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Abstract

In sustainable ecotourism, responsible ecotourist behaviour towards purchasing local products and services is vital to alleviate poverty in local communities and help wildlife conservation. Using an extended Theory of Planned Behaviour, this study investigates the relationship between attitude, anticipated emotion, and environmental concern. This pilot study was conducted to test the reliability of the questionnaire instrument before conducting the actual research. Data collection was conducted in Penang National Park, and questionnaires were distributed face to face among the ecotourist. Samples were obtained using the purposive sampling method. Statistical Software Packages, namely SPSS version 26.0, were used to perform data analysis. The high internal consistency of items among the constructs shows that the questionnaires are reliable in conducting actual research in predicting responsible ecotourist behaviour (Cronbach Alpha value ranges from 0.883 to 0.604).

Keywords: Responsible Ecotourist Behaviour, Wildlife Conservation, Attitude, Anticipated Emotion, Environmental Concern

Introduction

According to Stronza & Pêgas (2008), sustainable ecotourism is a powerful tool for wildlife conservation. It can generate incredible economic benefits for local people to alleviate poverty. Yadav et al (2021) suggested that humans unsustainable manner that lead to environmental problem can be prevented thru sustainability. In sustainable ecotourism, it is crucial to evaluate responsible ecotourist behaviour (REB) towards purchasing local products and services for wildlife conservation as this money will get back into the local communities (Stronza, 2007). The Theory Of Planned Behavior (TPB) is a psychological theory often used to study conservation behavior (Kaiser et al., 2005). Proposed by Ajzen in 1985, this theory tells how an individual's decision to engage in a specific behavior is predicted by their intention to engage in that behavior. Intentions are assumed to capture the motivational factors that influence behavior; they indicate how hard people are willing to try and how much effort they are planning to exert to perform the behavior. According to TPB, intentions are determined by attitude towards behaviour (Ajzen, 1991). Attitude is a positive and negative evaluation

when we consider particular behaviour (Eagly & Chaiken, 1993). It is critical to evaluate REB attitudes toward purchasing local products and services for wildlife conservation in this study because attitudes are a component of endurance. It means that someone who has a favorable opinion of an object, person, thing, or event will continue to have a favorable opinion (Eagly, & Chaiken, 2007). In psychology, emotion refers to the sentiments of happiness, love, fear, fury, or hatred elicited by a current circumstance and capable of influencing action. It profoundly affects all aspects of life, from our daily interactions with others to our decisions. According to Bagozzi et al (2016), emotions during the decision-making process involve anticipated emotions. Leone et al (2005) mentioned that anticipated emotions are an emotion that is not experienced directly but are the expectations of how the person will feel (gains or losses) regarding the decision making that has been made. For example, a person anticipates feeling regret if she/he decides not to recycle waste. Someone is anticipated to feel proud if she/he decides to recycle waste. When aroused, emotions control elements such as perception, attention, inference, learning, memory, goal selection, motivational priorities, physiological reactions, motor behaviors, and behavioral decision-making (Cosmides & Tooby, 2000; Tooby & Cosmides, 2008). As public awareness of environmental issues grows, researchers frequently employ the construct of environmental concern to assess environmental behaviour. Environmental concern is a general belief in environmental conservation, which motivates individuals to adopt more responsible behaviours (Fransson & Gärling, 1999). According to Bamberg (2003), it is crucial to study the influence of environmental concerns as they may affect a wide range of environmental behaviour. Therefore, this study investigated the relationship between REB's attitude, environmental concern, and anticipated emotion in purchasing local products and services for wildlife conservation.

Literature Review
TPB is used to predict human behavior (Curtis et al., 2018; Zaremohzzabieh et al., 2019). It has been applied in various human domains such as in the field of purchasing, advertising, entrepreneurship, plagiarism and sustainability (Al-Jubari et al., 2019; Naia et al., 2017; Nandi & Singh, 2021; Qi & Ploeger, 2019; Sanne & Wiese, 2018; Sharma & Foropon, 2019; Si et al., 2020; Uzun & Kilis, 2020). TPB has been criticized for ignoring the functions of attitude to predict intention as it is heavily used perceived behavioral control (PBC) to prove its influence on intention (Lee & Kim, 2018; Xiao & Wong, 2020). Scholars employ attitude constructs to examine the attitudes of customers, students, and workers (Gaiani et al., 2018; Santos et al., 2019; Saqlain et al., 2020). Since the 1970s, tourism academics have begun to pay attention to tourists' attitudes. Wildlife conservation research is frequently employed in tourism studies to investigate the attitudes of local communities (Black and Cobbinah, 2018; Mbaiwa, 2018; Ziegler et al., 2021). In TPB, scholars also heavily use the model to study environmental behaviour. However, scholars has lacked to integrate into the theory of the role of emotion in the formation of environmental behavior and decision-making processes (Parkinson et al., 2018). A meta-analysis by Rivis & Sheeran (2003) revealed that scholars always use norms as an additional predictor in the TPB to environmental behavior studies (Oteng-Peprah et al., 2020; Tan et al., 2017; Clark et al., 2019; Esfandiar et al., 2020; Han & Hyun, 2017). Over the decades, research on emotion has increased in a variety of fields, including medicine (Ferrer, & Mendes, 2018; Kozlowski et al., 2017), education (Frenzel et al., 2018; Morrish et al., 2018) and computer science (Egger et al., 2019; Tarnowski et al., 2017). Eng et al (2022) encourage researchers to consider the inclusion of emotional responses as antecedents to TPB outcomes

