

ASERS

Journal of Environmental Management and Tourism

Quarterly

Volume XIV

Issue 5(69)

Fall 2023

ISSN 2068 – 7729

Journal DOI

<https://doi.org/10.14505/jemt>

ASERS
Publishing



Table of Contents:

	Waste Utilization Potential of Oil Palm Industry in North Kalimantan Province, Indonesia	
1	Mohamad Nur UTOMO, Ahmad MUBARAK, Sulistya Rini PRATIWI, Najmudin NAJMUDIN	2159
	Legal Regulation of Civil Liability for Environmental Damage: How Appropriate are Civil Liability Provisions with the Privacy of Environmental Damage?	
2	Lana AL-KHALAILEH, Tareq AL-BILLEH, Majd MANASRA, Abdullah ALKHSEILAT, Noor ALZYUOD, Noor AL-KHAWAJAH	2174
	Study the Nexus between Indicators of Surface Water Quality on the Small River for Better Basin Management	
3	Olena MITRYASOVA, Andrii MATS, Ivan SALAMON, Victor SMYRNOV, Vadym CHVYR	2187
	Attracting Investment for Rural Development: Introduction of Organic Agriculture and ESG Principles in Kazakhstan	
4	Marzhan KUANDYKOVA, Aidos AKPANOV, Santay TLEUBAYEVA, Anuar BELGIBAYEV, Askar MAKHMUDOV, Aigul ATCHABAROVA	2196
	Forty-Seven Years of Environmental Management Accounting Research: A Bibliometric Analysis	
5	Chetanraj DB, Senthil Kumar JP	2207
	Accumulation of Heavy Metals in the Needles of Scots Pine of the Semipalatinsk Pre-Irtysh Region and Burabay National Park	
6	Botakoz YELKENOVA, Raikhan BEISENOVA, Rumiya TAZITDINOVA, Zhanar RAKHYMZHAN, Nurziya KARIPBAEVA	2242
	Identifying Karst Aquifer Recharge Area Using Environmental Stable Isotopes and Hydrochemical Data: A Case Study in Nusa Penida Island	
7	I Ketut ARIANTANA, Made Sudiana MAHENDRA, I Wayan NUARSA, I Wayan Sandi ADNYANA, Lambok HUTASOIT, Irwan ISKANDAR, MUSTIATIN, Putu Doddy Heka ARDANA	2253
	Regulatory and Legal Support for the Development of Digital Infrastructure in Rural areas as a Factor in Improving the Level of Sustainable Development and Quality of Life of the Rural Population	
8	Serikbai YDYRYS, Nazgul IBRAYEVA, Fariza ABUGALIYEVA, Mira ZHASKAIRAT, Aiman UVALIYEVA	2271
	Do Environmentally Responsible Practices in Accommodation Establishments Matter?	
9	Lulama NDZUNGU, Carina KLEYNHANS, Antoinette ROELOFFZE	2281
	Development of a Model of Strategic Priorities for Sustainable Development of Rural Areas in Kazakhstan until 2030. Example of the East Kazakhstan Region	
10	Kalamkas NURALINA, Raisa BAIZHLOVA, Yergali ABENOV, Dinara MUKHIYAYEVA, Yerkezhan MOLDAKENOVA	2290
	Investing in Human Capital for Green and Sustainable Development	
11	Ansagan BEISEMBINA, Alla GIZZATOVA, Yerlan KUNYAZOV, Takhir ERNAZAROV, Nurlan MASHRAPOV, Sergey DONTSOV	2300
	Top Management Support, Green Intellectual Capital and Green HRM: A Proposed Framework for Sustainability	
12	Abdur Rachman ALKAF, Mohd Yusoff YUSLIZA, Amauche Justina EHIDO, Jumadil SAPUTRA, Zikri MUHAMMAD	2308
	Human Capital Management Based on the Principles of Green Economy and the Creation of Green Jobs for Sustainable Territorial Development	
13	Gulmira RAKHIMZHANOVA, Aigul MAIDYROVA, Ainura KOCHERBAEVA	2319

Editor in Chief:

Ramona Pirvu,
University of Craiova, Romania

Co-Editor:

Cristina Mihaela Barbu,
Spiru Haret University, Romania

Editorial Advisory Board:

Omrans Abdelnaser, University Sains
Malaysia, Malaysia

Huong Ha, Singapore University of Social
Sciences, Singapore

Harjeet Kaur, HELP University College,
Malaysia

Janusz Grabara, Czestochowa University of
Technology, Poland

Vicky Katsoni, Technological Educational
Institute of Athens, Greece

Sebastian Kot, Czestochowa University of
Technology, The Institute of Logistics and
International Management, Poland

Andreea Marin-Pantelescu, Academy of
Economic Studies Bucharest, Romania

Piotr Misztal, The Jan Kochanowski
University in Kielce, Faculty of Management
and Administration, Poland

Agnieszka Mrozik, Faculty of Biology and
Environmental Protection, University of
Silesia, Katowice, Poland

Chuen-Chee Pek, Nottingham University
Business School, Malaysia

Roberta De Santis, LUISS University, Italy

Fabio Gaetano Santeramo, University of
Foggia, Italy

Dan Selisteanu, University of Craiova,
Romania

Lesia Kucher, Lviv Polytechnic National
University, Ukraine

Lóránt Dénes Dávid, Eötvös Loránd
University, Hungary

Laura Ungureanu, Spiru Haret University,
Romania

Sergey Evgenievich Barykin, Peter the
Great St. Petersburg Polytechnic University,
Russian Federation

Omar Abedalla Alananzeh, Faculty of
Tourism and Hotel Management, Yarmouk
University, Jordan

Marco Martins, Polytechnic Institute of
Tomar, Portugal

Konstantinos Antoniadis, University of
Macedonia Thessaloniki, Greece

ASERS Publishing

<http://www.aserspublishing.eu>

ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Editor in Chief:

Ramona Pîrvu,
University of Craiova, Romania

Co-Editor:

Cristina Mihaela Barbu,
Spiru Haret University, Romania

Editorial Advisory Board:

Omrans Abdelnaser, University Sains
Malaysia, Malaysia

Huong Ha, Singapore University of Social
Sciences, Singapore

Harjeet Kaur, HELP University College,
Malaysia

Janusz Grabara, Czestochowa University of
Technology, Poland

Vicky Katsoni, Technological Educational
Institute of Athens, Greece

Sebastian Kot, Czestochowa University of
Technology, The Institute of Logistics and
International Management, Poland

Andreea Marin-Pantelescu, Academy of
Economic Studies Bucharest, Romania

Piotr Misztal, The Jan Kochanowski
University in Kielce, Faculty of Management
and Administration, Poland

Agnieszka Mrozik, Faculty of Biology and
Environmental Protection, University of
Silesia, Katowice, Poland

