

Tourism Geographies

An International Journal of Tourism Space, Place and Environment

ISSN: (Print) (Online) Journal homepage: <https://www.tandfonline.com/loi/rtxg20>

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To cite this article: Elizabeth Agyeiwaah, Stephen Pratt, Benjamin Lucca Iaquinto & Wantanee Sontikul (2023) Social identity positively impacts sustainable behaviors of backpackers, *Tourism Geographies*, 25:1, 1-22, DOI: [10.1080/14616688.2020.1819401](https://doi.org/10.1080/14616688.2020.1819401)

To link to this article: <https://doi.org/10.1080/14616688.2020.1819401>



Published online: 23 Oct 2020.



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Social identity positively impacts sustainable behaviors of backpackers

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ABSTRACT

While backpacker social identity remains an important theme among tourism researchers, its influence on sustainable behaviors has received limited attention. We examine the impact of backpacker social identity on sustainable behavior based on both a structural modeling approach and regression analysis. A survey of 400 backpackers is conducted within Cape Coast, a major tourism hub in Ghana, West Africa. Supporting seven out of eight hypotheses based on PLS-SEM, social identity has a positive effect on sustainable behavior, which in turn positively affects satisfaction suggesting that the more backpackers identify themselves with this group the more sustainably they behave. Additionally, social identity has a negative impact on unsustainable behavior which negatively impacts behavioral intentions. These findings suggest that individuals who identify themselves as backpackers are less likely to engage in unsustainable behavior. Findings contribute to a deeper understanding of the nexus between backpacker social identity and sustainable behavior.

摘要

虽然背包客社会认同一直是旅游研究者关注的一个重要主题,但其对可持续行为的影响却关注有限。本文基于结构方程模型和回归分析方法,研究了背包客社会认同对可持续行为的影响。本研究在西非加纳的主要旅游中心开普海岸对400名背包客进行了问卷调查,运用偏最小平方结构方程模型(PLS-SEM)验证假设,8个假设中有7个得到验证,发现社会认同对可持续行为有积极影响,而可持续行为反过来又会对满意度产生积极影响。这表明,背包客越认同这个群体,他们的行为就越可持续。此外,社会认同对不可持续行为有负向影响,不可持续行为对行为意图有负向影响。这些发现表明,那些认为自己是背包客的人不太可能从事不可持续的行为。本研究结果有助于加深对背包客社会认同与可持续行为之间关系的理解。

ARTICLE HISTORY

Received 6 February 2020
Accepted 17 August 2020

KEYWORDS

Social identity; sustainable behaviors; backpackers; Cape Coast; Ghana

关键词

社会认同; 可持续行为; 背包客; 海角海岸; 加纳

Introduction

As a socially constructed community of semi-independent, loosely organized, long-term budget tourists, backpackers continue to attract research attention (Iaquinto & Pratt, 2020; Larsen et al., 2011; Zhang et al., 2018). The global spread of backpackers, their increasing diversity, and their various sustainability implications, make them an important topic for sustainable tourism researchers (Iaquinto, 2015; Zhang et al., 2018). While various studies have examined backpacker identity (O'Reilly, 2006; Zhang et al., 2017, 2018), and other studies have explored backpacker sustainability (Iaquinto, 2015; Iaquinto & Pratt, 2020; Nok et al., 2017; Pearce, 2007), studies which combine the two are rare. Given that backpackers often identify strongly with the label of 'backpacker' (O'Reilly, 2006), and social identity is known to have significant implications for (un)sustainable behavior in general (McCright & Dunlap, 2011), investigating the relationship between backpacker identity and the sustainability of their behavior would make an important contribution toward understanding sustainable tourism. This study contributes new knowledge in this area by exploring the influence of social identity on the sustainable behavior of backpackers.

As backpacking continues to evolve, so too have researchers' attempts to keep up with this diverse phenomenon, leading to a distinctive spectrum of studies (Hsu et al., 2014; Loker-Murphy, 1997; Maoz, 2007; Nok et al., 2017). However, most backpackers do not want to be labeled as *tourists* due to the negative connotations associated with the term (O'Reilly, 2006; Zhang et al., 2017), particularly amid over-tourism discussions (Agyeiwaah, 2019). The preference for being identified as a *backpacker* and not a *tourist* implies that backpackers tend to think of their group as distinct and in some ways superior to the stereotypes evoked by the term 'tourist' (Tajfel et al., 1979), and as a result, they seek to affirm a positive and secure self-image during travel (Loker-Murphy & Pearce, 1995). Consequently, backpacking tourism does not only represent a social category but a social identity. If the term *backpacker* transcends a social category to imply social identity, then such an identity would impact sustainable behaviors (Zhang et al., 2018), but the question is – how?

This study adopts an integrative approach to the examination of sustainable behavior through the use of social identity theory (SIT). As a theory of social change, SIT originated from a movement described as a "revolutionary cadre" in social psychology. Tajfel's influence by Marxist philosophy meant that social change is at the heart of SIT (Hogg, 2006). Accordingly, SIT not only explains the basis for group differentiation and discrimination but views social competition as a way for groups such as backpackers to challenge the status quo (Spears, 2011). Fundamentally, SIT involves an evaluative distinction between 'us' and 'them' (Hogg et al., 2017). Its basic motivating principle is that individuals prefer a positive to a negative self-image (Tajfel, 1979) with the tendency of thinking of their group as good (Hornsey, 2008).

However, SIT is not the only theoretical approach available for explaining behavior. A popular choice has been the theory of planned behavior that argues conscious attitudes and beliefs direct behavior. Other theories downplay the role of consciousness and place more emphasis on agency. Practice theory, for example, argues that people can perform practices with or without conscious awareness as long as three elements of practice (materials, abilities, and meanings) are connected (Iaquinto & Pratt, 2020).

Stabilized behaviors then emerge from sets of routinized practices performed in specific settings such as in the household or the holiday destination (Barr et al., 2011). Meanwhile, actor-network theory argues that all objects, technologies, materials, and living things possess agency, thus human behavior is characterized as ‘more-than-human’ because it is shaped by various living and non-living actors (van der Duim et al., 2017).

