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Millennials' predisposition toward ecotourism: the influence of universalism value, horizontal collectivism and user generated content

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ABSTRACT

This research effort empirically tests three factors hypothesized to affect Indonesian millennials' predisposition to engage in ecotourism experiences, namely universalism value, horizontal collectivism and user generated content (UGC). Indonesia is generally considered a collectivist (as opposed to individualistic) society, yet there is variance in both universalism value and horizontal collectivism. Two studies were conducted, one at 'soft', and another at 'hard' ecotourism sites. Findings showed that universalism value is positively related to ecotourism predisposition. UGC has a marginal moderating effect on the universalism → ecotourism predisposition. Horizontal collectivism also has a marginal moderating effect on the universalism → ecotourism predisposition in soft ecotourism but has significant effect in hard ecotourism. Both have direct effects on ecotourism predispositions. Managers must recognize that millennials can be segmented based on both universalism value and horizontal collectivism; and that to appeal to those with higher levels on these value dimensions UGC should be encouraged.

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Millennials include those born between 1982 and 2000 (Howe et al., 2000). Millennials are of notable exploratory interest because they are of age to be self-sufficient through personal income, independent decision makers, and are embracing a heightened willingness to allocate expenses for leisure activities. For supporting evidence, WYSE Travel Confederation suggests that youth travel generates over \$165 billion in tourism receipts, representing 200 million international trips a year – 20 percent of the total international tourism market (European Cities Marketing, 2014).

Despite the significant growth of youth tourism, global ecotourism trends show that ecotourists are mainly middle-aged to elderly. The ecotourism segment is growing faster than other travel segments, and this is true with millennials as well (Cini et al., 2015). However, research has found that there is wide variance across countries with

respect to young adults' knowledge of ecotourism (Cini & Passafaro, 2017). Poor knowledge might result in a reluctance to engage in ecotourism experiences, for example, if one has exaggerated perceptions of potential negative aspects such as discomfort.

Here, we empirically explore three factors posited to affect millennials predisposition to embrace ecotourism. Two relate to people's values, one of which is from Schwartz's (2012) theory of basic values and another from Hofstede's (1980) core society value dimensions. In this study we hold country constant – Indonesia is the focal country – and explore how differences in values within the millennial cohort affect ecotourism. Previous research concludes that between nation differences in values can be smaller than within nation variability (Reisinger & Crofts, 2010), suggesting that there are value driven segments within the domestic tourist market.

Millennials within and across countries are not homogeneous – there is a subset motivated by self-transcending or universalism values (Cavagnaro et al., 2018). This group views travel experiences as opportunities to learn and understand other people's cultures to create a better world for themselves and for others. Other studies have found that what motivates ecotourism transcends generations, that ecotourism purchase proclivity is more tied to life cycle rather than cohort. In their Singapore-based study, Litvin and Chiam (2014) found similarities between younger and older adults regarding their interest in ecotourism characteristics, notably wilderness, undisturbed nature, and being together as family. Here we test the link between one's universalism value and ecotourism predisposition.

A second value-based influence on ecotourism orientation is also examined, namely horizontal collectivism. In horizontal collectivism, even when individuals perceive themselves as part of a collective the other members in the group are seen as equals as opposed to thinking of oneself as being part of a hierarchically organized (vertical) collective (Singelis et al., 1995; Triandis & Gelfand, 1998). Studies have explored cross-nation collectivism versus individualism differences; for example, a meta-analysis concluded that in individualistic countries intentions to behave environmentally were linked to actual behaviors, but the attitude → intention link was weak in collectivist societies (Morren & Grinstein, 2016). Given that there is within nation variability in cultural values (Reisinger & Crofts, 2010), it is thus interesting to study the effect of variance in this value dimension within a country that overall scores high on collectivism.

A third, non-value-based influence on ecotourism predisposition particularly relevant to millennials is also explored. Millennials are the 'internet-in-its-pocket', digital-native generation (Wharton School, 2015), a consequence of which is that social media and social networking sites have broadened their concept of peer groups and influencers. Social media shapes millennials decision making processes (Simonson & Rosen, 2014), including perceptions of social norms which can affect travel choice behaviors (Maness et al., 2015). A study conducted in China revealed that UGC had a direct effect on pro-environmental behavioral intentions as well as influencing both personal and social norms (Han et al., 2017). Despite some millennials having transcendent universalism values that might drive them to embrace ecotourism, here we explore the moderating effect of UGC, a ubiquitous external influencer, on shaping their attitudes toward ecotourism.

This research thus embraces social learning theory (Bandura, 1971), endeavoring to understand how external 'socialization agents' affect attitudes and behaviors (Wang

et al., 2012). Specifically, we study the influence that universalism value (Schwartz, 1992; Schwartz et al., 2012) contributes to millennials predisposition toward ecotourism (Nowaczek & Smale, 2010), especially in the presence of the moderating roles of user generated content (Wang et al., 2012) and peer group considerations measured by horizontal collectivism (Hofstede, 1980; Hofstede et al., 2010; Iversen et al., 2015). We are not the first to explore how values affect ecotourism behaviors. For example, Fennell and Nowaczek (2003) considered how the List of Values (LOV) typology related to ecotourism in their descriptive, cross-cultural study; however, their focus was not millennials, nor did they consider UGC.

The conceptual model developed and tested appears in Figure 1.