Chuen-Chee Pek, Nottingham University
Business School, Malaysia

Roberta De Santis, LUISS University, Italy

Fabio Gaetano Santeramo, University of
Foggia, Italy

Dan Selişteanu, University of Craiova,
Romania

Lesia Kucher, Lviv Polytechnic National
University, Ukraine

Lóránt Dénes Dávid, Eötvös Loránd
University, Hungary

Laura Ungureanu, Spiru Haret University,
Romania

Sergey Evgenievich Barykin, Peter the
Great St. Petersburg Polytechnic University,
Russian Federation

Omar Abedalla Alananzeh, Faculty of
Tourism and Hotel Management, Yarmouk
University, Jordan

Marco Martins, Polytechnic Institute of
Tomar, Portugal

Konstantinos Antoniadis, University of
Macedonia Thessaloniki, Greece

14	Integrated Urban Solid Waste Management: Knowledge, Practices, and Implementation Riza Stephanie A. ALFARAS	2328
15	Issues Concerning the Improving Organizational and Legal Support of Victimological Prevention for Environmental Crimes DaurenMALIKOV, Natalya SIDOROVA, Saltanat ATAKHANOVA, Manshuk RAKHIMGULOVA, Sholpan MALIKOVA, Larissa KUSSAINOVA	2336
16	Management of Bioculture Potential with Environmental Perspective Based on Local Wisdom Trio Beni PUTRA, Thamrin THAMRIN, Zulfan SAAM, Sofyan HUSEIN	2345
17	Analysis of the Environment Impact on the Inclusion of Children with Special Educational Needs Marzhan TURLUBEKOVA, Valeriy BIRYUKOV, Zulfiya MAGRUPOVA, Galiya KISHIBEKOVA, Roza BUGUBAYEVA	2354
18	Perception and Awareness of Marine Plastic Pollution in Selected Tourism Beaches of Barobo, Surigao del Sur, Philippines Sherley Ann T. INOCENTE, Carlo S. GUTIERREZ, Maria Pia M. SISON, John Roderick V. MADARCOS, Judea Christine M. REQUIRON, Christine Joy M. PACILAN, Shiela Mae M. GABOY, Jayson Leigh M. SEGOVIA, Hernando P. BACOSA	2367
19	Role of State Institutions in Protecting the Environment. Improving Management System of the Public Services Yuliya KIM, Serik DARIBEKOV, Laura KUNDAKOVA, Dinar SIKHIMBAYEVA, Gulnara SRAILOVA	2379
20	Interactive Planning as Part of a Territorial Strategy to Develop Tourism Sites Edwin RAMIREZ-ASIS, Abu Bakar Bin Abdul HAMID, Nor Hazila Binti Mohd ZAIN, Mohsin RAZA, Jose RODRIGUEZ-KONG, Cinthy ESPINOZA-REQUEJO	2390
21	Travels and Sustainable Tourism in Italy. Selected Dilemmas Michał MROZEK	2398
22	Safety Management Model of Tourism City Municipalities in Eastern Economic Corridor Chayapoj LEE-ANANT	2406
23	Impact of War on the Natural Preserve Fund: Challenges for the Development of Ecological Tourism and Environmental Protection Anatolii KUCHER, Anna HONCHAROVA, Lesia KUCHER, Mariia BIELOBORODOVA, Liudmyla BONDARENKO	2414
24	Sustainable Development and Environmental Tourism. The Case of Lake Karla – Thessaly, Greece Georgia TRAKALA, Aristotelis MARTINIS, Georgios KARRIS, Charicleia MINOTOU, Achilleas TSIROUKIS	2426
25	Post-COVID-19 Community-Based Tourism Sustainable Development in China. Study Case of Hebian Village Mingjing QU, Wong Ming WONG	2440
26	Predicting the Intention to Implement Green Practices by Small and Medium Sized Hotels in South Africa Proceed Lerato MASEBE, Olawale FATOKI	2455

Call for Papers Winter Issues 2023 Journal of Environmental Management and Tourism

Journal of Environmental Management and Tourism is an open access, peer-reviewed interdisciplinary research journal, aimed to publish articles and original research papers that contribute to the development of both experimental and theoretical nature in the field of Environmental Management and Tourism Sciences. The Journal publishes original research and seeks to cover a wide range of topics regarding environmental management and engineering, environmental management and health, environmental chemistry, environmental protection technologies (water, air, soil), pollution reduction at source and waste minimization, energy and environment, modelling, simulation and optimization for environmental protection; environmental biotechnology, environmental education and sustainable development, environmental strategies and policies.

Authors are encouraged to submit high quality, original works that discuss the latest developments in environmental management research and application with the certain scope to share experiences and research findings and to stimulate more ideas and useful insights regarding current best-practices and future directions in Environmental Management.

Also, this journal is committed to a broad range of topics regarding Tourism and Travel Management, leisure and recreation studies and the emerging field of event management. It contains both theoretical and applied research papers and encourages obtaining results through collaboration between researchers and those working in the tourism industry.

The journal takes an interdisciplinary approach and includes planning and policy aspects of international, national and regional tourism as well as specific management studies. Case studies are welcomed when the authors indicate the wider applications of their insights or techniques, emphasizing the global perspective of the problem they address.

This issue has a special importance for us, marking a new stage in the history of this journal. So, starting with Issue 5(69), Fall 2023 **Journal of Environmental Management and Tourism** will be published in Open Access system. Journal of Environmental Management and Tourism' articles are published under the [Creative Commons Attribution 4.0 International License BB CY](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original authors and the source are credited.

Journal of Environmental Management and Tourism is indexed in SCOPUS, RePEc, CEEOL, ProQuest, EBSCO and Cabell Directory databases.

Details regarding the publication in this journal are here: <https://journals.aserspublishing.eu/jemt/about>

Deadline for submission:	21 st October 2023
Expected publication date:	December 2023
Website:	https://journals.aserspublishing.eu/jemt
E-mail:	jemt@aserspublishing.eu

To prepare your paper for submission, please see full author guidelines in the following file:

[JEMT_Full_Paper_Template.docx](#), then send it via email at jemt@aserspublishing.eu.



DOI: [https://doi.org/10.14505/jemt.v14.5\(69\).26](https://doi.org/10.14505/jemt.v14.5(69).26)

Predicting the Intention to Implement Green Practices by Small and Medium Sized Hotels in South Africa

Proceed Lerato MASEBE
Department of Business Management, University of Limpopo, South Africa
ORCID: 0000-0001-9042-4066
proceed.lerato@gmail.com

Olawale FATOKI
Department of Business Management, University of Limpopo, South Africa
ORCID: 0000-0003-1539-8333
Olawale.fatoki@ul.ac.za

Article info: Received 13 January 2023; Received in revised form 7 March 2023; Accepted for publication 26 June 2023; Published 1 September 2023. Copyright© 2023 The Author(s). Published by ASERS Publishing 2023. This is an open access article distributed under the terms of CC-BY 4.0 license.