Our choice to use SIT is due to the strong social identity of backpackers. Given that social identity involves primarily continuous social interactions in addition to expediting group differentiation (Brown, 2000; Hogg, 2016), its recognition as a predictor of group behavior is well-established, at least in social psychology, environmental psychology and consumer behavior research (Baca-Motes et al., 2013; Hornsey, 2008). Conceptually, SIT can account for the in-group/out-group dynamics that characterize backpacker social identity and is thus a useful approach to understand the sustainability of backpacker behavior.

Literature review and hypotheses development

Defining backpackers

According to Loker-Murphy and Pearce (1995, p. 819), backpackers are distinguished by five important elements such as a preference for budget accommodation, an emphasis on meeting other people, an independently organized and flexible travel schedule, longer rather than brief holidays, and an emphasis on informal and participatory holiday activities. Of these elements, a greater consensus exists on their predilection for budget accommodation (see Hampton, 1998; Mohsin & Ryan, 2003) since their youthful travel adventures are characterized by a tight budget (Loker-Murphy & Pearce, 1995; Pearce, 1990).

After backpacking went mainstream in the 1990s, it experienced a considerable degree of diversification that problematized the use of stable definitions. Backpackers could be gap year tourists, working holidaymakers, international students, or lifestyle travelers (Cohen, 2011; O’Reilly, 2006). Backpackers are no longer exclusively Western (Zhang et al., 2018), or young (laquinto, 2015), but they commonly remain university-educated, middle class, and prefer cheaper communal forms of accommodation such as hostels (laquinto, 2015; Nok et al., 2017). Some scholars argued the different criteria for defining backpackers were problematic and proposed more focused criteria (e.g. Cohen, 2011; Dayour et al., 2019; Zhang et al., 2017). The use of the self-identification criterion has emerged as a more operational approach to selecting backpackers (e.g. Cohen, 2011; Dayour et al., 2019; Zhang et al., 2017) which is the approach adopted in this paper. We thus define backpackers as travelers who identify themselves to be so, an approach aligned with SIT as it is based on distinguishing an ‘us’ from a ‘them’.

Within backpacker research, backpacker identities are found to be constructed based on different practices in different social contexts (Bui et al., 2013; Zhang et al., 2017). For example, in some social contexts, identity is about road status (Sørensen, 2003), guidebook communication (Currie Russell et al., 2011) and narratives of risk (Elsrud, 2001). Studies in the Chinese context further suggest that the external-oriented exploration motive, work alienation, and detachment from home centers are

the major influential factors of Chinese backpacker social identities (Zhang et al., 2018). While recent studies have not applied social identity theory to understand the relationship between backpackers and sustainability, some have employed group categorizations such as nationality (i.e. German, British, French, and American) (Iaquinto & Pratt, 2020).

(Un) sustainable behavior and social identity theory

Understanding sustainable behavior provides a promising angle for developing strategies to reduce unsustainable actions since attitudes do not necessarily lead to actual behavior (Juvan & Dolnicar, 2014). Bickman (1972) argues that sustainability problems can only be solved through influencing behaviors, not just attitudes. Because of this, studies on sustainable behavior have gained momentum, in part due to the fundamental truth that tourists are consumers who are pleasure-seeking and not generally prepared to modify their behaviors as regards resource consumption even though they may have positive attitudes towards the environment (Juvan & Dolnicar, 2014). In essence, sustainability researchers are interested in backpackers because they facilitate the close analysis of meaning in influencing onsite consumer behavior (Pearce, 2007). Indeed, recent studies confirm that backpackers are predisposed to act sustainably due to the low-budget focus that informs their actions when traveling (Iaquinto, 2015). Other studies maintain that backpackers prefer spending on local products and less on international brands as part of their sustainable behavior (Nok et al., 2017). While these studies make excellent contributions to backpacker sustainable behavior research, the lack of investigation of the connection between sustainable behavior and social identity implies that such findings represent individualistic and reductionist approaches to backpacker sustainable behavior.

While recognizing sustainability as a multifaceted, highly complex and contested concept (Miller et al., 2010; Mowforth & Munt, 2008), in this study a straight-forward understanding of the term is applied to avoid a protracted debate on the topic and to focus on the aims of the research. Thus in this study, sustainability is understood to be comprised of environmental, economic, and socio-cultural elements that reflect the triple bottom line concept (Agyeiwaah et al., 2017). Specifically, environmentally sustainable behaviors involve actions geared towards environmental conservation such as choosing green products. Economic sustainability involves actions that create net economic benefits for residents such as promoting local products. Socio-cultural sustainability represents actions that demonstrate respect for local culture and ways of life (Kastenholz et al., 2018).

One way that researchers have managed the complexity of sustainability is to bring it down to the level of the individual by focusing on behavior (Whitmarsh & O'Neill, 2010). While the majority of this research has been undertaken in the domestic context (Barr & Gilg, 2006), there is widespread recognition that tourism is also an important context within which (un)sustainable behavior can be performed (Barr et al., 2011; Budeanu, 2007; Juvan & Dolnicar, 2014).

Previous research into behavioral change has often been based on a 'rational "deficit model" of behavior' in which it was assumed that providing more information

about environmental problems would result in appropriate changes to behavior (Miller et al., 2010, p. 629). However, this model has now been heavily critiqued and researchers are well aware of the gap between awareness and sustainable behavior (Barr & Gilg, 2006; Juvan & Dolnicar, 2014; Miller et al., 2010). Another line of inquiry is the role of identity in guiding (un)sustainable behavior. Researchers have, for instance, explored the environmental implications of gender identity (Swim et al., 2020) and political ideology (McCright & Dunlap, 2011), and they have found that self-identity is an important determining factor influencing the performance of carbon-offsetting behavior (Whitmarsh & O'Neill, 2010). Tourism researchers have applied notions of behavior to sustainable tourism mobility (Cohen et al., 2014), to identify tourists with smaller environmental footprints (Dolnicar, 2010), and to explore the relationship between place attachment and pro-environmental behavior (Tonge et al., 2015). However, understanding the relationship between tourist identity and sustainable behavior could provide new insights.