This research was conducted in Indonesia, which is a country that ranks high overall in collectivism (Hofstede, 1980). Tourism is a significant contributor to the Indonesian economy: about 8 percent of GDP stems from the tourism sector. 15.8 million foreign tourists arrived in 2018, a 13 percent increase on the prior year, hence it is a major source of foreign exchange earnings (Sipahutar, 2019). Despite these impressive figures, most tourists are domestic, which is the focus here. In Indonesia ecotourism is responsible for 35% of tourist related income (Invest Islands, 2019). Indonesia has approximately 260 million people, of which 52 million are considered middle- or higher-income (The World Bank, 2017). There is therefore considerable opportunity to expand the domestic ecotourism market. Indonesia is the fourth most populace country in the world and classified as a newly industrialized, thus is an excellent case study of what can be expected in other emerging economies.

Two empirical studies are reported, one involving ‘soft’ ecotourists and the other ‘hard’ ecotourists (Weaver & Lawton, 2002). The resultant research contributes to the growing body of theoretical and empirical research regarding millennials’ predisposition toward ecotourism. Theoretically, this research contributes: (1) to our understanding of ecotourism behaviors by applying and adapting the Ecotourism Predisposition Scale (Nowaczek & Smale, 2010) to domestic travelers within an emerging country; (2) explores how within country variance in two value dimensions differentially affect millennial’s proclivity to engage in ecotourism; (3) assesses whether these proclivities differ between soft versus hard ecotourism opportunities; and finally, (4) sheds insight into the moderating effect of user generated content (ubiquitous among millennials) on the universalism value → ecotourism predisposition relationship.

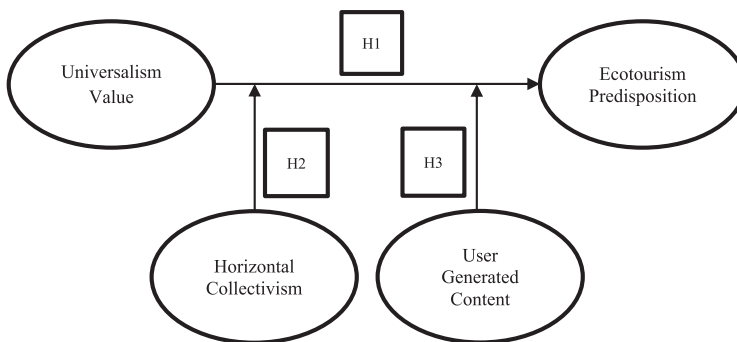


Figure 1. Research model.

From a practical perspective, these findings can assist stakeholder's decision making in the tourism field, especially about methods to educate millennials to build their interest in ecotourism as well as knowledge about appropriate behaviors. It is reasonable to assume that millennials in Indonesia have limited prior experience with ecotourism. Studies have shown that ecotourism without appropriate knowledge can have negative consequences. Inappropriate behaviors have been blamed for increasing the amount of rubbish in Indonesian national parks (Makur, 2019) as well as causing accidents and even deaths (Cahyadi, 2014). Ecotourism education can be successful at reducing off-trail walking (Goh et al., 2017); increasing binning behaviors (Esfandiar et al., 2019); and increasing participation by students studying tourism in ecotourism training, ecotourism development, and interest in joining management committees (Fatima et al., 2016). This research effort includes education-related suggestions.

Theoretical framework

The growth of tourism in [Indonesian] parks has been largely spontaneous rather than planned, with neither their conservation nor the needs of user-groups successfully addressed. One reason for this is that the characteristics of the latter are poorly understood. (Cochrane, 2006)

Universalism value, ecotourism predisposition and millennials

Bandura's (1971) social learning theory proposes that personal values are shaped by environmental influences. Individuals learn their values through a socialization process (Wang et al., 2012). Thus, for example, when individuals see other people's experiences and the resultant consequences, if it is meaningful to them they mimic that behavior. Social interactions shape one's norms, i.e. what are considered socially correct behaviors. Even vicariously experiencing others' actions influences one's conduct as a self-regulative process, and it might modify one's previous value system. The well-cited article by Moutinho (1987) made a strong case for the role of social influences on travel related decisions over 40 years ago.

Here we explore the relationship between one's values and their predisposition toward ecotourism. One's values are multi-dimensional (Hofstede, 1980; Schwartz, 2012). Schwartz defines basic values as the criteria people use to select and justify actions and to evaluate people (including the self) and events (Schwartz, 1992). Values differ from attitudes and behaviors (Blamey & Braithwaite, 1997; Schwartz, 1992). Values are conceptual: they pertain to desirable end states, transcend specific situations, guide selection or evaluation of behavior and events, and are ordered by relative importance. Values serve as standards of appropriate behavior (Moutinho, 1987).

Much research has investigated values, notably differences across nations (e.g. Hofstede, 1980; Hofstede et al., 2010; Schwartz, 1992) of particular relevance to ecotourism is universalism. Universalism acknowledges the needs of individuals as biological organisms, and that coordinated social interactions facilitate survival and welfare needs of groups (Schwartz, 1992). Universalism refers to understanding, appreciation, tolerance, and protection for the welfare of all people and for nature (Schwartz, 2012). To make a distinction between universalism and collectivism, Schwartz et al. (2012) advances that universalism is characterized for its transcendence, with a broader concern than just

loyalty to a particular group as in collectivism. We posit that higher levels of universalism will increase one's ecotourism predisposition.