Abstract: The study examined the intention to implement green practices by small and medium sized hotels in South Africa by extending the Theory of Planned Behaviour (TPB). Three personal factors namely moral norms, response efficacy and environmental concern were used to extend the TPB. In addition, the study examined if intention predicted the implementation of green practices. A quantitative approach was utilised, and a self-administered questionnaire was used for the collection of data from hotel managers and owners. The Partial Least Square Structural Equation Modelling (PLS SEM) was utilised for the analysis of data and testing of hypotheses. The results of the empirical study indicated that attitude, moral norms and response efficacy have significant positive relationships with green practice intention. In addition, intention is a predictor of the implementation of green practices. The implication of the study is that the extended TPB can help to improve the understanding of the intention to implement green practices by small and medium sized hotels. From a theoretical perspective, the study developed a model on the intention to implement green practices by extending the TPB by three individual factors namely moral norms, response efficacy and environmental concern. Empirically, the study provides a clear understanding of the predictors of the intention to implement green practices.

Keywords: green practices; hotels; theory of planned behaviour; individual factors.

JEL Classification: Q01; Q57; M10; R11.

Introduction

There are serious environmental related problems that the universe is currently facing, and these include air pollution, global warming, acid rain, waste disposal and water pollution (Steg *et al.* 2014). According to Nheta and Tondani (2016), the key causes of global warming are known to be carbon dioxide and other greenhouse gases (GHGs). Even though hotels have positive benefits, they are also linked to extensive natural resource use, significant waste creation, and high greenhouse gas emissions, all which have negative environmental consequences (Alipour *et al.* 2019). Due to rising stakeholder pressure, particularly from governments and customers, hospitality firms have begun to consider issues related to the environment. As a result, hotels are increasingly implementing green measures to decrease their undesirable environmental effects in order attract and retain guests, maintain a competitive advantage, and improve financial performance (Huang *et al.* 2015; Nheta and Tondani 2016). However, many small and medium-sized hotels and lodges, mainly in developing countries, have not taken any initiative to decrease the damage they cause to the environment, regardless of the efforts done by certain parts of the industry (Nheta and Tondani 2016). Although a single small firm does not have the same environmental impact compared to a large firm, their combined effects are bigger than for large firms (Cantele *et al.* 2020). However, some small hotels have started to incorporate environment management into their operation and strategy (Alipour *et al.* 2019).

Green practices have become an important part of environmental research in recent years. According to Alipour *et al.* (2019), currently green practices and sustainability are being considered by many businesses and

industries when running their daily operations. Smith and Perks (2010) assert that the ways to utilise methods, processes and products that will not negatively affect the environment by weakening the natural resources or through pollution are referred to as green practices. Awaysheh and Klassen (2010) describe green practices as the strategies or activities executed by businesses to alleviate the impact of the operation and activities on the environment. There is a need to create a zero net release of carbon dioxide into the atmosphere and for the hospitality sector to go green (Mbasera *et al.* 2016). Therefore, it is essential to explore the antecedents intention to implement green practices by small and medium-sized hotels. Theoretical models such as the Norm Activation Model (NAM), the Value Belief Norm (VBN) and the Theory of Reasoned Action (TRA) have been used by researchers to examine intentions to carry out green practices in hotels. However, the Theory of Planned Behaviour (TPB) by Ajzen (1991) is the most utilised theory for predicting green behavioural intentions and behaviours (Wang *et al.* 2016). The TPB proposes that an individual's intention to perform a specific behaviour determines whether or not that behaviour is performed. An individual's intention to behave in a certain way is influenced by three elements and these are (1) attitude towards the behaviour (2) subjective norms (3) perceived behavioural control. The TPB argues that intention is a significant indicator in predicting the implementation of sustainable practices (Ajzen 1991; Huang and Ge 2019). Even though the TPB is widely used to explain green behaviour, several studies have improved the theory's explanatory power through additional relevant variables or factors (Chen and Tung 2014). This study extends the TPB by adding three individual factors (moral norms, response efficacy and environmental concern) to develop a predictive model of intention to implement green practices by small and medium sized hotels.

1. Literature Review

1.1. Theory of Planned Behaviour (TPB)

The TPB by Ajzen (1991) is an extension of the Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980). The TRA argues that intention is a predictor of behaviour. Intention is determined by two factors namely attitude and subjective norms. The TPB shows that an individual's performance of a specific behaviour is determined by his/her behavioural intention to perform the behaviour. An individual's attitude, subjective norms, and perceived behavioural control are the three components linked to behavioural intention (Ajzen 1991). Although TPB has been broadly used to explain green behaviour, numerous studies have improved the theory's explanatory power through additional relevant variables or factors (Chen and Tung 2014).

1.1.1. Attitude and Green Practice Intention

Attitude is the first determinant of behavioural intention. Ajzen (1991) describes attitude as the way that a person makes a positive or negative appraisal of the behaviour in question. Individuals that have a positive attitude as the outcomes of behaviour are favourably appraised and as a result, are expected to take part in a particular behaviour (Yilmaz 2014). Numerous researchers have discovered that attitude is a vital precursor of behavioural intention in different settings like the implementation of the consumption of green products (Yadav and Pathak 2016) and sustainable automobiles (Wang *et al.* 2016). Chan and Hawkins (2010) discovered that attitude positively impacts the intention to implement green practice. However, the study by Chen and Chai (2010) found that attitude is not positively related to green practice intention. This study proposes that (H1): Attitude towards green practices and intention to implement green practices are significantly positively related.

1.1.2. Subjective Norms and Green Practice Intention

Subjective norms (SN) evaluate the chance that significant reference groups or persons, for example, family and friends will disapprove or approve of a specific behaviour (Ajzen 1991). Individuals are not influenced by people around them only, but they are also influenced by the groups or individuals that they consult regarding beliefs, behaviours, attitudes, and opinions (Wang and Ritchie 2012). Numerous researchers assert that there is a favourable link between SN and people's intention to conduct a behaviour (Han 2015; Paul *et al.* 2016; Ko and Jin 2017). In addition, prior ecological research proved that there is a positive link amongst SN and the intention to stay in ecological hotels (Suki and Suki 2015), the intention to recycle (Tih and Zainol 2012) and the intention to consume green products (Moser 2015). Conversely, empirical studies by Chen and Peng (2012) and Verma and Chandra (2018) did not find a positive correlation between SN and green practice intention. This means that the results of empirical studies on the relationship between SN and ecological practice intention are inconclusive. Thus, this study proposes that (H2): SN and intention to implement green practices are significantly positively related.

1.1.3 Perceived Behavioural Control and Green Practice Intention

The apparent ease or difficulty of carrying out a behaviour is known as perceived behavioural control (PBC) (Ajzen 1991). In the context of green consumers, Wang *et al.* (2014) conducted a study in China about factors influencing sustainable consumption behaviours and established that the association between PBC and sustainable consumption behaviour is significant and positive. Conversely, Ko and Jin (2017) showed that strong PBC often leads to a greater favourable green clothing products purchase intention. In contrast, Arvola *et al.* (2008) conducted an empirical study and found that there is no association between PBC and the intention to buy sustainable products. This phenomenon can be extended to sustainable hospitality firms. In the context of green hotels, empirical studies by (Chen and Peng 2012; Chen and Tung 2014; Verma and Chandra 2018) found that PBC has a significant positive relationship with the intention to implement ecological practices. It is hypothesised that (H3): PBC and intention to implement green practices are significantly positively related.

