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Tourists' Behavioural Intention Towards Ecotourism in Bali Under Consideration of Issue-Related Knowledge

Martin Krummeck, I Komang Gde Bendesa, Made Budiarsa I Gusti Ayu Oka Suryawardani, Agung Suryawan Wiranatha Udayana University, Bali, Indonesia

Tourists' image about Bali and the motivation to visit the island are firmly based on Bali's rich culture and tradition as well as its abundant nature. Due to the increasing number of visitors year by year, the island is in urgent need to reduce or even minimize the negative impacts of tourism and the damages done to nature and Balinese society. To improve the quality of tourism, a better understanding of tourists' behavioural intention and actual behaviour is crucial. An essential part of this context and the process of tourists' decision making plays the level of environmental knowledge. Therefore, the study intended to answer the research question: "How does issue-related knowledge influence ecotourism behavioural intention and actual environmental behaviour of tourists?". A sequential exploratory research method using quantitative and qualitative data from interviews and Focus Group Discussion has been utilized to find more insights. Ajzen's (1991) "Theory of Planned Behaviour" has been applied in an extended model to analyze whether knowledge influences attitude, intention, and behaviour. The data for the quantitative analyzes were collected 2019 within four weeks through interviews of 264 international and domestic tourists at three nature-based tourism destinations in Bali. The gained data were processed using multiple techniques: descriptive statistical analysis, correlation analysis, and Structural Equation Model (SEM) analysis. The results showed that ecotourism knowledge has a direct impact on tourists' environmental attitudes and their actual environmental behaviour. Although the SEM analysis could not show the direct influence towards ecotourism behavioural intention, this was confirmed by the correlation analysis result with a positive relationship of the latent variables ecotourism knowledge and ecotourism behavioural intention with significant strength. The research findings led to the conclusion that the research question could be confirmed. The level of ecotourism knowledge has a positive influence onenvironmental attitude, behaviour intention, and actual behaviour.

Keywords: ecotourism, knowledge, environmental attitude, planned behaviour, Bali, sustainability

Introduction

The World Travel and Tourism Council (WTTC, 2018) predicts that Indonesia's tourism industry will grow over the next 10 years by 61%, more than double the world average. However, the positive economic

Martin Krummeck, MBA, Faculty of Tourism, Udayana University, Bali, Indonesia.

I Komang Gde Bendesa, Prof. Dr., M.A.D.E., Faculty of Tourism, Udayana University, Bali, Indonesia.

Made Budiarsa, Prof. Dr., M.A., Faculty of Tourism, Udayana University, Bali, Indonesia.

I Gusti Ayu Oka Suryawardani, Dr. Ir., M.Mgt., Ph.D., Faculty of Tourism, Udayana University, Bali, Indonesia.

Agung Suryawan Wiranatha, Dr. Ir., M.Sc., Faculty of Tourism, Udayana University, Bali, Indonesia.

Correspondence concerning this article should be addressed to Martin Krummeck, Faculty of Tourism, Udayana University, Jl. PB Sudirman, Denpasar, Bali, Indonesia.

development also comes with negative impacts. The World Economic Forum assessed in its Environmental Performance Index 2018 that given the country's and tourism's dependence on natural resources, Indonesia is not placing enough emphasis on environmental sustainability. Therefore, WEF (2018) put Indonesia on place 134 out of 180 places for its sustainability. Bali, Indonesia's most famous tourism destination with an outstanding reputation, profits from the growth but also suffers from over-tourism (IDEP, 2016).

The overall image of Bali and the reasons to visit the island are based on the rich culture and the unique nature Bali has to offer (Wiranatha, Suhanda, Lipman, DeLacy, Buckley, & Law, 2012). But these natural and spiritual gifts are in great danger due to the soaring number of tourists visiting the small island year by year, reaching almost 16 million visitors in 2018 (disparada, 2019). Considering the predicted WTTC growth rate, Bali might have to cope with over 25 million visitors by 2028. Already today Bali is heavily suffering from negative tourism impacts such as agricultural land conversion (Lanya, Dibia, Diara, & Suarjaya, 2017), water shortage (BLH, 2016) and environmental destruction on land and below the sea (Colorni, 2018). The impacts of tourism also influence the fundamental Balinese philosophy "Tri Hita Karana" that is deeply engrained in Balinese culture, tradition, and lifestyle. Tri Hita Karana is the belief that life is about a balanced and harmonious relationship between humans with God, humans with other human beings, and human beings with the environment and other creatures. Unsustainable tourism growth will have negative impacts on the Balinese philosophy and the traditional way of life of the Balinese people; especially if the harmony of human beings and the natural environment becomes more and more unbalanced (Suamba, 2017).