Ecotourism is a concept that emerged in the 1980s (Fennell, 2015) that built upon prior research, such as that by Plog (1974). For example, Plog (1974) identified a tourist segment consistent with what would now be considered ecotourists: individuals that prefer non 'touristy' areas; enjoys the sense of discovery, delights in new experiences before others have visited the area; appreciates novelty and different destinations; likes a high activity level; and enjoys meeting and dealing with people from different cultures. More recently, the World Tourism Organization proposes that ecotourism has characteristics such as motivation to experience nature-based cultural and educational tourism destinations, avoiding negative impact, building awareness of biodiversity, and providing benefits to the local community (Garrod, 2008). One definition of ecotourism has not emerged, but there are similarities across ecotourism definitions that include having a nature-orientation, conservation of the natural environment and local cultures, environmental education, be sustainable, and participation by the local community (Baral et al., 2012; Cini et al., 2015; Cochrane, 2006; Dolnicar et al., 2008; Fennell, 2015; Nowaczek & Smale, 2010).

An explanation for what is considered ecotourism (Blamey & Braithwaite, 1997; Cini et al., 2015; Cochrane, 2006; Passafaro et al., 2015) is that many countries, including Indonesia, offer both 'soft' and 'hard' ecotourism options. The former are more mainstream, designed for the masses requiring relatively little time commitment or excessive exertion. They tend to be easily accessible and offer various services such as toilets, gift shops and more. The latter are more demanding, hence appeal to those seeking a higher level of commitment and willingness to experience some discomfort/hardship to appreciate nature's bounty.

Sweeping generalities suggest that tourists from Western cultures seek biodiversity, appreciating nature unaltered by humans, to 'walk in wild unpopulated places'. In contrast, tourists from East Asia are more prone to embrace an anthropocentric view, where 'humans are integrated into nature and can improve upon it' (Cochrane, 2006). However, exceptions have emerged. A study conducted at two nature reserves in Taiwan found ecotourism behavior was influenced by biospheric values (Lee & Jan, 2017). These contrasting views lend support for Dann (1993), who advances that one's nationality should not be assumed to be good proxy for 'cultural affiliation', proposing that values should be assessed at the individual level, as did, for example, Iversen et al. (2015) in their study of tourists in Norway. Reisinger and Crotts (2010) found that the variance in cultural values can be greater within a nation than between nations. Like Cochrane (2006), we assume there is heterogeneity in universalism value within the Indonesian tourist market.

Nowaczek and Smale (2010) developed a means to assess ecotourism predisposition that will be used in this research. One's predisposition precedes an individual deciding to experience or re-experience ecotourism. Their ecotourism predisposition measure taps six underlying dimensions extracted from an extant review of the literature: nature, culture, education, ethics, contribution and specialization. We argue that people with higher levels of universalism value will have a greater predisposition toward ecotourism. Thus, it is hypothesized that:

H1. Universalism value has a significant positive relation to ecotourism predisposition.

Millennials and collectivism

Collectivism is a core societal dimension advanced by Hofstede (1980). Collectivist (versus individualistic) societies emphasize the importance of the group above individuals. It starts with the family. As one matures, collectivism extends to a broader scope beyond one's family as a major source of one's identity. In contrast to collectivism is individualism, where ties between individuals are looser. Whereas collectivist cultures conform to social norms, those with a more individualist orientations like to be unique and seek variety to express their individuality (Iversen et al., 2015). In a study of university students from 11 countries, Pizam and Fleischer (2005) found that those from individualistic societies preferred more active, dynamic forms of tourist activities (less planned, riskier holidays), whereas those from collectivist societies preferred more static activities (organized activities with known outcomes). Indonesia ranks low in individualism, but high in collectivism (Hofstede et al., 2010). Indonesia offers both dynamic and static ecotourism experiences.

Since its initial introduction, it has been recognized that societies considered collectivist (or individualist) are not the same. For example, the collectivist mindset within an Israeli kibbutz is different from Indonesian's collectivism. As such, the individualism-collectivism divide was further divided into horizontal and vertical dimensions (Iversen et al., 2015; Singelis et al., 1995; Triandis & Gelfand, 1998). Horizontal collectivism emphasizes common goals, sociability and interdependence. Within group members are viewed as equals. Vertical collectivism, however, recognizes hierarchies within the group; members are willing to submit to authority, to sacrifice their own well-being to benefit the group.

To explain the role of collectivism as an antecedent to tourism related decisions, Meng (2010) and Pizam and Fleischer (2005) proposed that individuals from collectivist cultures would prefer to travel as a group rather than independently. Furthermore, an empirical study by Manrai and Manrai (2011) showed that collectivism plays a role while tourists plan their trip. Those with a collectivist orientation prefer anthropocentric and recreational side of traveling as opposed to visiting unspoiled wilderness areas (Cochrane, 2006); but see (Lee & Jan, 2017); and are willing to do more for the benefit of others without considering reward (Kiani et al., 2016) – including benefitting the local community, individuals not in their 'vertical collective'. Perceiving the self as being tied to others of equal status, which characterizes horizontal collectivism, has a significant influence on ecological beliefs (Hwang & Lee, 2018). Collectively these insights lead to the hypothesis that:

H2. Horizontal collectivism moderates the relationship between universalism value and ecotourism predisposition, such that higher levels of collectivism will increase the relationship between universalism and ecotourism predisposition.

Millennials and user generated content

User generated content (UGC) is created by the general public rather than by paid professionals, and primarily distributed on the internet (Daugherty et al., 2008). A definition of UGC is that is 'a new form of word-of-mouth that serve informational needs by offering non-commercial, detailed, experiential and up-to-date information with an access beyond the boundaries of one's immediate social circle' (Bizirgianni & Dionysopoulou, 2013).

Given its non-commercial origins, it is considered more trustworthy than official communications, and has been shown to strongly affect attitudes and intentions (Han et al., 2017; Pihlaja et al., 2017; Wang et al., 2012). Some of the more popular websites for sharing travel insights include YouTube, Facebook,

Flickr, Blogger, and Instagram (Daugherty et al., 2008).