1.2 Extension of the TP

The TPB can be broadened by the inclusion of different constructs that can improve the model's predictive power (Ajzen 1991). Chen and Tung (2014) used environmental concern and perceived moral obligation to extend the TPB in a study on consumers' intention to visit green hotels. De Freitas (2018) in a study on consumers' intended behaviour towards selecting green hotels extended the TPB by adding perceived moral obligation, anticipated regret, environmental knowledge, and environmental concern. Wang *et al.* (2018) added two constructs namely environmental concern and perceived consumer effectiveness to the TPB. This study will use three constructs namely moral norms, response efficacy and environment concern to extend the TPB.

1.2.1 Moral Norms and Green Practice Intention

The rules of morality that individuals should follow are known as moral norms (MN) (Machura 2013). Furthermore, based on studies conducted in the context of greening, MN can be described as an individual's desire with regards to their own duties concerning the performance of a particular ecological behaviour as well as the argument that the conduct is morally correct (Ru *et al.* 2019). Various researchers have done empirical reviews regarding the influence of moral norms, and they found a positive association between MN and a person's intention to exhibit ecological behaviour (Han 2015; Bertoldo and Castro 2016; Wang *et al.* 2020). Shalender and Sharma (2021) found that people who have greater personal moral norms have favourable intentions concerning the purchase of electronic vehicles compared to those who do not. It is hypothesised that (H4): there is a significant association between MN and intention to implement green practices.

1.2.2 Response Efficacy and Green Practice Intention

Response efficacy (RE) is the extent of an individual's beliefs about how effective a response is in preventing a threat (Popova 2012). RE refers to situations in which a person is of the opinion that a specific change in response will help to protect them and other people from the threat. The person's belief that an anticipated behaviour will succeed in eliminating threat is referred to as response efficacy (Almarshad, 2017). RE as a cognitive construct is a useful extension of the TPB. According to Ng *et al.* (2018), RE affects the intention to buy electronic vehicles positively and customers tend to reflect about consuming ecological products if they think their behaviour is going to help protect the environment (White *et al.* 2019). Moreover, Pang *et al.* (2021) have discovered that the association between RE and customers intention to purchase organic foods is positive. It is hypothesised that (H5): RE and intention to implement green practices are significantly positively related.

1.2.3 Environmental Concern and Green Practice Intention

Schuitema *et al.* (2013) define environmental concern (EC) as a common understanding and consciousness concerning issues in the environment. Chan and Hsu (2016) indicate that environmental concern has encouraged an increasing niche market, specifically the pro-environmental hotel industry. EC is the result of the hotel industry's attempts to reduce the extreme use of non-renewable resources while also limiting emissions (Ogbeide 2012; Chen and Tung 2014). As a result, hotels have gradually started to accept worldwide environmental initiatives to become more sustainable (Kang *et al.* 2012; Rahman *et al.* 2015). Sang and Bekhet (2015). Paul *et al.* (2016) and Yadav and Pathak (2017) showed that the link between EC and intention to buy certain ecological products is positive. It is hypothesised that (6): EC and green purchase intention are significantly positively related.

1.3 Intention and Actual Green Practices

In the TPB, the determinants of intention are perceived behavioural control, attitude and subjective norms (Ajzen 1991). Behaviour is mainly dependent on intention, and they have a positive relationship (Ajzen 1991). Intention is an important indicator in predicting the implementation of green practices (Yilmaz 2014; Wang *et al.* 2016; Huang and Ge 2019). Thus, it is hypothesised that (H7): intention is significantly positively related to actual green practices.

2. Methodology

The research used the cross-sectional survey method in a quantitative study. The survey method used to obtain data from the respondents was the self-administered questionnaire. The survey was conducted in the Capricorn District Municipality of Limpopo Province, South Africa. The sample frame consisted of all managers and owners of small and medium sized hotels selected from the databases of TripAdvisor, Trivago, and Hotel Grading of South Africa. The owners or managers of the identified hotels were contacted through emails to explain the purpose of the study. Five hundred and seventy hotel owners and managers were contacted, only four hundred and three hotel owners and managers granted permission to conduct the survey. Before the actual data collection, a pilot study was carried out with twelve hotel owners and managers who did not participate in the main survey. Four hundred and three participants who took part in the survey were made up of one hundred and fifteen from micro hotels, two hundred and twenty-nine from small hotels and fifty-nine from medium hotels. Based on the quantitative definition of small, medium, and micro enterprises by the National Small Business Act, 2019, micro hotels have been 0 and 10 employees, small hotels between 11 and 50 employees and medium-sized hotels between 51 and 250 employees. Each participant in the survey was given two weeks to complete the questionnaire. The participants were reminded every week through emails to complete the questionnaire. This process was repeated for two months. The Partial Least Square Structural Equation Modelling (PLS SEM) on the SmartPLS software version 3.0 was used to analyse the data collected in the survey. The question items were developed from prior studies and depicted in appendix one. The items were anchored on the five-point Likert scale with "1" strongly disagree and "5" strongly agree. Appendix one depicts the items used to measure the constructs.

3. Results

3.1 Biographical Details

Five hundred and seventy (570) questionnaires were distributed in the main survey to the respondents and four hundred and three (403) questionnaires returned were found to be usable, whereas 12 were not usable. Therefore, 403 (70.7%) questionnaires were analysed. Table 1 depicts the respondents' biographical details.

Table 1. Respondents' biographical details

Biographical Details	Frequency	Percentage
Gender		
Male	218	54
Female	185	46
Age		
Below 20	0	0
21-30	83	21
31-40	91	22
41-50	169	42
51-60	49	12
Above 60	11	3
Level of education		
Pre matric	44	11
Matric	129	32
Post matric	230	57
Level of business status		
Sole proprietor	0	0
Partnership	127	32
Close corporation	145	36
Private	131	32

Biographical Details	Frequency	Percentage
Number of employees		
0-10	115	28
11-50	229	57
51-250	59	15
Years of operation		
Below 5	54	14
6 to 10	126	31
11 to 15	150	37
Above 15	73	18
Position		
Owner	258	64
Manager	145	36

Source: (authors' data analysis)

Table 1 illustrates the respondents' details as follows: gender, male (218), female (185). Age, no respondent was below 20 years, 21-30 (83), 31-40 (91), 41-50 (169), 51-60 (49), above 60 (11). The level of education, pre matric (44), matric (129), post matric (230). Level of business status, sole proprietor (0), partnership (127), close corporation (145), private (131). Number of employees, 0-10 (115), 11-50 (229), 51-250 (59). Years of operation, below 5 (54), 6 to 10 (126), 11 to 15 (150), above 15 (73). Position, owner (258), manager (145).