In this study, social identity is understood to comprise cognitive, evaluative, and emotional dimensions (Hornsey, 2008; Zhang et al., 2019). The cognitive component implies the individual's sense of being aware as a member of the group which fosters the second component of an evaluation process where the individual associates value connotations of this group to him/herself against relevant out-groups. These two preceding components stimulate an emotional commitment where the individual displays an affective connection to the group (Hornsey, 2008; Zhang et al., 2019). Group norms have greater pull as behavioral guides since groups become the basis for self-identification (Blader & Tyler, 2009). Studies in environmental psychology provide empirical support for the relationship between social identity and sustainable behavior. Clayton (2003) constructed an environmental identity (EID) scale to examine how individual differences of environmental identity predict environmentally sustainable actions among students and found that EID scores had a significant correlation with environmental behavior. Similarly, Dono et al. (2010) found a significant relationship between social identity and environmental behavior. Whitmarsh and O'Neill (2010) established that pro-environmental self-identity is positively related to environmental behaviors including waste reduction, water saving, and domestic energy conservation. Identity has also been found to exert a positive effect on satisfaction (Michinov et al., 2008). This empirical evidence implies that the more individuals identify themselves as backpackers, the more likely they are to behave sustainably and to derive satisfaction from such behavior. Conversely, it would be expected that the more people identify themselves as backpackers, the less likely they are to behave unsustainably. Hence, it is hypothesized that:

H1: Backpacker social identity has a positive influence on sustainable behaviors.

H2: Backpacker social identity has a positive effect on satisfaction.

H3: Backpacker social identity exerts a negative influence on unsustainable behaviors.

(Un)sustainable behavior, satisfaction, and behavioral intentions

While both sustainable behavior and satisfaction remain topical issues in tourism, their relationship with backpacker research remains scarce. Tourist satisfaction represents an

“individual’s cognitive-affective state derived from a tourist experience” (del Bosque & San Martín, 2008, p. 553). Satisfaction, thus, involves both a cognitive and emotional assessment of a product and an intrinsic positive outcome emanating from behavior that fulfills the expectations of the individual (Ryan & Deci, 2000). Behavior is, thus, an antecedent of satisfaction (Corral-Verdugo et al., 2016). Corral-Verdugo et al. (2016) criticize the over-represented sustainable behavior research on pro-ecological and altruistic actions at the expense of frugal and equitable actions with the finding that sustainable actions have a positive relationship with satisfaction. Segmenting rural tourists by their sustainable travel behavior, Kastenholz et al. (2018) found that of the three clusters identified in their study, those with higher levels of sustainable behavior were more satisfied than those with less sustainable behavior. Similarly, Nassani et al. (2013) confirmed a positive relationship between sustainable consumption behavior and consumer satisfaction with life. Hence, this study posits that:

H4: Sustainable behavior has a positive influence on satisfaction.

H5: Unsustainable behavior has a negative effect on satisfaction.

Behavioral intention implies the perceived likelihood to engage in a particular behavior (Ajzen, 1991). In many studies, behavioral intentions are used interchangeably with attitudinal loyalty and measured by the likelihood to engage in positive word of mouth, recommend to others, re-purchase and revisit and select a product as the first choice among alternatives (Cronin Jr & Taylor, 1994; Song et al., 2012; Yoon et al., 2010). Previous backpacker studies have examined the connections between behavioral intentions and perceived risk (Dayour et al., 2019) as well as antecedents of word of mouth (Alves et al., 2016). However, these studies provide inadequate information on the likelihood of backpackers to engage in (un)sustainable behavior to facilitate strategic sustainable strategies by destination management organizations. Previous studies have found that tourists with more sustainable behavior possess higher levels of repeat visits to such destinations (Kastenholz et al., 2018). This study, thus, hypothesizes that:

H6: Sustainable behavior has a positive influence on behavioral intention.

H7: Unsustainable behavior has a negative influence on behavioral intention.

The relationship between satisfaction and behavioral intention is one of the most examined themes in tourism research since they serve as a yardstick for determining the overall performance of a destination’s product (Song et al., 2012). Most studies examine the relationship between these two constructs within the cognitive-affective–conative framework (Evanschitzky & Wunderlich, 2006; Oliver, 1999), where satisfaction represents an affective component that antecedes the conative component (behavioral intentions). Visitor satisfaction has been found to possess a positive relationship with the behavioral intentions of visitors at four tourist destinations in Slovenia (Žabkar et al., 2010). Similar conclusions have been found, specifically, within backpacker studies where backpackers who are satisfied with their hostels are more likely to use backpacker hostels again (Chitty et al., 2007). Consequently, we hypothesize that:

H8: Satisfaction has a positive influence on behavioral intention.

The proposed conceptual model summarizing the study is presented in [Figure 1](#).

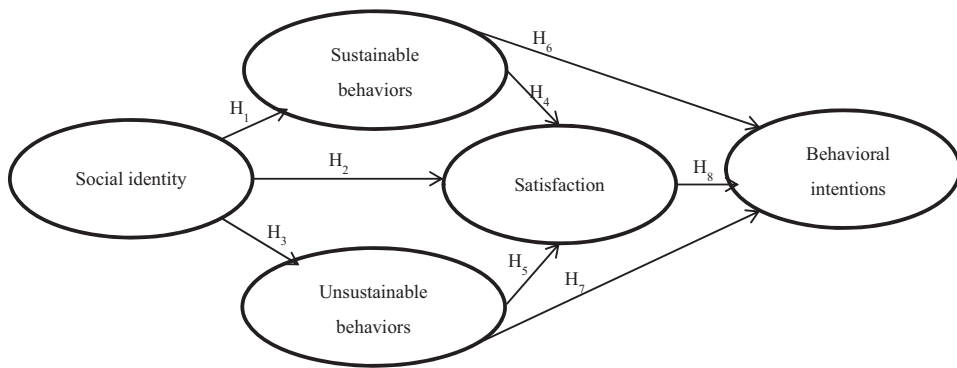


Figure 1. Conceptual model.