Antecedents for travelers sharing their experiences online include altruism and social contribution as well as to build interpersonal relationships (Litvin et al., 2008). Travelers source UGC when forming their plans (Ayeh et al., 2013; Bizirgianni & Dionysopoulou, 2013; Pihlaja et al., 2017; Schroeder & Pennington-Gray, 2014). An important factor for users when choosing the source of UGC or accepting its veracity is the perceived trustworthiness and credibility, in which they seek homophily or similarity between themselves and the creator of UGC (Ayeh et al., 2013; Guo et al., 2016; Okazaki et al., 2016; Pihlaja et al., 2017; Schlegelmilch & Ollenburg, 2013). Engagement in pro-environmental travel related UGC is significantly related to the enhancement of personal and social norms, and behavioral intention toward pro-environmentalism (Han et al., 2017), especially when the persuasion is directed toward self-efficacy belief (Shahzadal & Font, 2018).

UGC usage among youth travelers is significant. In a study of youth tourists in Greece, Bizirgianni and Dionysopoulou (2013) and Heikinheimo et al. (2017) found that 89 percent of their sample ($n = 254$) used UGC while planning their travel. Sixty-nine percent of youth travelers watched their friend's travel posts, and 74 percent share their own travel experience (Bizirgianni & Dionysopoulou, 2013). User preference for generating or using UGC are affected by the uniqueness of the particular tourism event (Toral et al., 2017). Given these insights above, it is hypothesized that the relationship between universalism and ecotourism predisposition will be stronger for those more prone toward seeking positive UGC. Thus:

H3. User Generated Content moderates the relationship between universalism value and ecotourism predisposition, such that greater use of UGC increases the relationship between universalism and ecotourism predisposition.

Methodology

Study 1: data collected at 'soft' ecotourism sites in Bali

To participate in the study respondents had to be domestic visitors at one of four 'soft' ecotourism destinations on the island of Bali (Bali Tourism Board, 2017): Bedugul Botanical Garden (managed by Indonesian Institute of Science), Sangeh Monkey Forest, Badung (managed by cultural village), Sacred Monkey Forest Sanctuary Ubud (managed by cultural village), and Tanah Lot (managed by regency government, cultural village, and private company for daily operations). Visits to these sites are typically brief; part of a multi-purpose itinerary; and involve a high level of service (parking lot, toilet, souvenir shop, guide).

Respondents had to be between the ages of 18 and 38, the age range classified as Millennials.¹ As an incentive to complete the survey, souvenirs with a price approximately equal to \$0.75 were given to respondents. The result was 509 questionnaires, 21 of which were incomplete and therefore removed. The remaining 488 anonymous surveys were analyzed. The final data was collected 22 percent from Bedugul Botanical Garden, 21

percent from Sangeh Monkey Forest, 28 percent from Sacred Monkey Forest Sanctuary Ubud, and 29 percent from Tanah Lot. Respondents were 34.8 percent female and 65.2 percent male; 69.7 percent were between 18–28 years old and 30.3 percent were 29–38 years old; 53.3 percent had completed high school education, 30.1 percent completed college education / university degree, and 16.6 percent completed the graduate education level.

Measurement

All theoretical constructs were measured using five-point Likert scales from ‘strongly disagree’ to ‘strongly agree’, with the exception of universalism, which used the terms ‘very much like me’, ‘like me’, ‘somewhat like me’, ‘not like me’, and ‘not like me at all’ (Schwartz, 2012). (This research did not use ‘a little like me’ because the meaning of ‘somewhat’ and ‘a little’ is similar in Bahasa Indonesia, the official language). The ecotourism predisposition measures are based on the Ecotourist Predisposition Scale (EPS) developed by Nowaczek and Smale (2010); user generated content (UGC) is adapted based on social media peer communication measures developed by Wang et al. (2012); and horizontal collectivism comes from Iversen et al. (2015).

The original language of the various scale items was English, hence the questionnaire was translated into Bahasa Indonesia. The translated questionnaire was presented to a panel of language experts who concurred that the terminology used was common and would be understood by young adults (Boeije & Willis, 2013). The next step was to pre-test the complete questionnaire which consisted of 52 items on 30 undergraduate students. Based on Principal Component Analysis, the number of items was reduced to 24 following the minimum loading of 0.40 as recommended by Hair et al. (2014). The more parsimonious list of scale items should lower bias, especially that caused by possible response fatigue (Podsakoff et al., 2003). The normality test with Kolmogorov–Smirnov test shows $p = 0.138$; skewness and kurtosis figures are presented in the Appendix and fall within acceptable bounds. The final set of measures and their respective loadings appear in Table 1.

Analysis and findings

The first analysis conducted was to check if common method variance was a problem (Podsakoff et al., 2003). Harman’s Single Factor test was thus conducted. Exploratory factor analysis (principle component analysis with varimax rotation) revealed that no more than 27.3 percent of the variance was explained by any single factor.

The next step was to assess reliability and convergent/discriminate validity. As shown in Table 2, the composite reliability for each construct exceeds 0.80 and thus are considered very good. The Average Variance of Extracted (AVE) was calculated to assess convergent validity. In two instances AVE falls below 0.50²; however, the square root of AVE for each construct (in bold on the diagonal) is larger than its correlation (off-diagonal elements) with other constructs, hence the constructs are independent (Fornell & Larcker, 1981). The internal reliability of the constructs was assessed using Cronbach alpha. The resultant reliabilities were 0.795 for ecotourism predisposition, 0.771 for universalism value, 0.700 for user generated content, and 0.800 for horizontal collectivism. Assumption tests reveal that the data are normally distributed. Bivariate tests show that there are significant positive relationships between ecotourism predisposition and

Table 1. Survey questions and loadings for the ‘soft’ ecotourism destinations.