3.2 Partial Least Square Structural Equation Modelling

Hair *et al.* (2019) indicates that to assess the outcomes in PLS-SEM, it is important to evaluate the measurement and structural models.

3.3.1 Measurement Model Assessment

The study follows the requirements for the evaluation of the measurement model with respect to the factor loading, composite reliability, Cronbach's alpha and the average variance extracted (Hair *et al.* 2019). The outcomes shown in table 2 indicate that the loadings have a value more than the required threshold of 0.708. The item loading for all the different variables range from the lowest value of 0.710 to the highest value of 0.966. The Cronbach's alpha value for all the latent variables ranges from 0.740 to 0.947. Composite reliability values are more than 0.80 as shown below in the table. The findings presented in Table 3 also reveal that GPI, GPB, ATGPI, SN, PBC, PEOC, LB, MN, RE and EC have an AVE value of 0.729, 0.904, 0.627, 0.688, 0.789, 0.814, 0.830, 0.655, 0.615 and 0.654, respectively. In addition, each construct's square root of AVE is larger compared to the values in the same column with it as shown by table 3.

Table 2. Measurement model assessment

Constructs	Item	Loading	Cronbach's alpha	Composite reliability	AVE
Green practice intention (GPI)			0.812	0.889	0.729
	GPI1	0.768			
	GPI2	0.902			
	GPI3	0.884			
Green practice behaviour (GPB)			0.947	0.966	0.904
	GPB1	0.931			
	GPB2	0.966			
	GPB3	0.955			
Attitude towards green practice (ATT)			0.902	0.922	0.627
	ATT11	0.803			

Constructs	Item	Loading	Cronbach's alpha	Composite reliability	AVE
Subjective norms (SN)	ATT2	0.821	0.853	0.898	0.688
	ATT3	0.827			
	ATT4	0.746			
	ATT5	0.759			
	ATTI6	0.754			
	ATT7	0.830			
	SN1	0.869			
Perceived behavioural control (PBC)	SN2	0.817	0.867	0.918	0.789
	SN3	0.878			
	SN4	0.747			
	PBC1	0.879			
Moral norms (MN)	PBC2	0.895	0.740	0.851	0.655
	PBC3	0.890			
	MN1	0.837			
	MN2	0.745			
Response efficacy (RE)	MN3	0.842	0.822	0.864	0.615
	RE1	0.717			
	RE2	0.903			
	RE3	0.793			
	RE4	0.709			
Environmental concern			0.914	0.930	0.654
	EC1	0.816			
	EC2	0.846			
	EC3	0.798			
	EC4	0.795			
	EC5	0.801			
	EC6	0.801			
EC7	0.804				

Table 3. Discriminant validity

	ATT	EC	GPB	GPI	MN	PBC	RE	SN
ATT	0,792							
EC	0,147	0,809						
GPB	0,248	0,058	0,951					
GPI	0,317	0,179	0,385	0,854				
MN	0,299	0,137	0,231	0,340	0,810			
PBC	0,303	0,147	0,494	0,255	0,392	0,888		
RE	0,124	-0,007	0,052	0,057	0,154	0,046	0,784	
SN	0,312	0,105	0,418	0,252	0,227	0,384	0,070	0,830

The square root of the AVE is represented by the diagonals.

Source: (authors' data analysis)

3.3.2 Structural Model Assessment

Hair *et al.* (2017) suggest that the structural model can only be measured when the required criteria are met. The requirements of the structural model such as common method bias, the R^2 , the f^2 , the Q^2 and model fit by Hair *et al.* (2019) were met. The model (R^2) explained 41.9% of the variance of GPI. The f^2 obtained in the study ranges from 0.000 to 0.029. The Q^2 obtained in the study is 0.146, and the standardised root mean residual (SRMR) obtained in the study is 0.05. Dijkstra and Henseler (2015) point out that the significance of a hypothesis is tested through bootstrapping. In addition, the value of standardised beta is also utilised to assess the significance of every estimation. Demir *et al.* (2021) indicate that the larger the value of the standardised beta, the larger the effect on the endogenous variable.

Table 4. Structural model

Path	Standardised Beta	T-statistics	Decision
H1 ATT →GPI	0.167	3.070**	Accepted
H2 SN→GPI	0.082	1.429	Rejected
H3 PBC→GPI	0.012	0.231	Rejected
H4 MN→GPI	0.172	3.326**	Accepted
H5 RE→GPI	0.204	2.983*	Accepted
H6 EC→GPI	0.088	1.751	Rejected
H7 GPI→GPB	0.385	4.801*	Accepted

* $P < 0.01$, ** $P < 0.05$

Source: (authors' data analysis)

The results of the structural model are represented in table 4. Four hypotheses are accepted. Hypothesis one shows that proposes that attitude towards green practices and intention to implement green practices are significantly positively related is accepted. Hypothesis four that proposes that moral norms and intention to implement green practices are significantly positively related is accepted. Hypothesis five that proposes that response efficacy and intention to implement green practices are significantly positively related is accepted. Hypothesis seven that proposes that there is a significant positive relationship between green purchase intention and green purchase behaviour is accepted. Three hypotheses are rejected. Hypothesis two that proposes that subjective norms and intention to implement green practices are significantly positively related is rejected. Hypothesis three that proposes that perceived behavioural control and intention to implement green

practices are significantly positively related is rejected. Hypothesis six that proposes that environmental concern and intention to implement green practices are significantly positively related is rejected.

4. Discussion

The study examined the intention to implement green practices by small and medium sized hotels in South Africa through the extension of the TPB. Three constructs namely moral norms, response efficacy and environmental concern. The findings indicated that attitude towards green practices and intention to implement green practices are significantly positively related. This suggests that a favourable attitude towards green practices by owner/manager of a small hotel can affect the intention to implement green practices. The findings are supported by prior empirical studies. Chan and Hawkins (2010) discovered that attitude positively impacts green purchase intention. In addition, empirical findings by Kim and Han (2010) and Chen and Peng (2012) find that attitude and intention to implement green practices are significantly positively related. The findings indicate an insignificant relationship between subjective norms and intention to implement green practices. The findings suggest that the opinions of significant reference groups or persons such as family and friends do not influence managers/owners to implement green practices. The findings are supported by prior empirical studies. Chen and Peng (2012) and Verma and Chandra (2018) find an insignificant relationship between SN and the intention to implement green practices. The findings indicate that the relationship between perceived behavioural control and intention to implement green practices is positive but insignificant. The findings suggest that owners/managers of small hotels may not have the understanding, skills, competence, and resources to implement green practices. The findings of the study by Arvola *et al.* (2008) found no association between PBC and the intention to buy sustainable products. The findings indicate that moral norms and intention to implement green practices are significantly positively related. The findings are supported by prior empirical studies by (Han 2015; Bertoldo and Castro, 2016; Wang *et al.* 2020). Shalender and Sharma (2021) indicate that moral norms positively influence intention to adopt green behaviour. The findings indicate that response efficacy is positively related to intention to implement green practices. The findings are supported by the results of prior empirical studies. Ng *et al.* (2018) find that response efficacy positively affects the intention to purchase electric cars in Hong Kong. Pang *et al.* (2021) find that the association between response efficacy and customers intention to purchase organic foods is positive. The findings indicate that the relationship between environmental concern and intention to implement green practices is positive but insignificant. The findings of studies by Mainieri *et al.* (1997) and Bamberg (2003) also find that the relationship between environmental concern and intention to purchase green products is insignificant. The results indicate that intention to implement green practices is a predictor of actual green practices. According to the TPB by Ajzen (1991), intention is the predictor of behaviour. The findings are supported by prior studies on the implementation of green practices (Chen and Tung 2014; Yilmaz 2014; Wang *et al.* 2016; Huang and Ge 2019).

