planned behaviour: predicting tourists' pro-environmental intentions after a humpback whale encounter. *Journal of Sustainable Tourism*, 27(5), 649– <https://doi.org/10.1080/09669582.2019.1603237>
49. Tara J. Denley, Kyle Maurice Woosnam, Manuel Alector Ribeiro, B. Bynum Boley, Christy Hehir, Jesse Abrams (2020): Individuals' intentions to engage in last chance tourism: applying the value-belief-norm model, *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2020.1762623
50. White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22–49. <https://doi.org/10.1177/0022242919825649>
51. Yongxun Xu 1,2 , Xuechao Wei 3 and Shih-Chih Chen (2019), Determinants and Mechanisms of Tourists' Environmentally Responsible Behavior and Extending the Value-Identity-Personal Norm Model in China: Applying. *Sustainability* 2019, 11, 3711; doi:10.3390/su11133711
52. Yi Hsien Lin & Tsung Hung Lee (2019): How do recreation experiences affect visitors' environmentally responsible behavior? Evidence from recreationists visiting ancient trails in Taiwan, *Journal of Sustainable Tourism*, DOI: 10.1080/09669582.2019.1701679
53. Yachen Zhang, Brent D. Moyle & Xin Jin (2018): Fostering visitors' proenvironmental behaviour in an urban park, *Asia Pacific Journal of Tourism Research*, DOI: 10.1080/10941665.2018.1487457
54. Yung-Sen Chen , Yi Hsien Lin & Yueh-Jung Wu (2020): How personality affects environmentally responsible behaviour through attitudes towards activities and environmental concern: evidence from a national park in Taiwan, *Leisure Studies*, DOI: 10.1080/02614367.2020.1778773