Co-creation experience and tourists' citizenship behavior: challenges of Indonesian ecotourism sector during post-pandemic era

Andriani Kusumawati, Cahya Nova Kurniawan and Mohammad Iqbal

Abstract

Purpose – *This study aims to highlight the influence of co-creation experience (CCE) on tourists' citizenship behavior (TCB), emphasizing the Indonesian ecotourism sector during the post-COVID pandemic.*

Design/methodology/approach – *By using a judgmental sampling, data were collected from 150 visitors who visits Indonesian ecotourism resort and acquired the wildlife experience through co-creation process. To evaluate the relationship model, partial least squares-structural equation modeling by SmartPLS 3rd version was used in this study.*

Findings – *The result indicated that CCE in terms of Indonesian ecotourism had an effect on involvement (INV) and satisfaction (SAT). Result ascertain INV and SAT direct effect on TCB. Multigroup analysis indicated that perceived risk of COVID-19 could moderate insignificantly the relationship among INV, SAT on TCB.*

Research limitations/implications – *This study focuses on CCE, INV, SAT and TCB in Indonesian ecotourism with wildlife attraction and contributes an insight for tourism research; thus, the results cannot be generalized for other ecotourism worldwide.*

Practical implications – *The proposed model of this study suggests the need to review the current condition of citizenship behavior at destination level, especially regarding to cleanliness and crowd controlling on post-COVID pandemic to maintain tourists' health and safety while traveling.*

Social implications – *Achieving TCB in different types of destination (ecotourism) requires specific development models concerning environmental conditions.*

Originality/value – *Though CCE, INV, SAT and TCB have identified as main topics for tourism research especially in ecotourism sector, the related factors of TCB in post-COVID-19 era are remain limited.*

Keywords *Involvement, Satisfaction, Co-creation experience, Post-COVID-19, Tourists' citizenship behavior*

Paper type *Research paper*

Andriani Kusumawati is based at the Department of Business Administration, Fakultas Ilmu Administrasi, Universitas Brawijaya, Malang, Indonesia.
Cahya Nova Kurniawan is based at the Department of Business Administration, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Merdeka Malang, Malang, Indonesia.
Mohammad Iqbal is based at the Department of Business Administration, Fakultas Ilmu Administrasi, Universitas Brawijaya, Malang, Indonesia.

共创体验与游客公民行为：后疫情时代印尼生态旅游行业面临的挑战

摘要

目的：本研究旨在强调共创体验（CCE）对游客公民行为（TCB）的影响，重点是后疫情期间印尼生态旅游中的游客公民行为（TCB）。

设计/方法论/方法：通过判断抽样，从访问印尼生态旅游胜地的 150 名游客收集了数据，并通过共创过程获得了其野生动物体验。 为了评估关系模型，本研究使用了 SmartPLS 第三版的偏最小二乘结构方程建模（PLS-SEM）。

发现：结果表明，印尼生态旅游的 CCE 对参与度（INV）和满意度（SAT）有影响。 结果确定了 INV 和 SAT 对 TCB 的直接影响。 多组分析表明，covid-19 的感知风险对 INV 和 SAT 与 TCB 的关系影响不大。 本研究还描述了中介作用。

研究局限性/影响：该研究重点关注印尼生态旅游中野生动物吸引力的CCE、INV、SAT, TCB, 为旅游研究提供见解；因此，研究结果不能推广到全世界其他生态旅游。

实际影响：该研究提出的模型表明，有必要审查目的地层面公民行为的现状，特别是在新冠大流行后的卫生和人群控制方面，以维护游客在旅行时的健康和安全。

社会影响：在不同类型的目的地（生态旅游）中实现游客的公民行为需要针对不同的环境条件而选择开发模式。

原创性/价值：尽管 CCE、INV、SAT 和 TCB 是旅游研究中，特别是在生态旅游领域的重点研究对象，但在后疫情旅游过程中，其与目的地公民行为相关的因素研究仍然有限。

关键词 共创体验、参与度、满意度、游客公民行为、后疫情
文章类型 研究型论文

Experiencia DE cocreación Y comportamiento DE ciudadano DE los turistas: retos del sector ecoturístico indonesioen LA era post-pandémica

Resumen

Objetivo: *Este estudio pretende poner de relieve la influencia de la experiencia de cocreación (CCE) en el comportamiento ciudadano de los turistas (TCB) haciendo hincapié en el sector del ecoturismo indonesio durante el periodo post-pandémico de la COVID-19.*

Diseño/enfoque: *Mediante el uso de un muestreo de juicio, se recopilaron datos de 150 visitantes que visitaron un centro de ecoturismo en Indonesia y adquirieron la experiencia de la vida silvestre a través del proceso de co-creación. Para evaluar el modelo de relación, en este estudio se utilizó el modelo de ecuaciones estructurales de mínimos cuadrados parciales (PLS-SEM) de SmartPLS 3.ª versión.*

Resultados: *El resultado indicó que la CCE en términos de ecoturismo indonesio tuvo un efecto sobre la implicación (INV) y la satisfacción (SAT). El resultado determinó que INV y SAT tienen un efecto directo sobre el TCB. El análisis multigrupo indicó que el riesgo percibido del covid-19 modera de forma insignificante la relación INV y SAT con el TCB. Papel mediador también descrito en este estudio.*

Limitaciones/implicaciones de la investigación: *el estudio se centra en CCE, INV, SAT, TCB en el ecoturismo indonesio con atracción de vida silvestre y aporta información para la investigación turística; por lo tanto, los resultados no pueden generalizarse para otros ecoturismos en todo el mundo.*

Implicaciones prácticas: *el modelo propuesto en el estudio sugiere la necesidad de revisar la condición actual del comportamiento ciudadano a nivel de destino, especialmente en lo relativo a la limpieza y el control de multitudes en la etapa poscovid para mantener la salud y la seguridad de los turistas durante el viaje*

Implicaciones sociales: *lograr un comportamiento ciudadano de los turistas en diferentes tipos de destino (ecoturismo) requiere modelos de desarrollo específicos en relación con las condiciones ambientales.*

Originalidad/valor: *aunque CCE, INV, SAT y TCB se identifican como una prioridad para la investigación turística, especialmente en el sector del ecoturismo, los factores relacionados en el curso del turismo post-covid-19 que se relacionan con la ciudadanía a nivel de destino siguen siendo limitados.*

Palabras clave *experiencia de cocreación, involucramiento, satisfacción, comportamiento ciudadano de los turistas, post covid-19*

Tipo de papel *Trabajo de investigación*

1. Introduction

One of the subset of tourism that embodies a spirit of responsibility toward nature and local cultures is an ecotourism (Sherwen and Hemsworth, 2019). Ecotourism has the potential to increase public knowledge of cultural and biological diversity, conserve wild habitats and enhance the economic conditions of local communities. Much of ecotourism includes wildlife viewing, which differs greatly from different situations in which people may come into contact with wild creatures (Dalimunthe *et al.*, 2021). However, when it comes to wildlife viewing at an ecotourism location, tourists have to get close to the animals and interact with them in their own way (Sunkar *et al.*, 2022). Ecotourism businesses are cautious to mention that sighting wild animals cannot be guaranteed, and most ecotourists are aware of the difficulties involved in watching wildlife in its natural habitat (Bertella, 2019). In ecotourism, there are many things that can be done through a human to animal approach so that interactions appear without barriers and are able to create memorable experiences for tourists (Learmonth, 2020).