Methods

Study site and target participants

Backpackers represent an important market for many developing countries, including Ghana, due to their taste for local products and services and quest to experience local culture (Sørensen, 2003). Previous research confirms Ghana as a preferred destination for backpackers to Africa who prefer to interact with locals and stay in hostels and budget accommodation (Dayour, 2013). Despite backpackers being positioned as a ‘good’ group of travelers, compared to mass tourists, we do not know whether such an identity influences their sustainable behaviors. As Ghana is increasingly becoming an important backpacker destination, the need to understand backpackers’ sustainable behavior during their trips becomes increasingly pertinent for the sustenance of the tourism industry. Additionally, as many backpackers are multi-destination and/or round-the-world travelers, their (un)sustainable behaviors can have wide-reaching implications.

Despite the substantial literature on backpackers, a lacuna exists on how backpacker social identity impacts sustainable behavior and the outcomes thereof. Addressing this dearth of research, the study setting was in Cape Coast, a major tourism hub in southern Ghana, heralded as the kingpin of tourism attractions. Given such a concentration of tourism in this area, backpacker research in Cape Coast has increased over the past years, on topics like risk perceptions (Adam, 2015), and motivations (Dayour, 2013) but with no examination of backpackers’ sustainable behavior concerning their social identity. The current study presents a social identity approach to understanding backpacker behavior by targeting backpackers within the Cape Coast Metropolis of Ghana using a questionnaire survey.

Survey instruments and measures

Bouldry (2009) suggests the need for proper conceptualization and operationalization of key concepts in structural modeling. Therefore, the questionnaire survey instrument used in this study identified specific theoretical constructs that were used to assess the model. In doing this, a multi-measurement approach was adopted where the items for each construct (i.e. social identity, sustainable behavior, unsustainable

behavior, satisfaction, and behavioral intention) were more than two (Hinkin, 1998). For example, there are six social identity statements adapted from Zhang et al. (2018) study on the social identity of Chinese backpackers, which recognizes social identity as comprising cognitive, evaluative, and emotional aspects. Three examples of the cognitive-evaluative-emotional statements include: "You are very interested in what others think about backpackers"; "When you talk about backpackers, you usually say 'we' rather than 'they'"; and 'When someone praises backpackers, it feels like a personal compliment'. Sustainable behavior statements were measured by six statements adapted from sustainability studies broadly (Agyeiwaah et al., 2017) and specifically on backpackers (Iaquinto, 2015; Nok et al., 2017). Examples of these statements include statements that assessed whether backpackers "read the history of their destinations; interact with local residents; and buy and choose environmentally friendly local accommodation".

Unsustainable behaviors represent the opposite of sustainable behaviors and included actions of "Smoking anywhere without considering those around them"; "Leaving the TV, lights, and fan on always"; and "Not respecting the religious or spiritual needs of others". These statements were adapted from sustainability studies and other studies on responsible tourists' behaviors cited above. Seven statements about unsustainable behavior were asked in the survey. Four satisfaction statements and five behavioral intention statements were adapted from the overwhelming literature on these constructs (Agyeiwaah et al., 2016; Song et al., 2012). All the scales for measurement adapted a 7-point Likert Scale (1 = Strongly disagree to 7 = Strongly agree) except sustainable and unsustainable behavior where backpackers were asked how frequently they undertake these behaviors on a 6-point Likert Scale (Very Frequently [6]; Frequently [5]; Occasionally [4]; Rarely [3]; Very rarely [2] and Never [1]). Thus, a higher score means that more sustainable behaviors were performed.

In addition to the five main constructs, respondents' socio-demographic profiles were assessed in terms of their gender, age, education, nationality, and purpose of travel. After the instrument was developed based on existing studies to ensure its theoretical fitness, a pre-test was set to validate the proposed items. While the pre-test generally showed the instrument measured what it was intended to measure, some items required revision for better assessment of the constructs for actual data collection. Before these procedures, research assistants from the University of Cape Coast, Ghana, were trained on how to identify backpackers, given the overlap of this group with volunteer tourists in Ghana. The assistants thus spotted backpacker centers and budget accommodation within the Cape Coast Metropolis for both pre-testing and actual data collection using a screening question of whether respondents are backpackers or not.

Data collection

Data collection commenced following the pre-testing of the survey instrument. The selection of respondents was based on non-probability convenience sampling. As part of this process, a screening question was important to separate the target group from ordinary tourists, given the strong identity of backpackers. Following the self-

Table 1. Backpacker sample profile.

Variables	n	%		n	%
Gender			Visits to Ghana		
Male	182	45.5	No previous visit	45	11.3
Female	218	54.5	1 previous visit	338	84.5
Age			2 or more previous visits	17	4.2
16-24 years	154	38.5	Travel Companions		
25-34 years	199	49.8	Friends	185	46.3
35 years +	47	11.7	Alone	182	45.5
Education			Organized Tour	15	3.8
High school graduate or less	67	16.8	Spouse/Partner	9	2.3
College graduate	209	52.3	Family members	6	1.4
Postgraduate	91	22.8	Others	3	0.7
Professional qualification	30	7.4	Length of Stay in Ghana		
Others	3	0.7	0 to 5 Days	246	61.5
Nationality			6 to 10 Days	78	19.5
German	86	21.5	11 to 15 Days	68	17.0
British	81	20.3	16 Days or longer	8	2.0
American	66	16.5	Length of Time as a Backpacker		
Spanish	56	14.0	0 to 5 Weeks	169	42.4
French	47	11.8	6 to 10 Weeks	94	23.6
Australian	38	9.5	11 to 15 Weeks	57	14.3
South African	1	0.2	16 to 20 Weeks	33	8.2
Others	25	6.2	Longer than 20 Weeks	46	11.5

identification criterion for selecting backpackers (e.g. Cohen, 2011; Dayour et al., 2019; Zhang et al., 2017), we first used a screening question for backpackers to self-identify before participating in the study. The self-identification approach allowed the inclusion of respondents who self-identified with backpacking tourism (Adam, 2015). With the help of assistants, a survey questionnaire was administered to backpackers to examine how their identity impacts on their sustainable behavior at major data collection points such as Oasis Beach Resorts and the Cape Coast Castle. Overall, the data procedure resulted in 400 useful questionnaires administered only to backpackers in Cape Coast.