Conclusions and Further Research

The study explored the determinants of intention to implement green practices by small and medium-sized hospitality firms in South Africa by using moral norms, response efficacy and environmental concern to extend the TPB. The findings showed that the effects of attitude, moral norms and response efficacy are significant. The effects of subjective norms, perceived behavioural control, and environmental concern are insignificant. The findings also indicated that intention is an important predictor of actual implementation of green practices. The study makes theoretical, empirical and policy contributions to the research on green practices in hotels. Theoretically, the study demonstrated that personal factors can be used to extend the TPB in the context of the intention to implement green practices by small hospitality firms. Empirically, the study contributes to the body of knowledge on green practices in small hotels. The study suggests some recommendations to improve the implementation of green practices by hotels. To improve attitude, moral norms and response efficacy, hotel owners or managers must have half-yearly workshops so that they can be taught about the importance of living in harmony with the environment and taking care of it. Therefore, it is suggested that green practice should be incorporated as a course in entrepreneurial programmes at institutions of higher learning so that these managers or owners can take them as their subjects or modules, which will prepare them to take care of the environment when running their day-to-day operations. The study had some limitations. The research focused on 403 hotel managers and/or owners in a single province, which limited the findings' generalisability. The study depended on self-reported data owners and managers rather than objective observations. This may lead to bias. The study's cross-sectional survey method cannot be utilised to examine behaviour over a longer period. The study's ability to determine cause and effect is hindered as a result of this limitation. Longitudinal studies focusing on the same concepts will assist in determining the cause-and-effect relationship. New studies should focus on the perception

of employees about the green practices in their firms. An examination of the moderating effects of gender and level of education of hotel managers/owners will add to the knowledge on green practices.

Acknowledgments

The authors thank the Department of Business Management, University of Limpopo for providing the funds to edit this paper. There is no financial interest or conflict of interest that could be seen to influence the results or interpretation of the study.

Credit Authorship Contribution Statement

Proceed Lerato Masebe was involved in the conceptualisation, investigation, methodology, software formal analysis, writing of original draft of the study.

Olawale Fatoki was involved in the conceptualisation, administration, supervision, validation, review, editing, visualisation and funding of the study.

Declaration of Competing Interest

The authors declare that they have no competing financial interests or personal relationships that could have appeared to influence the work reported in the paper.

References

- [1] Ajzen, I. 1991. The theory of planned behaviour. *Organizational behaviour and human decision processes* 50(2): 179-211. DOI: [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- [2] Ajzen, I. and M., Fishbein 1980. *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ: Prentice-Hall.
- [3] Alipour, H., F., Safaeimanesh and A., Soosan 2019. Investigating sustainable practices in hotel industry-from employees' perspective: Evidence from a Mediterranean island. *Sustainability* 1: 1-15. DOI:<https://doi.org/10.3390/su11236556>
- [4] Arvola, A., M., Vassallo, M., Dean, P., Lampila, A., Saba, L., Lähteenmäki, and R., Shepherd 2008. Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. *Appetite* 50(2-3): 443-454. DOI: <https://doi.org/10.1016/j.appet.2007.09.010>
- [5] Awaysheh, A., and R.D. Klassen, 2010. The impact of supply chain structure on the use of supplier socially responsible practices. *International Journal of Operations and Production Management* 30 (12): 1246-1268. DOI: <https://doi.org/10.1108/01443571011094253>
- [6] Bamberg, S. 2003. How does environmental concern influence specific environmentally related behaviours? A New Answer to an Old Question. *Journal of Environmental Psychology* 23(1): 21-32. DOI:[https://doi.org/10.1016/S0272-4944\(02\)00078-6](https://doi.org/10.1016/S0272-4944(02)00078-6)
- [7] Bertoldo, R., and P., Castro 2016. The outer influence inside us: Exploring the relation between social and personal norms. *Resources, Conservation and Recycling* 112: 45-53. DOI:<https://doi.org/10.1016/j.resconrec.2016.03.020>
- [8] Cantele, S., S., Vernizzi, and B., Campedelli 2020. Untangling the Origins of Sustainable Commitment: New Insights on the Small vs. Large Firms' Debate. *Sustainability* 12: 671-690. DOI:<https://doi.org/10.3390/su12020671>
- [9] Chan, E.S. and R., Hawkins, 2010. Attitude towards EMSs in an international hotel: An exploratory case study. *International Journal of Hospitality Management* 29(4): 641-651. DOI:<https://doi.org/10.1016/j.ijhm.2009.12.002>
- [10] Chen, A., and N., Peng 2012. Green hotel knowledge and tourists' staying behaviour. *Annals of Tourism Research* 39(4): 2211-2219. DOI: <https://doi.org/10.1016/j.annals.2012.07.003>
- [11] Chen, M.F., and P.J., Tung 2014. Developing an extended theory of planned behaviour model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management* 36: 221-230. DOI:<https://doi.org/10.1016/j.ijhm.2013.09.006>