However, the COVID-19 pandemic has a detrimental effect on ecotourism areas as a result of social restrictions (Casado-Aranda *et al.*, 2021). To prevent the spread of the virus that causing a lack of tourism visits (Potia and Dahiya, 2020), Indonesian Government then concentrated to reopen tourism sector with implementing health protocols, namely, CHSE (Cleanliness, Healthy, Safety and Environmental Sustainability), which also refers to World Health Organization standards (Marcelino *et al.*, 2022). A safe tourist destination during the COVID-19 pandemic is a destination that has a low level of perceived risk and optimal hygiene facilities (Nie *et al.*, 2022). It is no exception for ecotourism, which is also expected to comply with health provisions to ensure the comfort and safety of tourists (Nie and Tang, 2022).

Baobab Safari Resort Prigen is one of the ecotourism destinations in Indonesia that combines resorts with endangered species conservation in one location (Indrianto *et al.*, 2021). With these characteristics, Baobab Safari Resort Prigen seeks to present various endangered animal attractions directly in the hotel area for the benefit of educating tourists regarding nature conservation (Trip Advisor Indonesia, 2021). Tourist citizenship behavior (TCB) is an effort made by providers to provide education to potential tourists that destinations are safe to visit so that the ecotourism industry can be sustainable (Torres-Moraga *et al.*, 2021). In ecotourism, there are many things that can be done through a human-to-animal approach so that interactions appear without barriers and are able to create memorable experiences for tourists (Tomassini and Bertella, 2023).

The premise of this study was an investigation about co-creation experience (CCE) as a factor that drives TCB in the second stage of COVID-19 can be particularly useful for the development of safe ecotourism in terms of Indonesia. This paper offers a clear understanding of the role of perceived risk of COVID-19 as a moderating factor between involvement (INV) and satisfaction (SAT) toward TCB in terms of Indonesia's ecotourism literature by showing that providers concern for maintaining the safety and hygiene of destinations post-COVID-19 pandemic is related to the willingness of tourists to behave citizenship at the destination level. Although previous research suggests that CCE is one of the key antecedents of TCB in one place such as hotels or zoos itself, its moderating role is not explored in the extant literature. Based on this idea, this study aims to investigate the relationships between CCE and the impact on TCB. The stimulus–organism–response (SOR) theory as the foundation to analyze whether tourism experience that characterized in semicaptive ecotourism (a hotel and zoo in one place) with animal demonstrations as attraction. SOR theory in tourism studies is mainly concerned with the accepted reciprocal relationships by tourists, especially the suitability of experience with personal values and satisfaction that have an impact on encouraging citizenship behavior.

2. Literature review and hypothesis

2.1 Stimulus–organism–response theory

According to the SOR theory, behaviors should be used to respond to conditions, whether they are positive or negative (Mehrabian and Russell, 1974). The SOR hypothesis highlights the environment's capacity to evoke strong feelings or enthusiasm. Given the intangible character of ecotourism, Jeong *et al.* (2020) asserted that the SOR model is one of the best frameworks for explaining visitor behaviors. The current study was set out to investigate the connections between CCE (S), involvement, satisfaction and TCB (R) to understand the habits of tourists in an ecotourism with animal attraction on postpandemic era.

2.2 Co-creation experience

Campos *et al.* (2017) provided that CCE is a new trend that combines active participation between tourists and providers to shape satisfying experience. In the context of ecotourism, CCE is closely related with human-to-animal interaction, which is characterized by the

presence of wildlife experience (Bertella *et al.*, 2019), social interaction (Luo *et al.*, 2019) and cognitive experience (Zhang *et al.*, 2022). CCE also has been widely studied as a predictor of attitudes and actual behavior, such as involvement (Sthapit *et al.*, 2019a), satisfaction (Al Halbusi *et al.*, 2020) and citizenship behavior (Arica and Çorbaci, 2020). Providers always try to provide animal-based tourism related to the conservation on endangered species, which is realized by interacting demonstrations (Indrianto *et al.*, 2021), taking pictures (Tomassini, 2019) and also animal feeding with verbal narrative story from zookeeper (Roe *et al.*, 2015). CCE process in ecotourism creates social bonds between visitors because interactions between animals and humans are able to increase the sense of human being as well as cognitive processes about how to live side by side with nature (Sherwen and Hemsworth, 2019).

2.3 Involvement

In the context of human needs for nature-based tourism, the phrase "involvement" is explained as the basic form of tourists' interest in natural locations according to their perceptions (Moscardo and Saltzer, 2004). Dimensions of involvement include pleasure, sign value, risk probability and risk consequences (Xu *et al.*, 2018). Apart from natural nuances, interaction with wild animals in the form of CCE can give tourists a positive perception as a form of responsibility toward nature conservation (Campos *et al.*, 2017). Sthapit *et al.* (2019a, 2019b) showed that co-created tourist value, which includes visitor involvement and interactive collaboration with tourism providers, can influence visitors' opinions of the experience. First hypothesis could be proposed:

H1. Co-creation experience has a positive and significant effect on involvement.

2.4 Satisfaction

Satisfaction become the key success for tourism industry (Shafiee *et al.*, 2020). Grissemann and Stokburger-Sauer (2012) defined satisfaction as a positive emotion formed from co-creation processes that offer various benefits. Customers satisfy not only with the purchased product but also with the decision processes that associated with satisfaction towards service development process. The role of positive experience in achieving SAT was highlighted by Al Halbusi *et al.* (2020) which experiences formed through the process of participation and positive emotions could shapes visitors' satisfaction. Buonincontri *et al.* (2017) confirmed that tourists' experience in co-creation situations can be a determinant of SAT and also other behavioral outcomes such as recommendation. Tourist satisfaction with animal tourism destinations in terms of postpandemic was influenced by the presence of security guarantees and interactive information from tourism service providers (Usui *et al.*, 2021). Second hypothesis could be proposed:

H2. Co-creation experience has a positive and significant effect on satisfaction.

2.5 Tourists' citizenship behavior

TCB refers to the positive, voluntary and discretionary behavior of tourists during the experience to help businesses beyond participation in terms of co-creation processes (Liu *et al.*, 2021). Research has found that co-creating value with customers improves TCB (Nowacki and Kruczek, 2020). Arica and Çorbaci (2020) said that customers value co-creation related to behaviors such as advocacy, feedback and recommendation. Tourists are likely to engage in other activities voluntarily based on this added value, while the consumer is physically and emotionally active in the co-creation process (McCartney and Chen, 2019). Third hypothesis could be proposed:

H3. Co-creation experience has a positive and significant effect on tourists' citizenship behavior.

Co-creation tourism has a higher level of involvement, interaction and active participation than other types of tourism (Nowacki and Kruczek, 2020). Tourists will carry out several activities voluntarily as a form of reciprocity after assessing their psychological state and determining that they are interested when doing tourism activities (Sthapit *et al.*, 2019b). Shafiee *et al.* (2020) posited that when hotel visitors evaluate the hotel's services, staffs and ability to provide a sense of security, they will tend to suggest improvements to the hotel, submit positive recommendations to colleagues and fill out visitor satisfaction surveys. Fourth hypothesis could be proposed:

H4. Involvement has a positive and significant effect on tourists' citizenship behavior.

Satisfaction has frequently been linked to citizenship behavior (Bharwani and Jauhari, 2013). Tourists who receive satisfactory service as a result of a relational exchange are likely to repay the favor to the service providers by engaging in voluntary behaviors such as recommendations or other supportive actions (Al Halbusi *et al.*, 2020). Customers are likely to exhibit better citizenship behavior if they receive an endorsement from a company or another customer (Zhu *et al.*, 2016). Thus, it is proposed:

H5. Satisfaction has a positive and significant effect on tourists' citizenship behavior.