as it could shape our behavior. TPB is also heavily used by researcher in environmental research field to study environmental behaviour. However, the environmental concern construct is scarcely used in TPB to study environmental behaviour as the researchers focus more on environmental consciousness (Ahmad et al., 2020; Jain et al., 2020). Scholars and environmentalists have developed environmental concerns to evaluate pro-environmental behavior (Aprile & Fiorillo, 2017; Chao et al., 2021; Maichum et al., 2017; Malik et al., 2019; Yue et al., 2020).

Methodology
In this study, Penang National Park (PNP) was selected as the study site because it is a popular ecotourism destination that attracts domestic and international visitors. It was rated the seventh best ecotourism destination in Asia by Agoda.com. In Malaysia, PNP is situated in Penang State, the smallest state in Malaysia (measuring 29.6sq km) with a total population of 1.77 million. It is reported that the poverty in Penang State is increasing, which is 11.3% in 2016 and 13.2 % in 2019 (Department of Statistics, Malaysia). PNP is a home to 417 species of flora and 143 species of fauna, including numerous rare and endangered species. It is also a wildlife conservation area (Turtle Conservation Centre) dedicated to protect turtle eggs from being hunted by local people since a long time ago. Turtle eggs are hunted as a source of income due to poverty. The selling price of turtle eggs is RM5 to RM6 each, while these animals only lay eggs once a year, not more than 40 eggs. Turtles are reptiles that contribute significantly to the ecosystem's balance.

This study employs quantitative research approaches as it enables researcher to gain a deeper understanding of social science through survey (Bowling & Ebrahim, 2005). This method effectively communicated using statistics and figures in contribution to the theory (Leedy & Ormrod, 2005). Additionally, this study employed a single cross-sectional design, in which a single sample of respondents was recruited from the population and data from this sample was collected just once (Olsen & St George, 2004). As this study applied a non-experimental research and researcher knew accurately what and how to measure the variables of interest, close-structured questionnaire seemed to be an efficient data collection instrument (Sekaran, 2003). A self-administered questionnaire is a quantitative method that enables the researcher to collect a large number of respondents (individuals who respond to the questions) with minimal researcher intervention.

In this study, the questionnaire was designed into two sections, known as Section I and Section II. Section I has two parts namely Part A and Part B. Part A included the respondent's profile such as age, gender, education level, occupation, salary. Part B included the respondent's trip information. The type of question that was used in this section was determinant-choice question in which the respondents were required to choose one response from several possible alternatives. Section II of the questionnaire containing four constructs measurement namely environmental concern (12 items), anticipated emotion (6 items), attitude (12 items) and intention (4 items). All items were adapted from the literature as shown in Appendix 1. All of the measurable items were graded on a five-point Likert scale ranging from 5-strongly agree to 1-strongly disagree. According to Joshi, Kale, Chandel & Pal (2015), Likert Scale is the most effective method for analysing human behaviour. Additionally, a five-point Likert scale is straightforward and requires less time and effort to complete than a more complex scale. This contributes to the survey's bias reduction. Numerous researches

have indicated that using a five-point scale can improve response rate and quality while decreasing respondents' annoyance level (Devlin et al., 1993; Babakus & Mangold, 1992). Additionally, Krosnick (2018) stated that a five-point scale is easily understood by respondents and enables them to express their thoughts simply. Several of the items in this study were worded negatively rather than all being worded positively. This is to keep respondents engaged and focused while they provide responses to the questions, as well as to stop respondents unconsciously circling the points. According to Sekaran (2003), a "good questionnaire should have both positive and negative items" (p. 240). Seven negatively worded questions were used in this study.