Ecotourism, as an advanced form of sustainable tourism, has the potential to reduce the negative impacts of tourism. As a specific form of tourism, it focuses on minimizing the impact on nature and the environment (TIES, 2019). Ecotourism is defined as nature-based tourism that is ecologically sustainable and is based on relatively undisturbed natural areas; it is non-damaging and non-degrading; provided a direct contribution to the continued protection and management of protected areas used, and is subject to an adequate and appropriate management regime (Valentine, 1993).

Bali has the potential of applying ecotourism standards for some of its main tourist sites to reduce the impacts of mass tourism. The island offers many nature-based activities, and community-based village tourism combined with agrotourism has become more and more popular in recent years. The right utilization of Bali's national parks and the two UNESCO sites could contribute towards sustainable tourism significantly. However, research on visitors to ecotourism destinations found differences between the behaviour of tourists who care about the environment and the behaviour of those who have the intention to visit ecotourism destinations (Kerstetter, Hou, & Lin, 2004). Hedlunt, Marell, and Garling (2012) explain further that travellers who care about the environment will concern more with the perceived sustainability of nature in choosing a travel destination. It can not be denied that not all travellers who visit ecotourism sites demonstrate positive environmental behaviour because some are only attracted to the natural resources in the area or are visiting the destination accidentally.

As the public becomes increasingly aware of environmental protection, scholars have focused on how to promote positive attitudes towards various environmental issues and have found environmental knowledge to be of crucial consequence. Previous studies have shown that environmental knowledge, environmental attitude, and environmental behaviour are positively related to each other (Lee, 2011; Zoska, Szerenyi, Szechy, & Kocsis, 2013). Increased environmental knowledge may, therefore, effectively promote positive attitudes towards ecotourism (Zhang & Leis, 2012). Pooley and O'Conner (2000) considered attitude domains to be affected by

the knowledge domain. Specifically, the likelihood of change is affected by a person's stance toward knowledge or what Kruglanski (1989) described as "epistemic motives". Kaiser, Woelfing, and Fuhrer (1999) reported that environmental knowledge and environmental values explained 40% of the variance of ecological, behavioural intentions. Bamberg (2003) also suggested that situation-specific knowledge is a direct determinant of specific behaviours. The studies from Hughes (2013) and Stamation, Croft, Shaughnessy, Waples, and Briggs (2007) considered environmental behaviours occurring outside of the study site such as, for instance, once visitors returned home. Although asked about environmental behaviours in a comprehensive manner that allowed respondents to specify the type of behaviour impacted by the experience (Ballantyne & Packer, 2011), most researchers also requested information about specific behaviours such as purchase, consumption, and disposal of goods and services (Stern, 2000) and showed the influence of knowledge on actual behaviour. However, no research on the relation of ecotourism knowledge and environmental attitude and the impact on ecotourism behavioural intention and actual environmental behaviour has been implemented in Bali up to date. To improve the quality of tourism in Bali, a better understanding of tourist's behavioural intention and actual behaviour is crucial. As elaborated, an essential part of this context and the process of tourists' decision making plays the level of environmental knowledge. Therefore the study aimed to analyze how ecotourism knowledge influences the attitude, the behavioural intention, and the actual behaviour of Bali tourists.

The study used as grand theory Ajzen's (1991) "Theory of Planned Behaviour". The theory has been applied in numerous studies and has been proven to be a valid concept. According to Ajzen, the behavioural intention (BI) and actual behaviour(AB) is influenced by attitude (A), subjective norm (SN), and perceived behavioural control (PBC). For this study, the Theory of Planned Behaviour has been extended by the variable issue-related knowledge of ecotourism (EK).

Based on the literature review and the insights gained from prior works, we developed the following three main research hypotheses:

- H1: Ecotourism knowledge (EK) positively affects environmental attitudes (A).
- H2: Ecotouriswm knowledge (EK) positively affects ecotourism behavioural intention (BI).
- H3: Ecotouriswm knowledge (EK) positively affects actual environmental behaviour (AB).