2.6 Perceived risk of COVID-19

Perceived risk is closely related to the intention to travel to a specific destination or avoid a specific destination (Schroeder *et al.*, 2016). COVID-19 pushes many destinations to fulfill demands, including the importance of social distancing and hygiene in public areas (Casado-Aranda *et al.*, 2021). It can help to maintain a positive emotional experience while also reducing the severity of the risk (Park *et al.*, 2021). While perceived risk is frequently cited as a predictor of tourist citizenship, attitude or behavioral intention, its potentially moderating role in specific relationships has received little attention (Rather, 2021). Yin *et al.* (2020) tested whether perceived risk influences the relationship between physical/human crowding and destination attractiveness, emotion and tourist involvement. A safe tourist destination during the COVID-19 pandemic is a destination that has a low level of perceived risk and optimal perceived cleanliness (Nie *et al.*, 2022). As a result, we believe that perceived risk as a result of COVID-19 moderates the relationship between involvement and TCB, as well as satisfaction and TCB in the tourist destination. Based on some of the literature, this study has the following hypothesis:

H6: Perceived risk of COVID-19 is able to moderate INV and TCB.

H7: Perceived risk of COVID-19 is able to moderate SAT and TCB.

3. Methods
3.1 Context and samples

This research is conducted at the Baobab Safari Resort in East Java, Indonesia, which is one of the specific ecotourism attractions centered on African wildlife in Indonesia. As a natural-based destination that combines animal conservation with thematic attractions, Baobab Safari Resort is located within the ecological conservation area of Taman Safari Prigen, which covers 350 ha that makes it the largest ecotourism area in Indonesia (Fibriyanto, 2021). With an environmental topography that combines mountainous areas, plantations and rivers, this ecotourism area is unique compared with other regions in Indonesia. Baobab Safari Resort offers a variety of chances for learning, recreation, entertainment, as well as animal feeding attractions like giraffes, meerkats, rhinos, elephants and other wildlife animals. This resort was selected because it provides CCE with varied levels of visitor contact and involvement, making it an excellent setting to test the hypotheses. The population was all visitors to Baobab Safari Resort who stayed at least one

night. The research sample was determined using a purposive method with judgmental sampling. Visitors who are over 18 years old and carry out activities in the feeding area are selected as the research sample. The researchers distributed a link referring to an online questionnaire based on a Google Form to 214 ecotourism visitors. A total of 189 research questionnaires were filled out, but a total of 150 eligible questionnaires were calculated. Questionnaires were administered in Bahasa to remove any potential language barriers for each respondent. Each variables could be measured as follows:

- CCE measured by three indicators and nine items from Campos *et al.* (2017) and Hussain *et al.* (2020).

- INV assessed by four indicators and nine items from Andrades and Dimanche (2014).

- Two indicators and four items to measuring the SAT from Grissemann and Stokburger-Sauer (2012).

- TCB was measured by 3 indicators and 12 items from Groth (2005) also Liu and Tsaur (2014).

- Perceived risk of COVID-19 (PRC) was measured by two indicators and four items from Yin *et al.* (2020).

3.2 Data processing

In terms of data processing, partial least square (PLS) was used to maximize the explained variance of the dependent latent construct. Hair *et al.* (2019) posited that partial least square-structural equation modeling (PLS-SEM) is a potential statistical technique because it is applicable to all data scales, has few data assumptions and validates correlations with few theoretical foundations. Henseler and Fassott (2010) suggested PLS to test moderating effects in multiple regression. Cronbach's alpha and composite reliability (CR) were used to measure reliability in PLS-SEM with a score of 0.70 (Hair *et al.*, 2017a, 2017b). Average variance extracted (AVE) was used to measure validity with value of higher than 0.50 (Hair *et al.*, 2014) (Figure 1).

4. Result and analysis

Based on the descriptive analysis results, which included multiple items, the goal of the performed analysis was to define the profile of respondents who filled out the disseminated

Figure 1 Research model

Source: Developed by authors
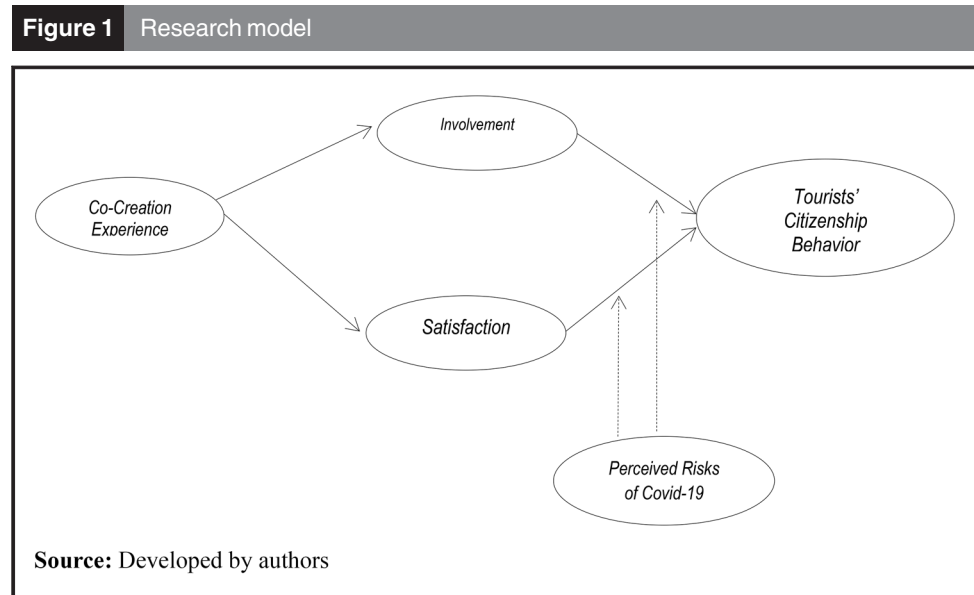
questionnaires, namely, the gender of respondents. Table 1 showed that female respondents were 105 people (69%), whereas male respondents were 45 (31%). There were 150 respondents in all who responded to the surveys. However, the study's findings were unaffected by gender differences. The range of respondents' age were dominated by ages of 18 until 35 years old with 112 respondents and the rest was 38 respondents with age >36.

For respondents' educational background, diploma or bachelor degree was the highest, with 106 people (70.67%). Most of the respondents knew about Baobab Safari Resort from Instagram, with 70 respondents (46.4%). For data feasibility, the data was assessed with validity and reliability tests using PLS-SEM. The research data showed that all variables had a CR value higher than 0.8 with CCE (0.904), INV (0.923), SAT (0.925), TCB (0.927) and also PRC (0.874) (Figure 2 and Table 2).

Schuberth *et al.* (2018) posited that standardized root mean residuals (SRMR) is widely used in applied research. The SRMR value for a properly model fit was zero or nearby. Our research discovered that the SRMR value was 0.097, indicating that the model fit was nearly ideal, close to zero. Then, f^2 tests was performed to calculate the absolute value of the contribution of each latent variable to the r^2 value, which have a criteria that strong relationship valued for higher than 0.35 and weak relationship valued below 0.15 (Sarstedt and Cheah, 2019). The data showed that the value of CCE has a strong category effect on the INV (1.931). CCE also had a high value of f^2 towards SAT with 1.508. The f^2 measurement of CCE towards TCB showed a weak value (0.067). This weak value of f^2 also showed the relationship between INV and TCB (0.025) and SAT and TCB (0.076).