- [12] Chen, T.B. and L.T., Chai 2010. Attitude towards the environment and green products: Consumers' perspective. *Management Science and Engineering* 4(2): 27-39. DOI:<http://doi.org/10.3968/j.mse.1913035X20100402.002>
- [13] Dakduk, S., Á., González, and A., Portalanza 2019. *Learn about structural equation modelling in smartPLS with data from the customer behaviour in electronic commerce study in Ecuador*. SAGE Publications, Limited.
- [14] Demir, M., H., Rjoub, and M., Yesiltas 2021. Environmental awareness and guests' intention to visit green hotels: The mediation role of consumption values. *Plos One* 16(5): 1-22. DOI:<https://doi.org/10.1371/journal.pone.0248815>
- [15] Dijkstra, T.K., and J., Henseler 2015. Consistent partial least squares path modeling. *MIS quarterly* 39(2): 297-316. DOI: [10.25300/MISQ/2015/39.2.02](https://doi.org/10.25300/MISQ/2015/39.2.02)
- [16] Fatoki, O. 2021. Predicting the Intention to Purchase Electric Vehicles in South Africa. *Journal of Environmental Management and Tourism* 1(49): 81-96. DOI: [https://doi.org/10.14505/jemt.v12.1\(49\).07](https://doi.org/10.14505/jemt.v12.1(49).07)
- [17] Hair, J.F., G.T.M., Hult, C.M., Ringle, and M., Sarstedt 2017. *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Sage, Thousand Oaks, CA.
- [18] Hair, J.F., J.J., Risher, M. Sarstedt, and C.M., Ringle 2019. When to use and how to report the results of PLS-SEM. *European Business Review* 31(1): 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- [19] Han, H. 2015. Travellers' pro-environmental behaviour in a green lodging context: Converging value-belief-norm theory and the theory of planned behaviour. *Tourism Management* 47:164-177. DOI:[10.1016/j.tourman.2014.09.014](https://doi.org/10.1016/j.tourman.2014.09.014)
- [20] Han, H., L.T.J., Hsu, and C., Sheu 2010. Application of the theory of planned behaviour to green hotel choice: Testing the effect of environmentally friendly activities. *Tourism Management* 31(3): 325-334. DOI:[10.1016/j.tourman.2009.03.013](https://doi.org/10.1016/j.tourman.2009.03.013)
- [21] Huang, K.T., J.C., Wang and Y.C., Wang 2015. Analysis and benchmarking of greenhouse gas emissions of luxury hotels. *International Journal of Hospitality Management* 51: 56-66. DOI: [10.1016/j.ijhm.2015.08.014](https://doi.org/10.1016/j.ijhm.2015.08.014)
- [22] Huang, X. and J., Ge 2019. Electric vehicle development in Beijing: An analysis of consumer purchase intention. *Journal of Cleaner Production*, 216: 361-372. DOI: <https://doi.org/10.1016/j.jclepro.2019.01.231>
- [23] Kang, K.H., L., Stein, C.Y. Heo, and S., Lee 2012. Consumers' willingness to pay for green initiatives of the hotel industry. *International Journal of Hospitality Management* 31(2): 564-572. DOI:<https://doi.org/10.1016/j.ijhm.2011.08.001>
- [24] Ko, S.B., and B., Jin 2017. Predictors of purchase intention toward green apparel products: A cross-cultural investigation in the USA and China. *Journal of Fashion Marketing and Management: An International Journal* 21: 80-87. DOI: [10.1108/JFMM-07-2014-0057](https://doi.org/10.1108/JFMM-07-2014-0057)
- [25] Machura, P. 2013. Moral norms, moral ideals and supererogation. *Folia Philosophica* 29:127-159.
- [26] Mainieri, T., E.G., Barnett, T. R., Valdero, J.B., Unipan, and S., Osamp 1997. Green buying: The influence of environmental concern on consumer behaviour. *The Journal of Social Psychology* 137(2): 189-204. DOI:<https://doi.org/10.1080/00224549709595430>
- [27] Mbasera, M., E., Du Plessis, M., Saayman and M., Kruger 2016. Environmentally-friendly practices in hotels. *Acta Commercii* 16(1): 1-8. DOI: [http://doi.org/10.4102/ac.v16i1.362](https://doi.org/10.4102/ac.v16i1.362)
- [28] Moser, A.K. 2015. Thinking green, buying green? Drivers of pro-environmental purchasing behaviour. *Journal of Consumer Marketing* 32(3): 167-175. DOI: <https://doi.org/10.1108/JCM-10-2014-1179>
- [29] Ng, M., M., Law and S., Zhang 2018. Predicting purchase intention of electric vehicles in Hong Kong. *Australasian Marketing Journal* 26(3): 272-280. DOI: <https://doi.org/10.1016/j.ausmj.2018.05.015>
- [30] Nheta, D.S. and N., Tondani 2016. Measures and practices implemented by hotels to minimise the causes and effects of global warming: the case of Vhembe District. *African Journal of Hospitality, Tourism and Leisure* 5(3): 1-19.

- [31] Ogbeide, G.C. 2012. Perception of green hotels in the 21st century. *Journal of Tourism Insights* 3(1): 1-9. DOI: <https://doi.org/10.9707/2328-0824.1032>
- [32] Pang, S.M., B.C., Tan and T.C., Lau 2021. Antecedents of consumers' purchase intention towards organic food: Integration of Theory of Planned behaviour and protection motivation theory. *Sustainability* 1: 1-16. DOI: <https://doi.org/10.3390/su13095218>
- [33] Paul, J., A., Modi and J., Patel 2016. Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services* 29: 123-134. DOI:<https://doi.org/10.1016/j.jretconser.2015.11.006>
- [34] Popova, L. 2012. The extended parallel process model: Illuminating the gaps in research. *Health Education and Behaviour* 39(4): 455-473. DOI: <https://doi.org/10.1177/1090198111418>
- [35] Rahman, I., J., Park, and C.G.Q., Chi 2015. Consequences of "greenwashing": Consumers' reactions to hotels' green initiatives. *International Journal of Contemporary Hospitality Management* 27(6): 1054-1081. DOI: [10.1108/IJCHM-04-2014-0202](https://doi.org/10.1108/IJCHM-04-2014-0202)
- [36] Ru, X., H., Qin, and S., Wang 2019. Young people's behaviour intentions towards reducing PM2. 5 in China: Extending the theory of planned behaviour. *Resources, Conservation and Recycling* 141: 99-108. DOI:[10.1016/j.resconrec.2018.10.019](https://doi.org/10.1016/j.resconrec.2018.10.019)
- [37] Sang, Y.N. and H.A., Bekhet 2015. Modelling electric vehicle usage intentions: an empirical study in Malaysia. *Journal of Cleaner Production* 92: 75-83. DOI: <https://doi.org/10.1016/j.jclepro.2014.12.045>
- [38] Schuitema, G., J., Anable, S., Skippon and N., Kinnear 2013. The role of instrumental, hedonic and symbolic attributes in the intention to adopt electric vehicles. *Transportation Research Part A: Policy and Practice* 48: 39-49. DOI: <https://doi.org/10.1016/j.tra.2012.10.004>
- [39] Shalender, K. and N., Sharma 2021. Using extended theory of planned behaviour (TPB) to predict adoption intention of electric vehicles in India. *Environment, Development and Sustainability* 23(1): 665-681. DOI:[10.1007/s10668-020-00602-7](https://doi.org/10.1007/s10668-020-00602-7)
- [40] Smith, E.E. and S., Perks 2010. A perceptual study of the impact of green practice implementation on the business functions. *Southern African Business Review* 14(3): 1-15.
- [41] Steg, L., J.W., Bolderdijk, K., Keizer, and G., Perlaviciute 2014. An integrated framework for encouraging pro-environmental behaviour: The role of values, situational factors and goals. *Journal of Environmental psychology* 38: 104-115. DOI: <https://doi.org/10.1016/j.jenvp.2014.01.002>
- [42] Suki, N.M. and N.M., Suki 2015. Consumers' environmental behaviour towards staying at a green hotel: Moderation of green hotel knowledge. *Management of Environmental Quality: An International Journal* 26(1): 103-117. DOI: [10.1108/MEQ-02-2014-0023](https://doi.org/10.1108/MEQ-02-2014-0023)
- [43] Tih, S. and Z., Zainol, 2012. Minimizing waste and encouraging green practices. *Journal Ekonomi Malaysia* 46(1): 157-164.
- [44] Verma, V.K. and B., Chandra 2018. An application of theory of planned behaviour to predict young Indian consumers' green hotel visit intention. *Journal of Cleaner Production* 172: 1152-1162.
- [45] Wang, J. and B.W., Ritchie 2012. Understanding accommodation managers' crisis planning intention: An application of the theory of planned behaviour. *Tourism Management* 33(5): 1057-1067. DOI:[10.1016/j.tourman.2011.12.006](https://doi.org/10.1016/j.tourman.2011.12.006)
- [46] Wang, J., S., Wang, Y., Wang, J., Li, and D., Zhao, 2018. Extending the theory of planned behaviour to understand consumers' intentions to visit green hotels in the Chinese context. *International Journal of Contemporary Hospitality Management* 30(8): 2810-2825. DOI: [10.1108/IJCHM-04-2017-0223](https://doi.org/10.1108/IJCHM-04-2017-0223)
- [47] Wang, P., Q. Liu, and Y., Qi 2014. Factors influencing sustainable consumption behaviours: a survey of the rural residents in China. *Journal of Cleaner Production* 63: 152-165. DOI:<https://doi.org/10.1016/j.jclepro.2013.05.007>