	Loadings
Y - Ecotourism Predisposition (subset of scale items from Nowaczek & Smale, 2010)	
Ethics	
EP1.1.The natural environment should be treated with respect	0.750
EP1.2.I always show much respect to the local people I meet on my travels	0.744
Culture	
EP2.1.When I travel, I enjoy interacting with the local people	0.677
EP2.2.The main reason I travel is for new cultural experiences	0.678
Nature	
EP3.1.I think nature is an essential component of any travel experience	0.603
EP3.2.Experiencing the natural environment is an important part of all my travels	0.664
Education	
EP4.1.I travel to new and different places to learn about their natural history	0.539
Specialization	
EP5.1.I regularly read nature-related magazines	0.434
X1 – Universalism Value (PVQ5X Items (Schwartz et al., 2012) HOW MUCH LIKE YOU IS THIS PERSON?)	
Universalism–concern	
U1.1.Protecting society’s weak and vulnerable members is important to him.	0.680
U1.2.He thinks it is important that every person in the world have equal opportunities in life.	0.786
U1.3.He wants everyone to be treated justly, even people he doesn’t know.	0.743
Universalism–tolerance	
U2.1.It is important to him to listen to people who are different from him.	0.739
U2.2.Even when he disagrees with people, it is important to him to understand them.	0.671
M1 – User Generated Content (Wang et al., 2012)	
UG1.I talked with my peers about traveling or nature or doing good for someone on social media.	0.594
UG2.I talked with my peers about nature or traveling or doing good for someone on the Internet.	0.539
UG3.I asked my peers for advice about nature or traveling or doing good for someone.	0.756
UG4.I obtained the information about nature, traveling, and doing good for someone from my peers.	0.762
UG5.My peers encouraged me to travel, to love nature, and doing good for someone.	0.702
M2 – Horizontal Collectivism (Iversen et al., 2015)	
H1.If a co-worker gets a prize, I would feel proud.	0.702
H2.The well-being of my co-workers is important to me.	0.706
H3.It is important to maintain harmony within my group.	0.733
H4.I like sharing little things with my neighbors.	0.699
H5.If a relative were in financial difficulty, I would help with my means	0.682
H6.I feel good when I cooperate with others.	0.718

universalism value ($r = 0.567, p < 0.01$), UGC ($r = 0.459, p < 0.01$), and horizontal collectivism. ($r = 0.443, p < 0.01$; refer to Table 2).

Hypotheses testing

To test the conceptual model shown in Figure 1, PROCESS v3.3 was used (Hayes, 2015, 2018). Model 2 was applied, which considers two moderators. The focal antecedent is universalism value (X), the moderators are UGC (W) and horizontal collectivism (Z), and the dependent variable is ecotourism predisposition. Confidence intervals were set at 95 percent and the number of bootstrapped samples set to 5,000. X, W, and Z were mean centered for constructing interaction terms. The estimated regression coefficients are presented in Table 3. Because several variables were examined at once, to address familywise error rate Table 3 also includes Holm (1979) α adjustment, which was calculated separately.

Universalism value had a significant positive effect on ecotourism predisposition ($b_1 = 0.3609, CI = 0.285–0.437, p < 0.001$), which is consistent with H1. Horizontal collectivism exhibited a *marginal* moderating effect ($b_5 = 0.1092, CI = -.014–0.233, p = 0.083$), hence H2 has limited support. When UGC was tested as a moderator, it was also *marginally* significant ($b_4 = 0.1260, CI = -0.021–0.273, p = 0.093$), thus lending limited support for H3.

Table 2. AVE, Composite Reliability and Discriminant Validity.

	Mean	SD	AVE	Composite Reliability	Ecotourism Predisposition	Universalism	User Generated Content	Horizontal Collectivism
Ecotourism Predisposition	3.6954	0.38459	0.415	0.847	0.644			
Universalism	3.5139	0.42602	0.526	0.847	0.567**	0.725		
User Generated Content	4.2459	0.41712	0.458	0.806	0.459**	0.361**	0.677	
Horizontal Collectivism	4.2357	0.45430	0.500	0.857	0.443**	0.453**	0.241**	0.707

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Table 3. Unstandardized OLS Regression Coefficients with Confidence Intervals (standard errors in parentheses). DV = Ecotourism Predisposition.

Ecotourism Predisposition							
		Coefficient (standard errors)	95% CI		t	p	Holm α adjustment*
Universalism (X)	b1	0.3609(0.0387)	0.2849,	0.4369	9.3263	0.0000	$p < 0.0100$
UGC (W)	b2	0.2751(0.0374)	0.2017	0.3486	7.3591	0.0000	$p < 0.0125$
X x W	b4	0.1260(0.0748)	-0.0209	0.2729	1.6850	0.0926	$p < 0.0500$
Horizontal Collectivism (Z)	b3	0.1993 (0.0340)	0.1325	0.2661	5.8600	0.0000	$p < 0.0167$
X x Z	b5	0.1092(0.0629)	-0.0144	0.2328	1.7360	0.0832	$p < 0.0250$
Constant	iy	3.6779(0.0144)	3.6495	3.7062	255.0137	0.0000	

$R^2 = 0.4402$
 $F(5,482) = 75.8810, p < 0.001$

X x W
 R^2 -chg = 0.0033
 $F(1,482) = 2.8391, p = 0.0926$

X x Z
 R^2 -chg = 0.0035
 $F(1,482) = 3.0139, p = 0.0832$

* Holm α adjustment = $\alpha / (\text{number of levels} - \text{rank in level} + 1)$.