Furthermore, the study included as hypotheses that each variable SN, A, and PBC individually have a positive influence on BI as well as PBC and EI have a positive influence on AB.

Research Method

For this study, a sequential exploratory method has been chosen. The research was conducted in several phases using quantitative and qualitative data. The mixed research method included data collection using questionnaires and Focus Group Discussion with stakeholders. The interviews were conducted at three nature-based tourist sites in Bali. Two hundred sixty-four individuals participated in the research. One hundred twenty-six came from Indonesia, whereas 138 international tourists came from 34 different countries. 49% of the respondents were female, while about 47% were male. 4% of the respondents did not indicate their gender. Most of the individuals who participated were in the age group of 21-30 years, reaching 50%, followed by the age group 31-40 years with 20%. The majority, with 58% of the interview participants had university degrees and 15% postgraduate degrees. Domestic and international respondents showed a similar percentage of demographic characteristics. When it came to "Motivation to visit Bali" the international and domestic respondents had the same priorities. "Nature" has been mentioned first, followed by "Culture and People",

"Beach and Leisure", and "New Experiences" in the fourth position.

For the objective of this study, a model has been developed to explain tourist's behavioural intention towards ecotourism in Bali under consideration of issue-related knowledge. The model consisted of six variables: SN, A, PBC, EK, BI, and AB. Each of the constructs was measured by seven indicators, whereas the construct Ecotourism Knowledge was operationalized by nine items in the questionnaire. All items were measured on a five-point Likert scale.

From the 264 respondents, 30% showed a very high level of Ecotourism Knowledge, 41% a high level, 21% a moderate level, 7% had a low level, and 1% a very low level. International respondents demonstrated, on average, a higher level of EK compared to domestic respondents.

For the planned SEM analysis, it was necessary to perform a validity and reliability test before the data could be collected. The validity of the items of each latent variable that was reflected in the model as well as the reliability of the questionnaire was tested by using 25 samples. To assess the reliability of the selected items in measuring the latent model construct, the Cronbach's Alpha score was examined. The results showed that the tested latent variables had good reliability measures and were reflected with valid items. The Structural Equation Model (SEM) was analyzed by using the AMOS version 24 program. For AMOS which is classified as covariance-based SEM, the parameter estimation method is performed using maximum likelihood (ML) which requires that the sample size is large enough and the data follow the normal multivariate distribution (Hox, 1998). Paying attention to the model parameters and using a sample measuring 264 observations, the model analysis could proceed. The analyzes of the structural model aimed at examining the inter-relationships expressed in the hypotheses that were designed by applying a significant path coefficient at the test level of 1 percent or smaller.

The hypotheses tests led to the following results:

H1 and H3 could be confirmed: EK positively affects A, and EK positively affects AB. H2 could not be confirmed: EK did not positively affect BI. Furthermore, the hypotheses that each variable SN, A, and PBC individually have a positive influence on BI could be confirmed, as well as that BI has a positive influence on AB. The hypothesis that PBC has a positive influence on AB could not be confirmed.

Additionally, to the SEM analysis, correlation analyses were conducted. The correlation analysis of the latent variables EK with EBI showed a positive result of the Pearson Correlation value. Therefore the existence of a positive relation with significant strength of the relationship between EK and BI could be determined.

Discussion

The majority of the domestic and international participants of this study belong to the group "Generation Z" (birth cohort: mid-1990-2000), with age bracket 20-30 years. They were well educated, over 70% holding university degrees or higher qualification, and had the same travel motivations. Typically the "Generation Z" group uses social media as their backbone for information sourcing and communication with members of their networks. Social media plays an important role in their knowledge building as they are highly important for their daily lives and indispensable. On the other hand, society-related issues are also shared via social media. That includes world-topics such as climate change and other environmental or political issues. Therefore, the usage of social media can contribute to a higher level of awareness and can influence environmental attitudes and the decision-making process.

International respondents achieved higher overall results per variable EK, A, BI, and AB on the Likert

scale as domestic respondents. Only for the variable PBC the results were almost authentic. The variance between international and domestic respondents reached 8.6%. The reason for this moderate difference is expected to lie in the fact that in the 34 countries where the respondents came from issues such as climate change, and positive environmental behaviour have diverse priorities in society.