Analysis of Pilot Study
A pilot study is the initial phase of the research process and is defined as a smaller-scale study (Van Teijlingen, & Hundley, 2001). Before conducting the primary research, it is essential to conduct a pilot study to improve the precision of the study. In quantitative study, pilot study was conducted to determine the instrument internal consistency (Rattray & Jone, 2007). Instrument reliability is a term that refers to the consistency of an instrument such as questionnaire. In this research, a pilot study was undertaken in January 2021. Purposive sampling was used in this study because its flexibility enables researchers to save time and money during data collecting (Taherdoost, 2016). It provides a procedure that is adaptable as circumstances change, even if the change is unexpected. After being granted permission by the authorised officer of the national park, the data is collected meticulously through a face-to-face survey of visitors at the Penang National Park's entrance gate. Initially, visitors to Penang National Park were asked whether they were checking in or staying overnight during their visit. In this study, only tourists that check in or stay overnight will be chosen as a sample. Second, only tourists who agree to be respondents will receive a set of questionnaires from the researcher's team, and they will be given a symbol of appreciation once they have completed the questionnaire. According to Fink (1995), a minimum of ten respondents is necessary to collect sufficient data for analysis. Seventy respondents' data were evaluated in this study to obtain more accurate results. The more data collected, the more accurate the findings (Fink, 1995). This pilot study analysed data using SPSS 26.0 software to obtain the internal consistency of the variables measured in the questionnaires.

Based on the analysis of respondents' profiles, the majority of respondents were between the ages of 20 and 40 (42.9 %), followed by those under the age of 20 and above the age of 40. The majority of respondents were men (57.1 %). Furthermore, 84.3% of respondents were Malaysian citizens, compared to non-Malaysians, according to the data. Most respondents have a secondary school certificate as the highest educational background (31.4%), followed by those with a degree certificate (27.1%) and foundation's certificate (22.9%). Those with master's and diploma's respectively are 7.1%. Respondents were largely employed (55.7 %), followed by students (28.6 %), and the fewest were retirees (2%). The majority of respondents work in the public sector (27.1%), followed by those in the private sector (25.7%) and the self-employed (2.9%). Most respondents' monthly income is below RM1000 (38.6%). It is followed by those with a monthly income of RM5001 to RM10,000 (35.7%) and RM1000 to RM5000 (25.7%). The respondents' profiles was summarised in Table 3.1.

Table 3.1
Profile of the Respondent

Item	Classification	Sample Amount	Percentage %
Age	Under 20	22	31.4
	20-40	30	42.9
	Above 40	18	25.7
Gender	Male	40	57.1
	Female	30	42.9
Malaysia Citizen		59	84.3
Non-Malaysian		11	15.7
Education Level	Primary School	3	4.3
	Secondary School	22	31.4
	Certificate	16	22.9
	Diploma	5	7.1
	Degree	19	27.1
	Master	5	7.1
Occupation	Employed	39	55.7
	Unemployed	9	12.9
	Pensioner	2	2.9
	Student	20	28.6
Working Sector	Public	19	27.1
	Private	18	25.7
	Self-Employed	2	2.9
	Non-Employed	31	44.3
Monthly Income	Less Than RM1000	27	38.6
	RM1000-RM5000	18	25.7
	RM5001-RM10000	25	35.7

Based on the analysis of respondent's trip details, most respondents are first-time visitors to Penang National Park (57.1 %), compared to those who visit frequently (42.9%). The number of respondents who came alone was lower than the number who came in groups (85.7%). Many of them were accompanied by family and friends (34.4 % each), followed by solo travellers (20%) and those who came with a business partner or colleagues (11.4%). According to the data, Penang National Park is the main trip's destination for respondents (88.6%), with most of them seeking leisure (87.1%). While the rest came for work (12.9%). According to the findings, most respondents were self-funding the expense of the trips (52.9%), followed by those sponsored by family and relations (35.7%). 100% of respondents agreed the best time to travel is on weekends. The analysis also discovered that the majority of respondents who came to visit Penang National Park spent money between RM500 and RM1000 (58.6%), followed by those who spent less than RM500 (24.3%). The respondents' trip details was summarised in Table 3.2.