Our proposed model is evaluated using R^2 for the dependent construct, path coefficient values or *t*-values for each path to test the significance between constructs in the structural model (Hair *et al.*, 2017b). The proposed model could be determined as strong relationship if the value of R^2 is higher than 0.70. The data showed that INV could be influenced by CCE with 0.659 (65.9%) which classified as moderate. SAT also could be influenced by CCE by

Table 1 Description of Baobab's visitors		
Demographic	*Frequency*	*%*
1. Gender		
a. Male	105	69
b. Female	45	31
2. Age		
a. 18–23	33	21.9
b. 24–29	38	25.2
c. 30–35	41	27.2
d. 36–41	20	13.3
e. 42–47	10	6.7
f. ≥48	8	5.4
3. Education level		
a. High school/Vocational school	31	20.5
b. Diploma or bachelor	106	70.67
c. Postgraduate	13	8.8
4. Source of information		
a. Instagram social media	70	46.4
b. Websites	4	2.6
c. Third-party applications	12	8
d. Family recommendation	23	15.2
e. Colleague's recommendation	41	27.3
Source: Developed by authors		
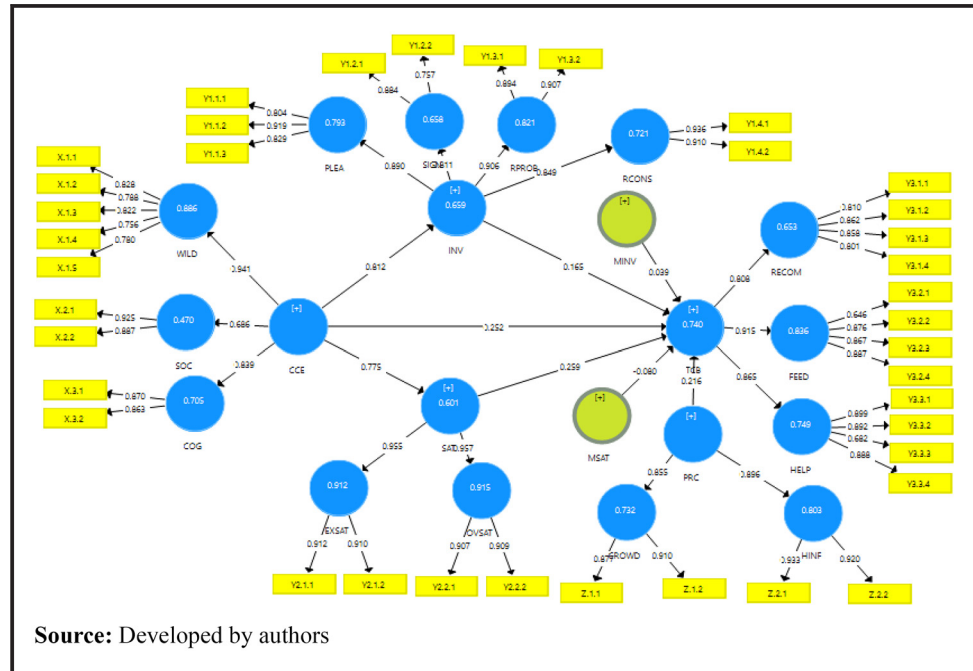
Source: Developed by authors

0.601 (60.1%) moderately. TCB has the highest category, which could be influenced by CCE by 0.740 (74%). The value of goodness of fit is known from the value of Q^2. The structural model in this study has a better Q^2 coefficient (0.965) because the value ranges $0 < Q^2 < 1$, indicating a better model. Henseler *et al.* (2015) suggested heterotrait–monotrait (HTMT) ratio as an alternative metric for evaluating discriminant validity, and a number of follow-up research have validated its robustness. Sarstedt *et al.* (2022) stated that HTMT criterion was <0.90 for conceptually similar constructs. Our data shown in Table 4 indicated that the HTMT values for each variable were declared to be valid because the results of each variable show a value of 0.90 (Table 3).

This study also performed a bootstrap analysis with SmartPLS and tested the seven hypotheses. The data showed that there was a positive and significant of CCE towards INV ($\beta = 0.812$ with *p*-value < 0.05), so *H1* was accepted. CCE and SAT also showed positive and significant results ($\beta = 0.775$; *p*-value < 0.05), so *H2* was accepted. CCE and TCB showed a positive and significant relationship ($\beta = 0.252$; *p*-value < 0.05), so *H3* is accepted. Next, INV towards TCB also showed a positive and significant relationship ($\beta = 0.165$; *p*-value < 0.05), so *H4* is accepted. The direct relationship between SAT and TCB showed positive and significant results ($\beta = 0259$; *p*-value < 0.05), so *H5* was accepted. PRC as a moderation between INV on TCB showed positive but insignificant results ($\beta = 0.039$; *p*-value < 0.05), so *H6* was accepted. Thus, PRC also ruled as a moderation between SAT toward TCB showed negative and insignificant results ($\beta = -0.080$; *p*-value > 0.05), so *H7* was rejected. This study also provided results on the mediating role of INV and SAT. INV could mediate CCE to TCB positively ($\beta = 0.134$; *p*-value < 0.05). Thus, SAT could also mediate between CCE and TCB ($\beta = 0.201$; *p*-value < 0.05). Table 4 was presented in detail and included the mediating role of INV and SAT; each implication will be discussed later in Table 4.

5. Discussion

As an Indonesian ecotourism site, Baobab Safari Resort Prigen tried to enhance their safety protocols in the post-COVID-19 pandemic. In this ecotourism, the CHSE protocol is

Table 2 Construct measurement

Variable	Indicator	Item	Mean	SD	Cronbach's α	Composite reliability	AVE
Co-creation experience	Wildlife experience	WILD1	4.61	0.737	0.854	0.896	0.632
		WILD2	4.61	0.661			
		WILD3	4.43	0.810			
		WILD4	4.48	0.804			
		WILD5	4.22	0.927			
	Social experience	SOC1	4.13	0.871	0.785	0.902	0.822
		SOC2	4.11	0.858			
	Cognitive experience	COG1	4.58	0.723	0.769	0.858	0.751
		COG2	4.36	0.800			
Involvement	Pleasure	PLEA1	4.68	0.645	0.809	0.888	0.726
		PLEA2	4.47	0.787			
		PLEA3	4.38	0.837			
	Sign value	SIGN1	4.62	0.662	0.734	0.807	0.677
		SIGN2	4.10	0.995			
	Risk probability	RPROB1	4.48	0.659	0.766	0.895	0.810
		RPROB2	4.52	0.660			
	Risk consequences	RCONS1	4.55	0.627	0.828	0.920	0.852
		RCONS2	4.50	0.670			
Satisfaction	Experience satisfaction	EXSAT1	4.60	0.611	0.795	0.907	0.830
		EXSAT2	4.58	0.568			
	Overall satisfaction	OVSAT1	4.62	0.617	0.786	0.903	0.824
		OVSAT2	4.48	0.689			
Tourists' Citizenship Behavior	Recommendation	RECOM1	4.48	0.698	0.853	0.901	0.694
		RECOM2	4.66	0.540			
		RECOM3	4.55	0.638			
		RECOM4	4.40	0.747			
	Giving feedback	FEED1	4.28	0.856	0.839	0.894	0.681
		FEED2	4.42	0.740			
		FEED3	4.49	0.754			
		FEED4	4.57	0.676			
	Helping others	HELP1	4.24	0.889	0.862	0.908	0.714
		HELP2	4.35	0.855			
		HELP3	3.88	1.061			
		HELP4	4.48	0.736			
Perceived risks of COVID-19	Perceived crowding	CROWD1	4.15	0.894	0.749	0.888	0.799
		CROWD2	4.38	0.812			
	Health infrastructure	HINF1	4.59	0.644	0.836	0.924	0.859
		HINF2	4.56	0.615			