A brief overview of the respondents reveals predominantly female (54.5%) youthful budget travelers, while less than half of the respondents were males (45.5%) similar to the respective proportions in a study by laquinto (2015) but different from other previous studies with higher male ratio (Chen et al., 2020; Sørensen, 2003). More than 80% of the respondents were within the age range of 16-34 years, reflecting the description of this group of traveler's profiles in the literature. In detail, 49.8% of respondents were within the age category of 25-34 years which corroborates the assertion that many of these travelers have completed higher education and worked for a few years before backpacking (see Sørensen, 2003). More than half (52.3%) of the respondents had college degrees. The top four nationalities of the respondents were German (21.5%), British (20.3%), American (16.5%), and Spanish (14.0%). More than 80% of the respondents had visited Ghana once prior to their current visit which confirms the literature that Ghana remains an important backpacker destination (Adam, 2015 and Table 1).

Data analysis

To test the hypotheses of this research and address the research objectives, we undertake Partial Least Squares - Structural Equation Modeling (PLS-SEM) analysis using

SmartPLS with further regression analysis (Hair et al., 2017). The PLS-SEM software, SmartPLS, allows the researcher to create a path model between the constructs and define the items which are attached to the construct. PLS-SEM creates weighted combinations of items. These composites are proxies for the constructs which do not assume a common factor (Mikulić & Ryan, 2018, p. 465). PLS-SEM analysis is becoming more frequently used in tourism research (Ali et al., 2018). PLS-SEM has advantages over the more commonly implemented Covariance-Based Structural Equation Modeling (CB-SEM) (Ringle et al., 2012) as it requires no distributional assumptions (such as variables needing to follow a normal distribution). PLS-SEM is also able to provide accurate and more reliable estimates with smaller sample sizes compared with CB-SEM. This gives PLS-SEM more flexibility.

PLS-SEM has been used for exploratory research and theory development (Ringle et al., 2012). This is because the statistical power of PLS-SEM is always larger than or equal to that of CB-SEM (Reinartz et al., 2009). However, CB-SEM has an advantage over PLS-SEM in terms of model evaluation. Covariance-based techniques have more statistical methods with which to assess reliability and validity. It is more difficult to compare the chosen model with alternatives. One way to address the weakness of PLS-SEM is to opt for a resampling technique such as bootstrapping. Bootstrapping was thus employed in this study since it provides information about the validity and reliability of the model by generating confidence intervals and t-statistics (Hair et al., 2013).

Results

A general overview of sustainable behavior and social identity shows that backpackers frequently interacted with locals ($M=5.30$), read the history of Ghana ($M=5.29$), learned about indigenous culture ($M=5.27$), asked permission before photographing ($M=5.23$), bought environmentally friendly local accommodation ($M=5.21$), and learned some local language ($M=5.13$). However, they rarely engaged in actions of expecting to be served before locals ($M=1.7$) that perpetuate inequality and dependency common with other types of tourists in developing countries (Guttentag, 2009). The sustainable and unsustainable behaviors identified in Table 2 corroborate with previous studies which identified the existence of an identity ambivalence of out-group and in-group interactions (Bui et al., 2013) as well as the shared backpacker identity of reading guidebooks to understand local cultures (Currie Russell et al., 2011). A detailed assessment of the overall multi-measurement approach thus follows.

Taking the multi-measurement approach, we assess the internal consistency of the constructs. Initially, five items that captured behavioral intention. Cronbach's alpha for this construct could be increased to 0.823 with the removal of one item 'I will recommend backpacking in Ghana to friends and family'. The Principal Component Analysis (PCA) confirms that the behavioral intentions items load under one factor, with a KMO of 0.76. The deleted item mentioned above has communality of less than 0.5, providing evidence for its omission. For overall satisfaction, there were four items asked in the survey instrument. Cronbach's Alpha was 0.914, suggesting strong internal validity. A PCA confirms these items load on one factor, all with high communalities and a

Table 2. Descriptive statistics and PLS item statistics.

Statements	(1) Mean	(2) Standard Deviation	(3) Cronbach's Alpha	(4) VIF	(5) Composite Loadings	(6) p-value	(7) Weights	(8) p-value
Behavioral intentions			0.833					
I will probably backpack in Ghana in the near future	5.33	1.688		2.261	0.673	0.000	0.276	0.000
I will encourage family and friends to backpack in Ghana	5.81	1.322		2.648	0.883	0.000	0.363	0.000
I will say positive things about backpacking in Ghana	6.07	1.199		1.780	0.790	0.000	0.324	0.000
I will backpack in Ghana as the first choice among alternative destinations	5.29	1.798		1.769	0.624	0.000	0.256	0.000
Satisfaction			0.915					
I am sure it was the right thing to backpack in Ghana	6.11	1.071		2.349	0.846	0.000	0.277	0.000
I am satisfied with the decision to backpack in Ghana	6.18	1.051		3.558	0.887	0.000	0.291	0.000
I truly enjoyed the experience of backpacking in Ghana	6.14	1.015		4.725	0.851	0.000	0.279	0.000
I feel good about the decision to backpack in Ghana	6.20	0.974		3.695	0.834	0.000	0.273	0.000
Social identity			0.905					
When someone criticizes backpackers, it feels like a personal insult	4.31	1.710		1.699	0.573	0.000	0.165	0.000
When you talk about backpackers, you usually say "we" rather than "they"	4.51	1.856		2.539	0.764	0.000	0.220	0.000
Recognition for backpackers is recognition for you	4.48	1.799		4.021	0.881	0.000	0.254	0.000
When someone praises backpackers, it feels like a personal compliment	4.42	1.936		3.796	0.960	0.000	0.277	0.000
If a story in the media criticized backpackers, you would feel embarrassed	4.09	1.982		2.540	0.852	0.000	0.245	0.000
Sustainable behavior			0.844					
Learn some local language	5.13	1.041		1.712	0.714	0.000	0.233	0.000
Buy and choose environmentally friendly local accommodation	5.21	0.981		1.521	0.519	0.000	0.170	0.000
Read history of your destination	5.29	0.918		2.149	0.588	0.000	0.192	0.000
Learn about indigenous cultures	5.27	0.922		2.271	0.902	0.000	0.295	0.000
Interact with local residents	5.30	0.923		1.882	0.712	0.000	0.233	0.000
Ask permission before photographing	5.23	0.947		1.881	0.626	0.000	0.205	0.000
Unsustainable behavior			0.687					
Not respecting the religious or spiritual needs of others	1.76	1.074		1.245	0.252	0.000	0.153	0.066
Causing congestion or crowding problems because of their group behavior	2.01	1.137		1.311	0.137	0.000	0.083	0.367
Smoking anywhere without considering those around them	1.77	1.091		1.552	0.641	0.000	0.390	0.000
Expecting to be served before locals	1.71	1.092		1.226	0.861	0.000	0.524	0.000
Leaving TV, lights and fan on always	1.83	1.121		1.160	0.439	0.000	0.267	0.000