- [48] Wang, S., J., Fan, D., Zhao, S., Yang, and Y., Fu 2016. Predicting consumers' intention to adopt hybrid electric vehicles: using an extended version of the theory of planned behaviour model. *Transportation* 43(1): 123-143. 10.1007/s11116-014-9567-9
- [49] Wang, S., J., Wang, S., Yang, J., Li, and K., Zhou 2020. From intention to behaviour: Comprehending residents' waste sorting intention and behaviour formation process. *Waste Management* 113: 41-50. DOI:<https://doi.org/10.1016/j.wasman.2020.05.031>
- [50] White, K., R., Habib, and D.J., Hardisty 2019. How to SHIFT consumer behaviours to be more sustainable: A literature review and guiding framework. *Journal of Marketing* 83(3): 22-49. DOI:<https://doi.org/10.1177/0022242919825>
- [51] Yadav, R. and G.S., Pathak 2016. Intention to purchase organic food among young consumers: Evidences from a developing nation. *Appetite* 96: 122-128. DOI: <https://doi.org/10.1016/j.appet.2015.09.017>
- [52] Yadav, R. and G.S., Pathak, 2017. Determinants of consumers' green purchase behaviour in a developing nation: Applying and extending the theory of planned behaviour. *Ecological Economics* 134: 114-122. DOI:<https://doi.org/10.1016/j.ecolecon.2016.12.019>
- [53] Yilmaz, N. 2014. *The Influence of Hotel Managers' Intentions for Green Marketing Practices: An Application of the Theory of Planned Behaviour in Turkey* (Doctoral dissertation). Texas A&M University.

Appendix: Measures of Constructs

Variable	Survey	Response category	Adapted from
Green practice intention	1. We are willing to implement green practices in our hotel/lodge in the future 2. We intend to implement green practices in our hotel/lodge in the future. 3. We plan to implement green practices in our hotel/lodge in the future.	Five-point Likert scale 1= strongly disagree 5= strongly agree	Ajzen 1991. Chen and Tung (2014)
Green practice behaviour	1. We have implemented green practices in our hotel/lodge in the past six months. 2. We have implemented green practices in our hotel/lodge in our daily operation. 3. We have implemented green practices in our hotel/lodge on a regular basis.	Five-point Likert scale 1 strongly disagree. 5 strongly agree	Chen and Tung 2014
Attitude towards green practices	1. I think that implementing green practice in my hotel/lodge is useful to protect the environment. 2. I think that implementing green practice in my hotel/lodge is significant to reduce greenhouse gas emissions. 3. I think that implementing green practice in my hotel/lodge is valuable to reduce pollution. 4. I think that implementing green practice in my hotel/lodge is a wise decision. 5. I think that the implementation of green practice in my hotel/lodge is desirable. 6. I think that the implementation of green practice in my hotel/lodge is pleasant 7. I think that the implementation of green practice in my hotel/lodge will make a positive impact on the environment	Five-point Likert scale 1= strongly disagree 5= strongly agree	Hua and Wang (2019)
Subjective norm	1. Most people who are important to me think I should implement green practices. 2. Most people who are important to me would want me to implement green practice. 3. People whose opinions I value would prefer that I implement green practices. 4. My friend's positive opinion influences me to implement green practice.	Five-point Likert scale 1= strongly disagree 5= strongly agree	Chen and Tung (2014)
Perceived behavioural control	1. I think that I am capable of implementing green practice in my hotel/lodge. 2. I have the knowledge and skill to implement green practice in my hotel/lodge. 3. Whether or not I implement green practice in my hotel/lodge is completely up to me.	Five-point Likert scale 1 strongly disagree. 5 strongly agree	Chen and Tung (2014)

Variable	Survey	Response category	Adapted from
Moral norm	<ol style="list-style-type: none"> 1. I believe it is my moral responsibility to reduce environmental pollution and greenhouse gases emissions. 2. I feel morally obliged to implement green practices irrespective of what others think of me. 3. I take into account environment consequences while I implement a practice. 	Five-point Likert scale 1 strongly disagree. 5 strongly agree	Shalender and Sharma (2021)
Response efficacy	<ol style="list-style-type: none"> 1. I am sure that green practice is effective in preventing, conserving and preserving physical and cultural resources. 2. I am sure that green practice will help prevent depletion of animal and plant species. 3. I am sure that green practice will help protect the environment. 4. I am sure that green practice will help prevent threat to safety of present and future human generations 	Five-point Likert scale 1 strongly disagree. 5 strongly agree.	Fatoki (2021)
Environmental concern	<ol style="list-style-type: none"> 1. I am extremely worried about the state of the world's environment and what it means for the future 2. Mankind is severely abusing the environment 3. When mankind interferes with nature, it often produces disastrous consequences 4. The balance of nature is delicate and easily upset 5. Human must live in harmony with nature in order to survive 6. I think that environmental problems are important 7. I think that we should care about environmental problems. 	Five-point Likert scale 1 strongly disagree. 5 strongly agree.	Chen and Tung (2014) Yadav and Pathak (2015)

ASERS



The logo for ASERS Publishing, featuring the word "ASERS" in a bold, orange, sans-serif font with a stylized fan-like graphic to the left, and the word "Publishing" in a smaller, orange, sans-serif font below it.

Web: www.aserspublishing.eu

URL: <http://www.journals.aserspublishing.eu/jemt>

E-mail: jemt@aserspublishing.eu

ISSN 2068 – 7729

Journal DOI: <https://doi.org/10.14505/jemt>

Journal's Issue DOI: [https://doi.org/10.14505/jemt.v14.5\(69\).00](https://doi.org/10.14505/jemt.v14.5(69).00)