Source: Developed by authors

Table 3 Heterotrait–monotrait (HTMT) ratio

Variables	Co-creation experience	Involvement	Satisfaction	Moderating value 1	Moderating value 2	Tourists' citizenship behavior
Co-creation experience	0.616					
Involvement	0.865	0.608				
Satisfaction	0.756	0.827	0.592			
Moderating value 1	0.799	0.773	0.646	0.882		
Moderating value 2	0.807	0.549	0.612	0.721	0.827	
Tourists' citizenship behavior	0.769	0.533	0.667	0.765	0.850	0.709

Source: Developed by authors

Table 4 Hypothesis testing

Variables	Direct effect	Indirect effect	T-score	Probability	Conclusion
CCE→ INV	0.812	–	23.574	0.000***	Accepted
CCE→ SAT	0.775	–	15.626	0.000***	Accepted
CCE→ TCB	0.252	–	2.405	0.017**	Accepted
INV→TCB	0.165	–	1.964	0.017**	Accepted
SAT→TCB	0.259	–	2.434	0.015**	Accepted
CCE→INV→TCB	–	0.134	1.961	0.017**	Accepted
CCE→SAT→TCB	–	0.201	2.510	0.012**	Accepted
MINV→TCB	0.039	–	0.406	0.685	Rejected
MSAT→TCB	−0.080	–	0.904	0.367	Rejected

Notes: $N = 150$; $R^2 =$ INV (0.659); SAT (0.601); TCB (0.701); $Q^2 = 0.965$; *Sig. p-value < 0.10; **Sig. p-value < 0.05; and ***Sig p-value < 0.01
Source: Developed by authors

implemented by limiting the number of visits to the African animal-feeding attraction to ten packages per day with a duration of 30 min for each visit to minimize transmission of the COVID-19 virus to animals. The interaction distance between visitors and animals and visitors and zookeepers is also limited to 1 meter to make visitors feel safe when interacting with each other. The use of masks has begun to be relaxed, but it is still recommended to wear at the destination. Handwashing facilities are also provided outside the feeding area to improve visitors' hygiene. The feeding process is accompanied by a zookeeper who provides a description of the animal's origin, characteristics, type of food, relocation method and unique name. Zookeepers also help visitors to take pictures and videos while using CHSE protocols as shown in Figure 3 below.

Figure 3 Inside Baobab safari resort Indonesia

Source: Developed by authors

5.1 In terms of Indonesian ecotourism, co-creation experience could influence involvement

Interaction with wildlife in the form of CCE could increase the suitability of visitors' needs for nature-based tourism (Moscardo and Saltzer, 2004). Feeding activities can increase cognitive elements regarding reciprocal relationships between humans and animals (Campos *et al.*, 2017). In terms of Indonesian ecotourism sites, animal feeding as an external stimulus plays an important role in removing boundaries as well as forming kinship feelings. The success of CCE is measured by how much tourists' needs are accommodated and suitability with intrinsic values (Sthapit *et al.*, 2019b). This finding might result from Baobab's visitors perceptions that animal feeding in wildlife setting was related to their personal values.

5.2 Co-creation experience could also influence satisfaction

CCE plays an essential role in influencing visitor satisfaction in terms of ecotourism. The existence of animal attractions, social interaction and cognitive experience is able to create satisfaction for value-added experiences (Usui *et al.*, 2021). The level of interaction with wild animals in terms of feeding attractions at Indonesian ecotourism sites post COVID pandemic requires tourists to remain distant, limit visiting time and also prohibit physical contact. Even though there are limitations, tourists are still comfortable because the animal feeding process is also accompanied by interactive storytelling, which raises tourists' cognitive and emotional expectations. The storytelling process that combines local culture and emotional narratives can be effective because tourists feel positive about stories and also like to share them with friends and family (Buonincontri *et al.*, 2017). Through SOR theory, positive reactions will arise if the experience is able to meet tourist expectations (Al Halbusi *et al.*, 2020).

5.3 Co-creation experience could influence tourists' citizenship behavior

With the greater value experience that comes from CCE, tourists tend to do actual behaviors such as providing feedback and advocating for others (Assiouras *et al.*, 2019). The presence of knowledge transfer when the tourism process occurs in the form of CCE in the Indonesian ecotourism sector could create a sense of oneness among tourists, creating a great opportunity for mutual help behavior with fellow tourists and with other people. Based on SOR theory, a voluntary relationship between tourists and providers will emerge when service quality as a stimulus is able to meet tourist expectations (Liu and Tsaur, 2014). The finding resulted from Baobab's visitors perceptions that animal feeding and social and cognitive experiences in a wildlife setting raised their possibilities to do some voluntary behavior such as advocacy and helping behavior.

5.4 Involvement could also affect tourists' citizenship behavior

Nowacki and Kruczek (2020) posits that higher levels of INV lead to tourists' behavioral intention such as TCB. In terms of ecotourism, when all people in the destination are involved in forms of CCE, it could tend to create social awareness that is part of sustainability tourism (Koure *et al.*, 2022). Based on SOR theory, characteristics of persons, such as agreeableness, could contribute to citizenship expressions (Liu and Tsaur, 2014). This finding might result from Baobab's visitors assessment that when all of their experiences in wildlife settings are met with tourists' values and risks, consequences will arise for their possibilities to do some voluntary behavior in the destination area.

5.5 Satisfaction could also affect tourists' citizenship behavior

If visitors feels satisfy from the process of personalized experiences, they tend to behave citizenship (Arıca *et al.*, 2022). In terms of ecotourism, satisfaction with nuances, services

and attractions that appear in ecotourism in protected areas is a good predictor of advocacy behavior as part of citizenship behavior (Nie and Tang, 2022). When all of the experiences and services in a wildlife setting were able to create tourists' satisfaction, it could raise the visitors' possibilities to do advocacy, giving feedback to providers and also helping others at Baobab Safari Resorts.

5.6 Health infrastructure could mitigate their impact on citizenship behavior on postpandemic era

The visitor's perception of destination risk is low if Baobab Safari Resort Prigen is described as having proper health protocol supporting facilities during the COVID-19, which will provide a sense of security for the location. This result was in line with Nie *et al.* (2022) which a safe tourist destination during the COVID-19 pandemic is a destination that has a low level of perceived risk and optimal perceived cleanliness. However, researchers also reveal that there is a shift in tourists' preferences about the COVID-19 pandemic and that tourists are not afraid to flock to destinations in the post-COVID-19 period. This phenomenon causes the decreasing of intrinsic assessment with the destination, which makes tourists tend to be reluctant to behave citizenship. Visitors will feel comfortable to behave citizenship in the post-COVID-19 period when the potential for crowds remains under control and the sanitation areas are widely dispersed (Teeroovengadum *et al.*, 2021). Several key terms that must be adhered to by Baobab Safari Resort that have the potential crowds are supporting protection and security while keeping tourists comfortable interacting in destinations (Rather, 2021). If viewed from the SOR theory, visitors will think critically that this phenomenon can support the health of visitors (organisms) during a pandemic when they are able to see that there are sanitation facilities (stimulus) at Baobab Safari Resort. This will have an impact on increasing attention to the emergence of TCB due to low-risk perception.

6. Conclusion

6.1 Theoretical contributions

The first novelty is related to TCB as an outcome of CCE in terms of Indonesian ecotourism on postpandemic. The results revealed that Indonesian tourists are willing to do citizenship behavior such as making recommendations, providing feedback and helping behavior at destinations. However, transitional state from a pandemic to an endemic could made tourists to keep remain distant, so the helping behavior becomes insignificant. The lack of duration of tourism activities also contributes to the insignificant value of helping others in destinations on postpandemic. This result is in line with SOR theory, which states that actual behavior requires an alignment between the stimulus phase and the organism. When Baobab Safari Resort's visitors are still feeling anxious of COVID-19, they will assess the destination safety and also prioritize services that are suitable for their health. By maintaining the feeling of security, tourists are able to behave citizenship by providing recommendations, feedback and helping behavior at the destination level.