Table 3. Measurement model evaluation.

Factors	(1) ρ_A	(2) Average Variance Extracted (AVE)	(3) Cronbach's Alpha	(4) Composite Reliability
Behavioral intention	0.850	0.562	0.833	0.834
Satisfaction	0.916	0.730	0.915	0.915
Social identity	0.925	0.667	0.905	0.907
Sustainable behaviors	0.860	0.473	0.844	0.839
Unsustainable behaviors	0.753	0.285	0.687	0.603

high KMO (0.80). Similarly, for social identity, several indices suggest dropping one item 'You are very interested in what others think about backpackers', as the Cronbach Alpha improves from 0.773 to 0.906 with its removal. The PCA reveals that all items load onto one factor but that one item has a low communality of 0.209, providing evidence for its omission. For the unsustainability items, two of the seven items ('Avoid locally made products' and 'Buy only products from international brands') are omitted based on Cronbach's Alpha, which is 0.687, slightly below the generally accepted level of 0.7. For the sustainability indicators, after purification six indicators are retained which have a collective internal consistency of 0.843 (Table 2, Column 3).

The other constructs in the model show strong internal consistency, as reported by the Cronbach alphas (above 0.8) except for unsustainable behavior, which is slightly under the recommended 0.7 criteria. The four items for behavioral intentions and four items for overall satisfaction report relatively high mean scores (out of 7). The mean scores for social identity are all somewhat lower varying between 4.09 and 4.51 (out of 7). The sustainability behaviors have relatively high reported mean scores suggesting that backpackers profess to undertake these behaviors relatively often. The mean scores vary from 5.30 out of 6 for 'Interact with local residents' to 5.13 for 'Learn some local language'. The reported frequencies for unsustainable behaviors are relatively low. The most frequently reported unsustainable behavior is 'Causing congestion or crowding problems because of their group behavior' (2.01) and the least frequently reported behavior is 'Expecting to be served before locals' (1.71) (Table 2, Column 1).

Assessment of the measurement model

For the measurement, composite reliability, convergent validity, indicator reliability, and discriminant validity should be evaluated. To assess composite reliability, we examine Dijkstra–Henseler's ρ_A . This statistic measures the correlation between the latent variable and construct scores. Dijkstra–Henseler's ρ_A values larger than 0.707 are deemed reasonable, meaning that more than half of the variance in the construct scores can be explained by the latent variable (Nunnally & Bernstein, 1994). Table 3, Column 1, shows that this is the case. Convergent validity measures the degree to which the indicators belonging to one latent variable measure the same construct (Benitez et al., 2020). The average variance extracted (AVE) is commonly used to assess convergent validity (Fornell & Larcker, 1981). AVE measures how much of the indicators' variance can be explained by the latent variable. AVE greater than 0.5 is usually the criteria used to demonstrate convergent validity, meaning that the relevant latent variable explains over half of the variance in the related indicators. Table 3, Column 2 shows all AVEs to be above 0.5, except for unsustainable behaviors (0.285) and

Table 4. Heterotrait-Monotrait Ratio (HTMT).

Factors	Behavioral Intention	Satisfaction	Social Identity	Sustainable Behaviors	Unsustainable Behaviors
Behavioral intention					
Satisfaction	0.578				
Social identity	0.449	0.207			
Sustainable behaviors	0.382	0.240	0.141		
Unsustainable behaviors	0.144	0.071	0.301	0.133	

sustainable behavior, which is marginal (0.473). Cronbach's alpha, a measure of internal consistency, shows that all constructs with the exception of unsustainable behaviors exceed the 0.7 threshold (Table 3, Column 3). The composite reliability indices support the other indices, showing that there is good reliability except for the unsustainable behaviors construct (Table 3, Column 4).

Indicator reliability is generally demonstrated through the factor loadings. Factor loadings greater than 0.7 are deemed to show indicator reliability, indicating that over half of the variable in an indicator is explained by the relevant latent variable. However, lower factor loadings are not necessarily problematic as long as the construct validity and reliability criteria are met (Benitez et al., 2020). Table 2, Column 5 shows the factor loadings for the indicators. Hulland (1999) notes that 0.70 or higher is preferred but 0.4 or higher is acceptable. The loadings on the behavior indicators, both sustainable and unsustainable are below the 0.4 criteria but tolerable. Discriminant validity seeks to determine whether two latent variables, which theoretically represent two different constructs, are statistically sufficiently different. Heterotrait-Monotrait Ratio (HTMT) is used for this. The HTMT should be lower than 0.85 (Voorhees et al., 2016). As can be seen from Table 4 below, all of the ratios are smaller than 0.85.