The study found further that knowledge influences decision making and actual behaviour only to a certain degree. Other aspects might be more relevant in a particular case and situation and cover or reduce the influence of knowledge in the decision-making process, which might lead to different actual behaviour. As described by Wang and Ruhe (2007), decision making is a process that chooses a preferred option or a course of action from among a set of alternatives based on given criteria or strategies. That means in the context of the conducted research, although broad knowledge of ecotourism existed, other aspects could have influenced the behavioural intention significantly. That is particularly the case for tourists who came to Bali on a special occasion (e.g. anniversary or honeymoon) or for business (e.g. meetings or company outings). That was the case in a significant number: 21% of the international and 35% of the domestic respondents mentioned these two aspects as travel motivation. Therefore, these groups had most likely other priorities, especially if the time on the island was very limited, as it is usually for local tourists. Even showing a general positive environmental attitude respondents who came to Bali on special occasions (anniversary, honeymoon, "once in a lifetime experience") were more reluctant to minimize water consumption than others. Such who came in groups (company outing, seminar) had limited time and opportunities to perform positive actual environmental behaviour. On the other hand, the same tourists can show a very different, and more positive behaviour intention and actual behaviour during another holiday under other circumstances and travel motivations.

Conclusion

The study found that issue-related knowledge about ecotourism had a direct positive impact on environmental attitudes and through it also towards ecotourism behavioural intention of Bali visitors. The hypothesis in this regard could be confirmed. The positive correlation of ecotourism knowledge and ecotourism behavioural intention underlined this finding. The extended theory of Ajzen's "Theory of Planned Behaviour" proved to be useful to answer the research question. The study result showed that 78% of the respondents demonstrated high-level agreement towards a positive, protective environmental attitude and 70% of the respondents a high level of agreement towards ecotourism (ecotourism knowledge). The majority of respondents (75%) had an interest in ecotourism (ecotourism behavioural intention) and showed a willingness to support sustainable tourism as well as to contribute towards environmental protection. Almost half of all respondents (47%) reported a very high or high level of actual environmental behaviour. That means that every second respondent contributes positively to a better environment through multiple actions. In the framework of the applied theory of planned behaviour, the aspect of Subjective Norm was part of the study. The research respondents showed a high level of agreement towards the influence of others. But not the family was the core-influencer, rather more friends and other people whose opinion the respondents' value. That shows the importance of social media and how influencers can affect opinions and decision-making process.

The study found further a decrease in the overall level of environmental attitude, ecotourism behavioural intention, and actual environmental behavior of the interviewed Bali tourists. Such a decrease is a typical incident, as there are usually obstacles to overcome from attitude to real action. Firstly, attitude is not alone a predictor of intention. Intention is also influenced by subjective norm and perceived behavioural control (Ajzen,

1991). The theories of reasoned action and planned behaviour both acknowledge that participants' intention can change before the performance of a behaviour (e.g. as a result of new information) and that consequently, the primary intention measure may not provide an accurate prediction of the behaviour (Ajzen & Fishbein, 1980). Secondly, in the literature, the phenomena of the differences between intention and behaviour are well known and described as "Intention-Behaviour-Gap" (Sheeran, 2002).

The conducted study has shown that the travel motivations to visit Bali are still up to date and the utmost relevant. Intact nature and lively culture are key reasons for travellers to come to Bali. The highly potential customer group "Generation Z" is more and more concerned about the environment and their impact caused by their travel. Due to their high level of ecotourism knowledge, they show a significant positive environmental attitude and a growing interest in sustainable tourism and the sub-form ecotourism. Social media is playing a significant role in their lives and influences their environmental awareness. Social Media contributes to knowledge building and therefore influences the decision makingto a certain degree.

With the above mentioned theoretical background, data analyses and results of FGD in mind, it can be concluded that the study findings are in line with other research and can be accepted as satisfying.