The second novelty is the PRC variable, which moderates the relationship between INV and SAT towards TCB. The results enrich Rather's (2021) finding that it is necessary to control tourist destinations to maintain a sense of security related to a pandemic. Managing crowds and providing cleaning facilities were important to create a positive perception of the risks so that tourists were comfortable with their activities at destinations. Nie *et al.* (2022) explained that destinations could revive from pandemics if they could control perceptions related to health risks and facilities. It is possible for less significant citizenship behavior because tourists feel that crowd control at destinations such as Baobab Safari Resort gets less attention, even though the cleaning facilities are adequate. External stimulus processes

are not in line with the reactive behavior of tourists, so a comprehensive adjustment is needed.

6.2 Practical contributions

This study found that CCE can lead to actual behavior when there is a direct interaction with the animal attraction. It is important to know that tourism providers could provide these central attributes. CCE raised the personal values and also could lead to visitors' satisfaction. CCE could also increase the potential form of TCB, such as providing recommendations, giving feedback to management and engaging in mutual assistance activities between visitors. The existence of sanitation facilities could reduce the visitors' risk perception of COVID-19. However, the lack of crowd control at destinations also has an impact on increasing perceptions of pandemic risk in the context of tourism.

6.3 Limitations and future studies

This research focuses on ecotourism and natural-based attractions in Indonesia. This finding cannot be generalized to other countries. Another limitation is about the research sample in relation to TCB, considering the lack of potential behavior if visitor activities were carried out for a short duration. Future studies could pay attention to the duration of tourism activities to increase the possibility of citizenship behavior.

References

Al Halbusi, H., Estevez, P.J., Eleen, T., Ramayah, T. and Hossain Uzir, M.U. (2020), "The roles of the physical environment, social servicescape, co-created value, and customer satisfaction in determining tourists' citizenship behavior: Malaysian cultural and creative industries", *Sustainability (Switzerland)*, Vol. 12 No. 8, pp. 1-23, doi: 10.3390/SU12083229.

Andrades, L. and Dimanche, F. (2014), "Co-creation of experience value: a tourist behaviour approach", in Prebensen, N., Chen, J. and Uysal, M. (Eds), *Creating Experience Value in Tourism*, London, pp. 95-112, doi: 10.1079/9781780643489.0095.

Arica, R. and Çorbaci, A. (2020), "The mediating role of the tourists' citizenship behavior between the value co-creation and satisfaction", *Advances in Hospitality and Tourism Research (AHTR)*, Vol. 8 No. 1, pp. 125-150, doi: 10.30519/AHTR.649639.

Arıca, R., Polat, I., Cobanoglu, C., Çorbacı, A., Chen, P.J. and Hsu, M.J. (2022), "Value co-destruction and negative e-WOM behavior: the mediating role of tourist citizenship", *Tourism Review*, Vol. 77 No. 4, pp. 1116-1134, doi: 10.1108/TR-05-2021-0219.

Assiouras, I., Skourtis, G., Giannopoulos, A., Buhalis, D. and Koniordos, M. (2019), "Value co-creation and customer citizenship behavior", *Annals of Tourism Research*, Vol. 78, p. 102742, doi: 10.1016/j.annals.2019.102742.

Bertella, G. (2019), "Sustainability in wildlife tourism: challenging the assumptions and imagining alternatives", *Tourism Review*, Vol. 74 No. 2, pp. 201-210, doi: 10.1108/TR-11-2017-0166.

Bertella, G., Fumagalli, M. and Williams-Grey, V. (2019), "Wildlife tourism through the co-creation lens", *Tourism Recreation Research*, Vol. 44 No. 3, pp. 300-310, doi: 10.1080/02508281.2019.1606977.

Bharwani, S. and Jauhari, V. (2013), "An exploratory study of competencies required to co-create memorable customer experiences in the hospitality industry", *International Journal of Contemporary Hospitality Management*, Vol. 25 No. 6, pp. 823-843, doi: 10.1108/IJCHM-05-2012-0065.

Buonincontri, P., Morvillo, A., Okumus, F. and van Niekerk, M. (2017), "Managing the experience co-creation process in tourism destinations: empirical findings from Naples", *Tourism Management*, Vol. 62, pp. 264-277, doi: 10.1016/j.tourman.2017.04.014.

Campos, A.C., Mendes, J., do Valle, P.O. and Scott, N. (2017), "Co-creating animal-based tourist experiences: attention, involvement and memorability", *Tourism Management*, Vol. 63, pp. 100-114, doi: 10.1016/j.tourman.2017.06.001.

Casado-Aranda, L.A., Sánchez-Fernández, J. and Bastidas-Manzano, A.B. (2021), "Tourism research after the COVID-19 outbreak: insights for more sustainable, local and smart cities", *Sustainable Cities and Society*, Vol. 73, doi: 10.1016/j.scs.2021.103126.

Dalimunthe, N.P., Alikodra, H.S., Iskandar, E., Atmoko, S.S.U. and Lingga, R. (2021), "Visitor's perception about orangutan conservation in Indonesian zoos", *International Journal of Science, Technology & Management*, Vol. 2 No. 6, pp. 2209-2217, doi: 10.46729/ijstm.v2i6.395.

Fibriyanto, C. (2021), "Taman safari Prigen, Pesona Taman safari Terluas di Asia", Native Indonesia, available at: www.nativeindonesia.com/taman-safari-prigen/

Grissemann, U.S. and Stokburger-Sauer, N.E. (2012), "Customer co-creation of travel services: the role of company support and customer satisfaction with the co-creation performance", *Tourism Management*, Vol. 33 No. 6, pp. 1483-1492, doi: 10.1016/j.tourman.2012.02.002.

Groth, M. (2005), "Customers as good soldiers: examining citizenship behaviors in internet service deliveries", *Journal of Management*, Vol. 31 No. 1, pp. 7-27, doi: 10.1177/0149206304271375.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Marko, S. (2014), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, 1st ed., SAGE Publications.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017a), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Second Edi., SAGE Publications.

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2017b), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Second Edi., SAGE Publications.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24, doi: 10.1108/EBR-11-2018-0203.

Henseler, J. and Fassott, G. (2010), *Handbook of Partial Least Squares*, 1st ed., Springer, Berlin Heidelberg, doi: 10.1007/978-3-540-32827-8.

Henseler, J., Ringle, C.M. and Sarstedt, M. (2015), "A new criterion for assessing discriminant validity in variance-based structural equation modeling", *Journal of the Academy of Marketing Science*, Vol. 43 No. 1, pp. 115-135, doi: 10.1007/s11747-014-0403-8.

Hussain, K., Jing, F., Junaid, M., Zaman, Q.U. and Shi, H. (2020), "The role of co-creation experience in engaging customers with service brands", *Journal of Product and Brand Management*, Vol. 30 No. 1, doi: 10.1108/JPBM-08-2019-2537.

Indrianto, A.T.L., Mitasari, R. and Hangga, F.P. (2021), "Educational tourism: what strategies needed to develop it? (a case study of baobab safari resort)", *Proceedings of the 2nd International Conference on Business and Management of Technology (ICONBMT 2020)*, Vol. 175, pp. 11-14, doi: 10.2991/aebmr.k.210510.003.