Table 4. Conditional Effects of Universalism value as focal predictor of Ecotourism Predisposition using different values of UGC and Horizontal Collectivism as moderators.

UGC	Horizontal collectivism	Effect	se	t	p	LLCI	ULCI
-0.4171	-0.4543	0.2587	.0473	5.4732	0.0000	0.1659	0.3516
-0.4171	0.0000	0.3803	.0527	5.8485	0.0000	0.2048	0.4119
-0.4171	0.4543	0.3580	.0704	5.0838	0.0000	0.2196	0.4963
0.0000	-0.4543	0.3113	.0389	8.0073	0.0000	0.2349	0.3877
0.0000	0.0000	0.3609	.0387	9.3263	0.0000	0.2849	0.4369
0.0000	0.4543	0.4105	.0558	7.3534	0.0000	0.3008	0.5202
0.4171	-0.4543	0.3639	.0523	6.9586	0.0000	0.2611	0.4666
0.4171	0.0000	0.4135	.0464	8.8935	0.0000	0.3221	0.5048
0.4171	0.4543	0.4631	.0568	8.1584	0.0000	0.3515	0.5746

While the evidence supporting UGC and horizontal collectivism is therefore marginal, it is important to note that both UGC and horizontal collectivism have significant *direct* effects on ecotourism predisposition: $b_2 = 0.2751$, $CI = 0.202-0.349$, $p < 0.001$ for UGC, and $b_3 = 0.1993$, $CI = 0.133-0.266$, $p < 0.001$ for horizontal collectivism. Thus, while these two constructs only weakly interact with universalism value, they do affect ecotourism predisposition and thus should be acknowledged by tourism scholars. The R^2 of the model is 44.02 percent, $F(5,482) = 75,8810$ $p < 0.001$.

The next analysis was a floodlight analysis to investigate the conditional effect of universalism value on ecotourism predisposition at various levels of UGC and horizontal collectivism. The analysis considered low, average and high values of both UGC and horizontal collectivism (mean centered values). This produced nine combinations as shown in Table 4 (low UGC and low horizontal collectivism, low UGC and average horizontal collectivism, etc.). What is striking is that across all combinations of UGC/horizontal collectivism the effects are significant, and the effects increase with the level of UGC/horizontal collectivism: Higher levels of UGC/horizontal collectivism increase the effect of universalism on ecotourism predisposition.

Study 2: data collected from individuals referring to 'hard' ecotourism experiences

Study 1 involved individuals at 'soft' ecotourist destinations. To enhance the external validity of the proposed model, data for Study 2 were collected from members of a 'nature lovers club' (Cochrane (2006) – *Bahasa Indonesia: pecinta alam*) at several different universities in Indonesia: Java (64 percent), Bali (23 percent), Lombok (10 percent) and northern Sulawesi (3 percent). Respondents ($n = 205$ complete surveys) included students and alumni that had at least one experience of trekking or mountain climbing. Such excursions can be characterized as hard ecotourism (Weaver & Lawton, 2002), which include being a small group activity, physically and mentally challenging, offer few services, and involve a deep personal encounter with nature.

The profile of the respondents show that 97.6 percent were between 18–28 years old and 2.4 percent were 29–39 years old. Respondents were 29.8 percent female and 70.2 percent male; 87.8 percent had completed high school education, 11.2 percent completed college education/university degree, and 1 percent completed the graduate education level. Common method variance was not considered a problem as the Harman Single factor test revealed that no more than 33.9 percent of the variance was explained by any single

Table 5. Means, Standard Deviations, Loadings, AVE, Composite Reliability, and Cronbach Alphas from 'hard' ecotourists.

	MEAN	SD	Loadings	AVE	CR	α
Universalism				0.551	0.857	0.791
U1.1	5.878	0.678	0.850			
U1.2	5.785	0.673	0.831			
U1.3	5.883	0.744	0.715			
U2.1	5.776	0.691	0.712			
U2.2	5.610	0.605	0.568			
User Generated Content				0.584	0.875	0.820
UGC1	6.337	0.746	0.767			
UGC2	6.176	0.745	0.690			
UGC3	6.410	0.691	0.805			
UGC4	6.581	0.746	0.812			
UGC5	6.556	0.716	0.741			
Horizontal Collectivism				0.663	0.921	0.896
H1	6.581	0.541	0.751			
H2	5.556	0.571	0.860			
H3	6.615	0.553	0.888			
H4	6.439	0.628	0.761			
H5	6.581	0.550	0.723			
H6	6.517	0.615	0.886			
Ecotourism Predisposition				0.528	0.897	0.868
E1.1	5.732	0.714	0.870			
E1.2	5.732	0.735	0.906			
E2.1	5.688	0.700	0.727			
E2.2	5.698	0.738	0.741			
E3.1	5.746	0.743	0.761			
E3.2	5.659	0.679	0.590			
E4.1	5.663	0.663	0.576			
E5.1	5.751	0.650	0.557			

Table 6. Discriminant validity.

	Ecotourism Predisposition	Universalism	User Generated Content	Horizontal Collectivism
Ecotourism Predisposition	0.742			
Universalism	0.375**	0.764		
User Generated Content	0.349**	0.382**	0.814	
Horizontal Collectivism	0.499**	0.497**	0.451**	0.727

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

factor. The normality test with Kolmogorov–Smirnov shows $p = 0.200$; skewness and kurtosis figures are presented in the Appendix and are within acceptable bounds.