Assessment of the composite model

To assess the composite model, we need to examine the degree of multicollinearity, composite loadings, the weights, and their significance. High multicollinearity may result in insignificant estimates and unexpected signs of the weights. The variance inflation factor (VIF) has been the standard measurement for significant multicollinearity with values above 5 being regarded as problematic (Hair et al., 2006). Table 2, Column 4 shows that no indicator has a VIF greater than 5, suggesting that multicollinearity is not a problem. Composite loadings show the correlation between the indicator and the construct. They are akin to factor loadings and show the relative contribution of an indicator to its construct. Running the bootstrap procedure, we can estimate p-values and confidence intervals for the composite loadings and weights.

Table 5 shows several composite loadings and their associated p-values. A composite loading above 0.7 is often used as a criterion for acceptability, although Hulland (1999) proffers 0.4 or higher is acceptable. If 0.4 is taken as the cut-off, then two unsustainable behavior indicators do not meet this threshold. However, content validity must be considered as well, because dropping an indicator may alter the meaning of the construct (Benitez et al., 2020). All loadings are significant at the 95% level of

Table 5. Structural model.

		Path Coefficient	p-value	Conclusion
H1	Social identity -> Sustainable behaviors	0.126	0.019	Supported
H2	Social identity -> Satisfaction	0.179	0.001	Supported
H3	Social identity -> Unsustainable behaviors	0.289	0.000	Supported
H4	Sustainable behaviors -> Satisfaction	0.203	0.000	Supported
H5	Unsustainable behaviors -> Satisfaction	-0.044	0.429	Not Supported
H6	Sustainable behaviors -> Behavioral intention	0.211	0.000	Supported
H7	Unsustainable behaviors -> Behavioral intention	0.102	0.005	Supported
H8	Satisfaction -> Behavioral intention	0.468	0.000	Supported
			Adjusted R ²	
	Behavioral intention	0.413	0.409	
	Satisfaction	0.097	0.091	
	Sustainable behaviors	0.020	0.018	
	Unsustainable behaviors	0.120	0.118	
	Effect Size	f ²		
H1	Social identity -> Sustainable behaviors	0.021		
H2	Social identity -> Satisfaction	0.037		
H3	Social identity -> Unsustainable behaviors	0.136		
H4	Sustainable behaviors -> Satisfaction	0.056		
H5	Unsustainable behaviors -> Satisfaction	0.004		
H6	Sustainable Behaviors -> Behavioral intention	0.088		
H7	Unsustainable behaviors -> Behavioral intention	0.027		
H8	Satisfaction -> Behavioral intention	0.438		

confidence. Weights and their associated p-values are shown in [Table 2](#), Columns 7 and 8, showing the degree of importance of each indicator to the construct. All of the indicators are significant at the 95% level of confidence, except for two unsustainable behavior indicators: 'Causing congestion or crowding problems because of their group behavior' and 'Not respecting the religious or spiritual needs of others'.

Assessment of the structural model

The final part of the analysis involves an assessment of the structural model. The indices for assessment include the overall fit of the estimated model, the path coefficient estimates, their significance, the effect sizes (f^2), and the coefficient of determination (R^2). To assess the overall fit of the model, we examine the Standardized Root Mean Square Residual (SRMR); a measure of the mean absolute value of the covariance residuals. The value is 0.079, which is slightly below the recommended threshold value of 0.08 (Hair et al., 2013). However, the thresholds for the overall model fit for PLS-SEM models should be treated with caution and more research needs to be done in this area of future methodological research (Benitez et al., 2020).

The path coefficient estimates can be interpreted like standardized regression coefficients, whose sign and absolute size can be assessed. As with regression coefficients, the estimate is considered significant at the 95% level of confidence if lower than 0.05 or the confidence interval contains zero. [Table 5](#) shows the outcomes of the path analysis with its path coefficients and associated p-values. The table reveals that all the hypotheses cannot be rejected at the 95% level of confidence with the exception of H5. Firstly, social identity impacts both sustainable (H1) and unsustainable behaviors (H3), more so unsustainable behaviors (0.289) than sustainable behaviors (0.126). Social identity also significantly impacts overall satisfaction with backpacking in Ghana (H2).

Sustainable behaviors impact overall satisfaction (H4), but the extent to which backpackers perform unsustainable behaviors does not influence overall satisfaction with the trip (H5). Supporting the structural model, influencers of behavioral intentions were identified using regression analysis. In terms of influencers of behavioral intentions, in order of magnitude, satisfaction, sustainable behaviors and unsustainable behaviors all influence this outcome construct, rejecting the null hypotheses that there are no relationships between these constructs. As with standard regression analysis, the R^2 shows the amount of variance in the dependent variables explained by the model. About 41% of the variance shown in behavioral intentions is explained by the model. The other constructs have lower R^2 s.

The relevance of significant path coefficients needs to be examined by taking into consideration the effect sizes of the relationships between the constructs. The effect size is a measure of the magnitude of an effect that is independent of sample size (Benitez et al., 2020). The f^2 values in Table 5 show the effect sizes. The large effect size is considered to be equal to 0.35 or higher. Medium effect sizes range from 0.15 to 0.35 while weak effects range from 0.02 to 0.15. The coefficient of the effect of satisfaction on behavior intention (H8) has the largest effect size compared to the rest (Table 3).

Discussion and implications

The findings indicate that there is indeed evidence of structural links between social identity, sustainable behaviors, satisfaction, and behavioral intentions among backpackers in Ghana. The link between social identity and sustainable behavior (H1) can be interpreted as indicating that backpackers' self-image as 'good' travelers, distinct from mass tourists (O'Reilly, 2006; Tajfel et al., 1979; Zhang et al., 2017), inspires them to feel compelled to affirm this self-image (to themselves and others) by performing the role of a sustainable traveler through their actions. Actions including learning the local language, history, and culture are important because they do not only confirm their identity as backpackers but symbolize their quest for cultural awareness (Larsen et al., 2011). While the identified actions are not exclusive to backpackers, they are the core of their sub-culture. Within the backpacker subculture, the shared worldview as travelers in contrast to mass tourists reflects values such as knowing the destination and its people. Such values create a series of common actions to govern interactions at the destination with proper use of artifacts such as guidebooks (Martín-Cabello, 2014). These core actions may be in part motivated by the pursuit of the satisfaction that these tourists feel from their social identity (H2). As a corollary, backpackers' self-image as a group is also bolstered by a sense that one is avoiding ways of behaving that are considered unsustainable (H3).