Jeong, Y., Kim, E. and Kim, S.K. (2020), "Understanding active sport tourist behaviors in small-scale sports events: stimulus-organism-response approach", *Sustainability (Switzerland)*, Vol. 12 No. 19, doi: 10.3390/su12198192.

Koure, F.K., Hajjarian, M., Zadeh, O.H., Alijanpour, A. and Razieh, M. (2022), "Ecotourism development strategies and the importance of local community engagement", *Environment, Development and Sustainability*, Vol. 25 No. 1, p. 0123456789, doi: 10.1007/s10668-022-02338-y.

Learmonth, M.J. (2020), "Human–animal interactions in zoos: what can compassionate conservation, conservation welfare and duty of care tell us about the ethics of interacting, and avoiding unintended consequences?", *Animals*, Vol. 10 No. 11, pp. 1-14, doi: 10.3390/ani10112037.

Liu, J.S. and Tsaur, S.H. (2014), "We are in the same boat: tourist citizenship behaviors", *Tourism Management*, Vol. 42, pp. 88-100, doi: 10.1016/j.tourman.2013.11.001.

Liu, L., Cui, T., Wu, J., Cao, R. and Ye, Y. (2021), "Encouraging tourist citizenship behavior through resource uniqueness and service quality: the mediating role of emotions", *Journal of Vacation Marketing*, Vol. 27 No. 1, pp. 45-60, doi: 10.1177/1356766720952101.

Luo, J.(G.), Wong, I.K.A., King, B., Liu, M.T. and Huang, G.Q. (2019), "Co-creation and co-destruction of service quality through customer-to-customer interactions: why prior experience matters", *International Journal of Contemporary Hospitality Management*, Vol. 31 No. 3, pp. 1309-1329, doi: 10.1108/IJCHM-12-2017-0792.

McCartney, G. and Chen, Y. (2019), "Co-creation tourism in an ancient Chinese town", *Journal of China Tourism Research*, Vol. 16 No. 2, pp. 1-24, doi: 10.1080/19388160.2019.1596856.

Marcelino, J.A., Sukana, M. and Anom, I.P. (2022), "Provision of tourism facilities during the covid-19 pandemic (case study in Bali zoo, Singapadu village, Gianyar regency)", *European Journal of Business and Management Research*, Vol. 7 No. 4, pp. 99-102, doi: 10.24018/ejbmr.2022.7.4.1361.

Mehrabian, A. and Russell, J.A. (1974), "The basic emotional impact of environments", *Perceptual and Motor Skills*, Vol. 38 No. 1, pp. 283-301, doi: 10.2466/pms.1974.38.1.283.

Moscardo, G. and Saltzer, R. (2004), "Understanding wildlife tourism markets", in Saltzer, R. (Ed.), *Wildlife Tourism: Impacts, Management and Planning*, 1st ed., pp. 167-185, available at: https://researchonline.jcu.edu.au/7501/1/7501_Moscardo_%26_Saltzer_2004.pdf

Nie, K. and Tang, X. (2022), *Study on Ecological Value Co-Creation of Tourism Enterprises in Protected Areas: Scale Development and Test*, pp. 1-34.

Nie, Z., Xu, L., Zhang, H., Cao, Y., Zhang, C., Pan, J. and Zhang, J. (2022), "Crowding and vaccination: tourist's two-sided perception on crowding and the moderating effect of vaccination status during COVID-19 pandemic", *Journal of Destination Marketing & Management*, Vol. 24, doi: 10.1016/j.jdmm.2022.100705.

Nowacki, M. and Kruczek, Z. (2020), "Experience marketing at Polish museums and visitor attractions: the co-creation of visitor experiences, emotions and satisfaction", *Museum Management and Curatorship*, Vol. 36 No. 1, pp. 1-20, doi: 10.1080/09647775.2020.1730228.

Park, I.J., Kim, J., Kim, S.(S.), Lee, J.C. and Giroux, M. (2021), "Impact of the COVID-19 pandemic on travelers' preference for crowded versus non-crowded options", *Tourism Management*, Vol. 87, p. 104398, doi: 10.1016/j.tourman.2021.104398.

Potia, A. and Dahiya, K. (2020), "Optimistic, digital, generous: COVID-19 ' s impact on Indonesian consumer sentiment", *McKinsey*, pp. 1-4, available at: www.mckinsey.com/business-functions/marketing-and-sales/our-insights/survey-indonesian-consumer-sentiment-during-the-coronavirus-crisis#

Rather, R.A. (2021), "Demystifying the effects of perceived risk and fear on customer engagement, co-creation and revisit intention during COVID-19: a protection motivation theory approach", *Journal of Destination Marketing & Management*, Vol. 20 No. 100564, pp. 1-11, doi: 10.1016/j.jdmm.2021.100564.

Roe, K., McConney, A. and Mansfield, C.F. (2015), "How do zoos 'talk' to their general visitors? Do visitors 'listen'? a mixed method investigation of the communication between modern zoos and their general visitors", *Australian Journal of Environmental Education*, Vol. 30 No. 2, pp. 167-186, doi: 10.1017/aee.2015.1.

Sarstedt, M. and Cheah, J.H. (2019), "Partial least squares structural equation modeling using SmartPLS: a software review", *Journal of Marketing Analytics*, Vol. 7 No. 3, pp. 196-202, doi: 10.1057/s41270-019-00058-3.

Sarstedt, M., Hair, J.F., Pick, M., Liengaard, B.D., Radomir, L. and Ringle, C.M. (2022), "Progress in partial least squares structural equation modeling use in marketing research in the last decade", *Psychology & Marketing*, Vol. 39 No. 5, pp. 1035-1064, doi: 10.1002/mar.21640.

Schroeder, A., Pennington-Gray, L., Korstanje, M. and Skoll, G. (2016), "Managing and marketing tourism experiences: extending the travel risk perception literature to address affective risk perceptions", in Sotiriadis, M. and Gursoy, D. (Eds), *The Handbook of Managing and Marketing Tourism Experiences*, Emerald Group Publishing Limited, Leeds, pp. 379-395, doi: 10.1108/978-1-78635-290-320161015.

Schuberth, F., Henseler, J. and Dijkstra, T.K. (2018), "Confirmatory composite analysis", *Frontiers in Psychology*, Vol. 9, pp. 1-14, doi: 10.3389/fpsyg.2018.02541.

Shafiee, M.M., Tabaeeian, R.A. and Khoshfetrat, A. (2020), "Tourist engagement and citizenship behavior: the mediating role of relationship quality in the hotel industry", *Tourism and Hospitality Research*, Vol. 20 No. 4, pp. 481-492, doi: 10.1177/1467358420914373.

Sherwen, S.L. and Hemsworth, P.H. (2019), "The visitor effect on zoo animals: implications and opportunities for zoo animal welfare", *Animals*, Vol. 9 No. 6, pp. 1-27, doi: 10.3390/ani9060366.

Sthapit, E., Coudounaris, D.N. and Björk, P. (2019a), "Extending the memorable tourism experience construct: an investigation of memories of local food experiences", *Scandinavian Journal of Hospitality and Tourism*, Vol. 19 Nos 4/5, pp. 333-353, doi: 10.1080/15022250.2019.1689530.

Sthapit, E., Del Chiappa, G., Coudounaris, D.N. and Björk, P. (2019b), "Tourism experiences, memorability and behavioural intentions: a study of tourists in Sardinia, Italy", *Tourism Review*, Vol. 75 No. 3, doi: 10.1108/TR-03-2019-0102.

Sunkar, A., Rachmawati, E., Santosa, Y. and Hasanah, S. (2022), "Willingness to donate and preferences of zoos/safari parks visitors toward endangered mammals conservation", *Media Konservasi*, Vol. 26 No. 3, pp. 173-182, doi: 10.29244/medkon.26.3.173-182.