The analysis follows that of Study 1, the results of which are presented in Tables 5–7 (the flood light analysis available upon request). The noteworthy differences between the two studies are that in Study 2 the moderating effect of horizontal collectivism was supported, thus both H1 and H2 were supported. Also, the loadings and AVE for all the constructs were slightly higher for these 'hard' ecotourists.

Discussion and conclusion

This research effort focused on millennials' predisposition to engage in ecotourism experiences. The focal country was Indonesia, deemed an excellent case study of what can be

Table 7. Unstandardized OLS Regression Coefficients with Confidence Intervals (standard errors in parentheses). DV = Ecotourism Predisposition. UGC, Horizontal Collectivism and Universalism value are mean centered.

		Ecotourism predisposition					
		Coefficient (standard errors)	95% CI		t	p	Holm α adjustment*
Universalism (X)	b1	0.2961 (0.0600)	0.1778	0.4143	4.9381	0.0000	$p < 0.0100$
UGC (W)	b2	0.2683 (0.0556)	0.1588	0.3779	4.8289	0.0000	$p < 0.0125$
X x W	b4	0.1417 (0.1035)	-0.0624	0.3458	1.3690	0.1726	$p < 0.0500$
Horizontal Collectivism (Z)	b3	0.3191 (0.0696)	0.1819	0.4563	4.5868	0.0000	$p < 0.0167$
X x Z	b5	0.3247 (0.1300)	0.0684	0.5810	2.4983	0.0133	$p < 0.0250$
Constant	iy	5.6672 (0.0298)	5.6085	5.7259	190.2851	0.0000	
		$R^2 = 0.4360$					
		$F(5,199) = 30.7678, p < 0.001$					
		$R^2\text{-chng} = 0.0053$					
X x W		$F(1,199) = 1.8741, p = 0.1726$					
		$R^2\text{-chng} = 0.0177$					
X x Z		$F(1,199) = 6.2414, p = 0.0133$					

* Holm (1979) α adjustment = $\alpha / (\text{number of level} - \text{rank in level} + 1)$.

expected in other emerging economies. Here, we unearthed three factors (two value dimensions as well as UGC) that influence millennials’ predisposition to engage in ecotourism based on data from Indonesian domestic millennials. Because the variance in cultural values can be greater within a nation than between nations (Reisinger & Crotts, 2010), following the lead of Dann (1993) values were assessed at the individual level.

The first insight revealed is that universalism value is positively related to ecotourism predisposition. Universalism is an abstract construct that can be modified over time as well as amplified by UGC. The findings of this research thus confirm previous suggestions that universalism value influences ecotourism predisposition (Blamey & Braithwaite, 1997; Schwartz, 1992, 2012), but in this case the focus is on Indonesian millennials. Findings were mixed regarding the moderating effect of horizontal collectivism on the universalism → ecotourism predisposition (marginal significance for Study 1 which involved soft ecotourists, significant for Study 2 that surveyed hard ecotourists). There is also a significant direct effect of horizontal collectivism on ecotourism predisposition. And, like universalism, there is variance in this construct within Indonesian millennials, suggesting that there are means to tailor ecotourism related promotion material to appeal to those scoring high on these value dimensions.

This research also empirically supports Wang et al. (2012) and Han et al. (2017) contention that peer communication on social media and social networking sites shapes norms, attitudes, intentions and behaviors, in this case towards ecotourism experiences. Although the moderating effect of UGC was marginal, there was a significant direct effect on ecotourism predisposition in both studies. In other words, findings support that UGC enhances the knowledge of and one’s desire for ecotourism among millennials, insights consistent with previous findings that UGC is used by millennials for travel related planning (Ayeh et al., 2013; Bizirgianni & Dionysopoulou, 2013; Schroeder & Pennington-Gray, 2014).

A floodlight analysis revealed that all combinations of UGC/horizontal collectivism are significant: higher levels of UGC and horizontal collectivism increase the effect of universalism on ecotourism predisposition. These insights thus agree with Blamey and

Braithwaite (1997), Wang et al. (2012) and Han et al. (2017) that personal values and UGC are relevant variables for understanding behavioral intentions. Findings are also consistent with social learning theory (Bandura, 1971) in that UGC interacts with values to shape behavioral intentions. The significance of UGC's role in modifying attitudes toward ecotourism by millennials as was the case here has received little attention (Ayeh et al., 2013; Han et al., 2017; Schlegelmilch & Ollenburg, 2013).

Implications

From a practical standpoint, an insight for managers involved in ecotourism, both private and government, is to recognize that millennials can be segmented based on both universalism value and horizontal collectivism; and that to appeal to those with higher levels on these value dimensions promotion material should emphasize the novelty, ethics, nature and cultural awareness aspects that ecotourist adventures offer as opposed to discussing convenience, price or amenities. Promotion efforts should also recognize the value in educating ecotourists. Education efforts should be directed toward both internal psychological processes by strengthening pro-environmental personal and social norms (Han et al., 2017; Maness et al., 2015) as well as external psychological process by building awareness of the consequences of inappropriate behaviors (Esfandiar et al., 2019; Goh et al., 2017).