The findings for hypotheses H4 and H5, when considered in conjunction with the support for H2 and H3, describe that behavior performs a possible mediating function between social identity and satisfaction. That is, one gains satisfaction from behaving in ways that affirm one's social identity and feels dissatisfaction from behaving in ways that clash with the norms of behavior associated with that identity. Social norms are the unspoken rules of behavior associated with being a member of a particular

community, or society at large (Turner, 1991). They are important in establishing an understanding of what is acceptable or expected among members of a group and giving members of the group guidelines for maintaining the approval of other group members (Festinger, 1950), as well as affirming their membership in this group to other group members and differentiating the group from the broader society (Michael A. Hogg & Reid, 2006). The satisfaction derived from adhering to social norms of the group with which one identifies could be influenced by both the intrinsic motivation of feeling that one is behaving according to one's ethical ideals and the extrinsic motivation of approval and acceptance from other members of the social group of backpackers. This reaffirms the previously noted connection between social identity and (un)sustainable beliefs (McCright & Dunlap, 2011).

All of these findings give insights into the ways that backpackers use their travels to affirm a positive and secure self-image (Bui et al., 2013; Loker-Murphy & Pearce, 1995; Zhang et al., 2017), choosing to demonstrate their social identity as members of the backpacker sector and to performatively differentiate themselves from other groups of tourists through these behaviors (Brown, 2000; Hogg, 2016). The satisfaction that backpackers derive in this way has a positive effect on their future behavioral intentions to visit Ghana or to recommend it as a destination to others (H8 supported), and sustainable behavior of backpackers during their visit to Ghana was found to positively influence future intentions (H6). However, unsustainable behavior negatively influenced future intentions (H7 supported) but not satisfaction (H5 unsupported). This implies that satisfaction does not serve a transparent, straightforward mediating role between behavior and behavioral intentions. Positive effects of sustainable behavior on satisfaction carry forward into positive effects on behavioral intentions, while the negative effects of unsustainable behavior translate into negative effects on behavioral intentions. While the findings of this research support seven of the eight hypotheses proposed at the beginning of this article, the path coefficients for all but one of the seven supported hypotheses have an effect size in the range considered "weak" (0.02 – 0.15), except H8, which has a large effect size. This finding indicates that, while backpackers' sustainable behavior is a component of their satisfaction with travel experience, such satisfaction plays a much larger role in influencing future intentions.

These findings indicate that backpackers in Ghana assign a significant degree of importance to sustainable behavior as a way of affirming their social identity, and their recognition that some of their behavior is unsustainable can erode their sense of identity. As developing countries are perceived by many travelers as places to construct a new temporary identity (Scheyvens, 2002), backpacking research in Ghana offers unique insights that are different from the gamut of studies in Australia and Asia (e.g. Iaquinto & Pratt, 2020; Pearce, 2007; Ross, 1993). In Ghana, backpackers' social identity is constructed through their preference for budget accommodation and hostels which played a major role in their infrequently unsustainable behaviors and frequently sustainable behaviors. Such accommodation types preferred by backpackers have implications not only for economic sustainability but for socio-cultural and environmental sustainability as well. Budget accommodation and hostels in Ghana are non-serviced accommodation that requires users to pay their electricity bills, and the power fluctuations in Ghana makes it both expensive and risky to leave TV and lights on always.

Moreover, such accommodation types are highly locally structured, sometimes with owner-managers who are not very proficient in the English language. This contextual climate inevitably requires backpackers using this accommodation to learn some local language to communicate and interact with owner-managers in addition to understanding the cultural climate of the destination. The need to interact and learn some local language and culture becomes even more crucial for backpackers since they are generally independent travelers traveling with friends or alone to Ghana, unlike volunteer tourists who have NGO mediators to cushion them.

By examining how social identity impacts backpacker (un)sustainable behavior, this study contributes theoretically to the increasing research on backpackers by providing a deeper understanding of how behavior could be explained by psychological concepts. The findings of the significant influence of social identity on backpacker behavior show that sustainable behavior does not just occur (Holmes et al., 2019), but rather it is the consequential outcome of one's social identity. The study provides further theoretical insights on the role of sustainable behavior and unsustainable on satisfaction and behavioral intention, of which little has been written in the extant literature. Moreover, it challenges the hierarchical conceptualization of the cognitive-affective-conative-action framework to signal the possibility of actions to predict affective responses in the case of sustainability issues. Such important theoretical insights have practical implications for the tourism authorities, backpacker hostels, and budget accommodation owner-managers, as well as tourism marketers and practitioners. Practically, the study findings that backpackers engaged in sustainable behavior to affirm their identity implies that to promote sustainable behavior at the various destinations, tourism authorities should reinforce and strengthen such identity by promoting certain destinations as best locations for backpacker cultural awareness, interactions, and language learning. Hostels and budget accommodation owner-managers can equally promote their facilities as platforms that enhance backpacker identity and further promote sustainable production and consumption economically, socio-culturally, and environmentally as a requirement of using their facilities. Practically, destination marketing organizations could emphasize tourism resources and attractions that are closely linked with backpacker social identity.

Despite these important implications of the study, some limitations have to be acknowledged. First, the current study targeted backpackers in Ghana, specifically within the Cape Coast Metropolis. Hence, the findings might not be generalized to other settings. Second, the study was quantitative with no qualitative insights or stories explaining some of the relationships identified in the study. Recognizing such limitations, future studies are encouraged to adopt mixed methods that include both qualitative and quantitative approaches in other regions around the world and Ghana.

Disclosure statement

No potential conflict of interest was reported by the authors.

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