References

- Ajzen, I. (1991). The theory of planned behaviour. Organizational Behaviour and Human Decision Processes, 50, 179-211.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behaviour. Engelwood Cliffs, NJ: Prentice-Hall.
- Ballantyne, R., & Packer, J. (2011). Using tourism tree-choice learning experience to promote environmentally sustainable behaviour: the role of post-visit action resources. *Environmental Education Research*, 17(2).
- Bamberg, S. (2003). How does environmental concern influence specific environmentally related behaviours? A new answer to an old question. *Journal of Environmental Psychology*, 23(1), 21-32.
- BLH. (2016). Laporan KLHS Bali—Strategic Environmental Assessment (KLHS)—Management and Conservation of Water Resources (Bali Province). Available from: http://www.scribd.com/doc/249234967/2-3, visited 07.07.2019
- Colorni, R. (2018). Tourism and land grabbing in Bali—A research brief. The Transnational Institute (TNI), Amsterdam
- disparda.baliprov.go.id/en/Statistics2/Statistics Tourism Bali 2019, Table 31 and Table 13-24. Bali Tourism Authority. Website visited 04.08.2019
- Hedlunt, T., Marell, A., & Garling, T. (2012). The mediating effect of value orientation on the relationship between socio-demographic factors and environmental concern in Swedish travellers' vacation choice. *Journal of Ecotourism*, 11(1), 16-33
- Hox, J. J. (1998). An introduction to structural equation modelling. Family Science Review, 11, 354-373.
- Hughes, K. (2013). Measuring the impact of viewing wildlife: Do positive intentions equate to longterm changes in conservation behaviour? *Journal of Sustainable Tourism*, 21(1).
- IDEP Foundation. (2016). Bali water protection program. Available from: http://www.idepfoundation.org, visited 07.07.2019
- Kaiser, F. G., Woelfing, S., & Fuhrer, U. (1999). Environmental attitude and ecological behaviour. *Journal of Environmental Psychology*, 19(1), 1-19.
- Kerstetter, D. L., Hou, J. S., & Lin, C. H. (2004). Profiling Taiwanese ecotourists using a behavioural approach. *Tourism Management*, 25(4), 491-498
- Kruglanski, A. W. (1989). Lay epistemic and human knowledge: Cognitive and motivational bases. Plenum: Newark, UK.
- Lanya, I., Dibia, I. N., Diara, I. W., & Suarjaya, D. G. (2017). Analysis of Subak landuse change due to tourism accommodation development in north Kuta Sub-district, Badung Regency, Indonesia. 5th Geoinformation Science Symposium 2017. IOP Conf. Series: Earth and Environmental Science, 98.
- Lee, T. H. (2011). How recreation involvement, place attachment, and conservation commitment affect environmentally responsible behaviour. *Journal of Sustainable Tourism*, 19(7).
- Pooley, J. A., & O'Conner, M. (2000). Environmental education and attitudes emotions and beliefs are what is needed. *Journal of Environmental Behaviour*, 32.
- Sheeran, P. (2002). Intention—Behaviour relations: A conceptual and empirical review. European Review of Social Psychology,

12(1), 1-36

- Stamation, K., Croft, D., Shaughnessy, P., Waples, K., & Briggs, S. (2007). Educational and conservation value of whale watching. *Journal of Tourism in Marine Environments*, 4(1).
- Stern, P. (2000). Toward a coherent theory of environmentally significant behaviour. Journal of Social Issues, 56(3).
- Suamba, I. B. P. (2017). Materiality and spirituality in Bali tourism: An ethical reflection on the Tri-Hita-Karana. Research Paper. Politeknik Negeri Bali, Indonesia.
- TIES (The International Ecotourism Society). https://ecotourism.org/what-is-ecotourism/. Website visited 05.01.2019
- Valentine, P. (1993). Ecotourism and nature conservation: A definition with some recent developments in Micronesia. *Journal of Tourism Management*, 14(21).
- Wang, Y., & Ruhe, G. (2007). The cognitive process of decision making. *International Journal of Cognitive Informatics and Natural Intelligence*.
- Wiranatha, A., Suhanda, A., Lipman, G., DeLacy, T., Buckley, G., & Law, A. (2012). Green growth 2050 roadmap for Bali sustainable tourism development. Project Report. Ministry of Tourism & Creative Economy of the Republic of Indonesia.
- World Economic Forum (WEF). (2018). The global competitiveness report 2017-2018. Geneva, Switzerland.
- World Travel & Tourism Council (WTTC). (2018). Travel & tourism economic impact (World) 2018. London, UK.
- Zhang, H., & Leis, L. S. (2012). A structural model of residents' intention to participate in ecotourism.: The case of a wetland community. *Tourism Management*, 33(4), 916-925.
- Zsoka, A., Szerenyi, Z. M., Szechy, A., & Kocsis, T. (2013). Greening due to environmental education? Environmental knowledge, attitudes, consumer behaviour and everyday pro-environmental activities of Hungarian high school and university students. *Journal of Clean Production*, 48, 126-138.