Teeroovengadum, V., Seetanah, B., Bindah, E., Pooloo, A. and Veerasawmy, I. (2021), "Minimising perceived travel risk in the aftermath of the COVID-19 pandemic to boost travel and tourism", *Tourism Review*, Vol. 76 No. 4, pp. 910-928, doi: 10.1108/TR-05-2020-0195.

Tomassini, L. (2019), "The co-creation of diverse values and paradigms in small values-based tourism firms", *Tourism Recreation Research*, Vol. 44 No. 3, pp. 359-369, doi: 10.1080/02508281.2019.1576376.

Tomassini, L. and Bertella, G. (2023), "The human gaze at animals and the missing animal gaze in tourism studies", *Current Issues in Tourism*, Vol. 36, pp. 1-6, doi: 10.1080/13683500.2023.2215920.

Torres-Moraga, E., Rodriguez-Sanchez, C. and Sancho-Esper, F. (2021), "Understanding tourist citizenship behavior at the destination level", *Journal of Hospitality and Tourism Management*, Vol. 49, pp. 592-600, doi: 10.1016/j.jhtm.2021.11.009.

Trip Advisor Indonesia (2021), "Peringkat 1 travellers choice awards hotel di Prigen, Jawa Timur", available at: www.tripadvisor.co.id/Hotels-g2699971-Prigen_East_Java_Java-Hotels.html

Usui, R., Sheeran, L.K., Asbury, A.M. and Blackson, M. (2021), "Impacts of the COVID-19 pandemic on mammals at tourism destinations: a systematic review", *Mammal Review*, Vol. 51 No. 4, pp. 492-507, doi: 10.1111/mam.12245.

Xu, S., Kim, H.J., Liang, M. and Ryu, K. (2018), "Interrelationships between tourist involvement, tourist experience, and environmentally responsible behavior: a case study of Nansha wetland park, China", *Journal of Travel & Tourism Marketing*, Vol. 35 No. 7, pp. 856-868, doi: 10.1080/10548408.2018.1439429.

Yin, J., Cheng, Y., Bi, Y. and Ni, Y. (2020), "Tourists perceived crowding and destination attractiveness: the moderating effects of perceived risk and experience quality", *Journal of Destination Marketing & Management*, Vol. 18, p. 100489, doi: 10.1016/j.jdmm.2020.100489.

Zhang, Y., Lee, T.J. and Xiong, Y. (2022), "The contribution of animal-based cultural ecosystem services to tourist well-being at cultural heritage sites", *Journal of Travel Research*, Vol. 61 No. 7, pp. 1631-1647, doi: 10.1177/00472875211037743.

Zhu, D.H., Sun, H. and Chang, Y.P. (2016), "Effect of social support on customer satisfaction and citizenship behavior in online brand communities: the moderating role of support source", *Journal of Retailing and Consumer Services*, Vol. 31, pp. 287-293, doi: 10.1016/j.jretconser.2016.04.013.

Appendix

Table A1 Research variable, indicator and item		
Variable	*Indicator*	*Item*
Co-creation experience	Wildlife experience	1) In this experience, I can interact with wild animal directly at Baobab Safari Resort
		2) In this experience, I can feed the wild animal at Baobab Safari Resort
		3) In this experience, I am able to move actively while interacting with wild animal at Baobab Safari Resort
		4) In this experience, I receive an interactive explanation from the trainer regard to general information about wild animal at Baobab Safari Resort
		5) In this experience, I can collaborate with trainers while interacting with wild animal at Baobab Safari Resort
	Social experience	6) I can meet with other visitors that have a same interest with wild animal at Baobab Safari Resort
		7) I can have an interaction with other visitors at Baobab Safari Resort
	Cognitive experience	8) Interacting with wild animal was a new experience for me at Baobab Safari Resort
		9) I am able to improve my personal skills while interacting with wild animal at Baobab Safari Resort
Involvement	Pleasure	10) It gives me pleasure to participate in this experience
		11) Participating in this experience is like giving a gift to myself
		12) This experience says a lot about who I am
	Sign value	13) This experience was precious for me
		14) It gives me a chance to know the people's character while participating in this experience
	Risk probability	15) It is easy for me to choose Baobab Safari Resort as a tourism destination
		16) I feel save when choosing at Baobab Safari Resort as a place to travel
	Risk consequences	17) I identify that at Baobab Safari Resort was an appropriate place for me to travel
		18) I identify that at Baobab Safari Resort was worth to me
Satisfaction	Experience satisfaction	19) I am satisfied with the experience that given in Baobab Safari Resort
		20) I am satisfied when I can collaborate with Baobab Safari Resort
	Overall satisfaction	21) I am satisfied with overall experience at Baobab Safari Resort
		22) Overall experience that I gained at Baobab Safari Resort has met my expectations
Tourists' citizenship Behavior	Recommendations	23) I recommend Baobab Safari Resort to all of my partners at work
		24) I recommend Baobab Safari Resort to all of my family
		25) I recommend Baobab Safari Resort to my friends
		26) I recommend Baobab Safari Resort to all of people that have a same interest
	Giving feedback	27) I can fill the questionnaire that related to visitor's satisfaction
		28) I can provide a constructive feedback to customer service
		29) I can provide an information to the management about the quality of services that have been made
		30) I give appreciation to all persons that give services as well at Baobab Safari Resort
	Helping others	31) I can provide assistance when another tourists are not well at Baobab Safari Resort (like had a heat stroke)
		32) I can provide a help with the elderly and children if they can't use some facility at Baobab Safari Resort
		33) I can provide a help for carrying bags voluntarily at Baobab Safari Resort
		34) I can provide a help to other visitors in accessing the application that related to destination's entrance permission
Perceived risk of COVID-19	Physical crowding	35) I see that in Baobab Safari Resort there aren't many crowds
		36) I see that in Baobab Safari Resort, there aren't a long queue nearby
	Health infrastructure	37) I see that all of tourism workers at Baobab Safari Resort are equipped with gloves and masks to avoid physical contact with visitors
		38) I find an adequate cleaning infrastructure such as hand-washing facilities and also hand sanitizers on each area at Baobab Safari Resort

Sources: Co-Creation Experience from Campos *et al.* (2017) and Hussain *et al.* (2020); Involvement from Andrades and Dimanche (2014); Satisfaction from Grissemann and Stokburger-Sauer (2012); Tourists' Citizenship Behavior from Groth (2005) also Liu and Tsaur (2014); Perceived Risk of Covid-19 from Yin *et al.* (2020)

About the authors

Andriani Kusumawati is a Marketing Professor at the Business Administration Department, Faculty of Administrative Sciences, Universitas Brawijaya, Indonesia. She holds a Doctor of Business Administration (DBA) degree from the University of Wollongong, Australia. Her current work is focused on consumer behavior and service marketing, including tourism and hospitality marketing. Andriani Kusumawati is the corresponding author and can be contacted at: andriani_kusuma@ub.ac.id

Cahya Nova Kurniawan is a Marketing Lecturer at the Business Administration Program, Faculty of Social and Political Sciences, Universitas Merdeka Malang, Indonesia. He holds a Master of Business Administration (MBA) degree from Universitas Brawijaya, Indonesia. His current work is focused on tourism and hospitality marketing as well as consumer behavior.

Mohammad Iqbal is an Associate Professor of Marketing at the Business Administration Department, Faculty of Administrative Sciences, Universitas Brawijaya, Indonesia. He holds a Doctor of Business Administration (DBA) degree from the Victoria Business School, Australia. His current work is focused on strategic marketing and strategic management.