A way to identify and interact with them is through hashtag usage in social media (e.g. in Indonesia there is #ecotourism and #exploreindonesia). The other way to reach them is by paid / sponsored social media, where an algorithm is utilized to reach them based on prior search behavior, such as keywords like 'nature experience', 'local culture', and 'natural history'. While communicating through social media, managers must take into consideration that millennials seek information, advice, and encouragement from social media. It is important to note that the information they consider most trustworthy and credible comes from homophilous peers, those they consider similar to themselves. Managers should therefore endeavor to work with public influencers that are followed by millennials – perhaps by sponsoring influencers and having them visit ecotourist destinations – to share their insights on social media, where they write and post photos about their experiences regarding nature, ethics, education and culture. Moreover, managers can encourage millennials themselves to post their own experiences on social media, perhaps offering incentives to do so (e.g. discounts, vouchers, and awards for the most liked post). Booking.com, for example, offers discount vouchers if you successfully recommend a friend to use their site – in this case, the incentive would be for a referral that resulted in a visit to a particular destination.

While creating ads priming collectivism, managers must consider that millennials respond high to harmony and cooperation. For example, ads might use pictures and wording that protecting and experiencing nature also benefits communities around the site. Another way to promote horizontal collectivism is to encourage corporations to consider ecotourism destinations for employee outing/team building programs. Schools could also be encouraged to include their students in ecotourism preservation programs by requiring community service in the curriculum and communicating the resultant activities/outcomes in social media.

Limitations and future research

These research insights should be considered within its limitations. This study examined the effect of variance in values within a collectivist country (Hofstede, 1980); it would therefore be interesting to test this framework within an individualistic country, such as the USA. Within this study there is generational cohort overlap within our Millennials definition. Generation Y was born between 1982–2000 (Wong et al., 2008) and generation Z was born between 1995–2009 (Goh & Lee, 2018). These cohorts may have different perspectives with respect to the constructs examined (Parry & Urwin, 2011; Wong et al., 2008), hence future research could examine these groups separately. Furthermore, data were self-reported. Future research should consider incorporating a social desirability scale (Crowne & Marlowe, 1960).

These limitations aside, insights have been revealed regarding how values and a factor known to shape values (UGC) affect ecotourism predispositions among millennials living in Indonesia, many of whom have the financial resources, decision making authority and the mindset to embrace ecotourism adventures but often lack knowledge of what to expect.

Notes

1. There is not a consistent age range for millennials, with some sources proposing an older starting age (sourced 24/5/19: <https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/>).
2. Ways to increase AVE would include removing cases, but this can affect the representativeness of the sample; removing more items from the scale; and breaking the construct into sub-components, but the composite constructs have empirical support from other studies. Given the high composite reliabilities and evidence of convergent validity, the measurement scales/cases analyzed were not further adjusted.

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Appendix

Study1: Skewness and Kurtosis

Indicators	Skewness	S.E.	Kurtosis	S.E.
U1.1	-0.379	0.111	-0.664	0.221
U1.2	-0.637	0.111	-0.302	0.221
U1.3	-0.270	0.111	-1.312	0.221
U3.2	-0.830	0.111	-0.244	0.221
U3.3	-0.831	0.111	-0.222	0.221
UG1	-0.228	0.111	-0.639	0.221
UG2	-0.286	0.111	-0.643	0.221
UG3	-0.188	0.111	-0.621	0.221
UG4	-0.141	0.111	-0.621	0.221
UG5	-0.163	0.111	-0.566	0.221
HC1	-0.351	0.111	-0.752	0.221
HC1	-0.318	0.111	-0.676	0.221
HC3	-0.375	0.111	-0.745	0.221
HC4	-0.156	0.111	-0.643	0.221
HC5	-0.272	0.111	-0.692	0.221
HC6	-0.141	0.111	-0.530	0.221
E1.1	-0.130	0.111	0.253	0.221
E1.2	-0.263	0.111	0.120	0.221
E3.1	0.481	0.111	-0.396	0.221
E3.2	-0.532	0.111	0.373	0.221
E4.1	0.551	0.111	-0.457	0.221
E4.2	-0.141	0.111	-1.171	0.221
E5.1	-0.395	0.111	1.348	0.221
E6.2	-0.864	0.111	2.774	0.221

• One kurtosis figure lies outside +/- 2.

Study 2: Skewness and Kurtosis.

Indicators	Skewness	S.E.	Kurtosis	S.E.
U1.1	0.154	0.170	-0.823	0.338
U1.2	0.285	0.170	-0.810	0.338
U1.3	0.193	0.170	-1.172	0.338
U2.1	0.330	0.170	-0.892	0.338
U2.2	0.440	0.170	-0.651	0.338
UG1	-0.683	0.170	-0.946	0.338
UG2	-0.297	0.170	-1.153	0.338
UG3	-0.749	0.170	-0.618	0.338
UG4	-0.431	0.170	-1.098	0.338
UG5	-0.636	0.170	-0.828	0.338
HC1	-0.791	0.170	-0.490	0.338
HC1	-0.859	0.170	-0.259	0.338
HC3	-1.077	0.170	0.165	0.338
HC4	-0.666	0.170	-0.519	0.338
HC5	-0.856	0.170	-0.321	0.338
HC6	-0.895	0.170	-0.204	0.338
E1.1	0.201	0.170	-0.631	0.338
E1.2	0.021	0.170	-0.449	0.338
E2.1	0.085	0.170	-0.379	0.338
E2.2	-0.042	0.170	-0.343	0.338
E3.1	0.014	0.170	-0.489	0.338
E3.2	0.072	0.170	-0.302	0.338
E4.1	-0.009	0.170	-0.213	0.338
E5.1	-0.134	0.170	-0.034	0.338

• One skewness figure lies outside +/- 1.