Table 3.2
Information on the Respondent's Trip

Item	Classification	Sample Amount	Percentage %
Trips frequent	First Timer	40	57.1
	More Than 1 time	30	42.9
Number of People in the trips	1 Person	10	14.3
	More Than 2 Persons	60	85.7
Travel Buddy	Unaccompanied Traveler	14	20
	Family	24	34.4
	Friend	24	34.4
	Business Partner/Colleagues	8	11.4
Main Trip	Yes	62	88.6
	No	8	11.4
Objective	Working	9	12.9
	Leisure	61	87.1
Sponsor	Self-Sponsor	37	52.9
	Friend	3	4.3
	Office	5	7.1
	Family & Relatives	25	35.7
Vacation time	Weekends	70	100
Average Expenses	Less Than Rm500	17	24.3
	Rm500-Rm1000	41	58.6
	Rm1001-Rm2000	1	1.4
	More Than Rm2000	11	15.7

The Cronbach Alpha scores can be used to measure the internal consistency of questionnaire items (Gliem & Gliem, 2003). Cronbach Alpha values between 0.9.1 and 1.00 indicate excellent internal consistency, whereas Cronbach Alpha values between 0.81 and 0.90 indicate good internal consistency. Cronbach Alpha values between 0.71 and 0.80 suggest that items have a good to acceptable degree of internal consistency, whilst values between 0.61 and 0.70 indicate that items have an acceptable degree of internal consistency. However, scores of 0.01-0.60 imply that the items do not have an acceptable level of internal consistency. In the present research, results of pilot study demonstrates that the Cronbach alpha value were ranges from 0.883 to 0.604, respectively. Cronbach Alpha value for Limit to Growth (0.881), Anti-anthropocentrism (0.775), Exemp-tionalism (0.781), Eco-crisis (0.79), anticipated emotion (0.883), attitude towards buying local vendors for wildlife conservation (0.680), attitude towards buying local handicrafts for wildlife conservation (0.788), attitude towards staying in a local homestays for wildlife conservation (0.604), attitude towards using

local tour guides for wildlife conservation (0.760), and intention (0.826) shows that the items in the questionnaire have a high level of internal consistency, which further indicates that the questionnaire has a high level of reliability. The results of the pilot study were described in Table 3.3, which included the reliability coefficients for the constructs and dimensions.

Table 3.3
Reliability Coefficient for the Constructs and Dimensions

Construct	Dimension	Cronbach's alpha	Number of items
Environmental concern	Limit to growth	0.881	4
	Anti-anthropocentrism	0.775	3
	Exemp-tionalism	0.781	2
	Eco-crisis	0.79	3
Anticipated emotion		0.883	6
Attitude	Attitude towards buying local vendors for wildlife conservation	0.680	3
	Attitude towards buying local handicrafts for wildlife conservation	0.788	3
	Attitude towards staying in a local homestays for wildlife conservation	0.604	3
	Attitude towards using local tour guides for wildlife conservation	0.760	3
Intention		0.826	4

Discussion and Conclusion

This study is crucial for predicting responsible ecotourism behaviour (REB) regarding purchasing local products and services for wildlife conservation. Before conducting the actual research, it is crucial to conduct a pilot study to determine the instrument's reliability (questionnaire). The pilot study's purpose was to determine the internal consistency of the construct's items. The results show that items in environmental concern have a high level of internal consistency (Limit To Growth = 0.881; Anti-anthropocentrism = 0.775; Exemp-tionalism = 0.781; and Eco-crisis = 0.79). Findings show that the internal consistency among the six items in anticipated emotion is also very high (Cronbach Alpha = 0.883). The results show that there is a high level of internal consistency among attitude items (Attitude towards buying local vendors for wildlife conservation = 0.680; Attitude towards buying local handicrafts for wildlife conservation = 0.788; Attitude towards staying in local homestays for

wildlife conservation = 0.604; and Attitude towards using local tour guides for wildlife conservation = 0.760). Findings show that the intention's internal consistency among the four items is very high (Cronbach Alpha = 0.826). Finally, the findings show that the items have a high degree of internal consistency among the constructs (Cronbach's alpha values range from 0.88 to 0.604), indicating that the questionnaire is highly reliable. Therefore, it is suggested that future researchers utilize the instrument to predict REB. Additionally, this instrument is recommended to be reliable for conducting actual research.

Appendix 1

Source	Items of Attitude
Ibrahim, Mariapan, Lin, and Bidin (2021b)	1. I like to buy local food vendor very much if it contributes to the conservation of wildlife in Penang National Park.
	2. I think, buying local food vendor that contributes to the conservation of wildlife in Penang National Park is very good.
	3. I always buy local food vendor that contributes to the conservation of wildlife in Penang National Park.
	4. I like to buy local handicraft products very much if it contribute to the conservation of wildlife in Penang National Park.
	5. I think, buying local handicraft products that contribute to the conservation of wildlife in Penang National Park is very good.
	6. I always buy local handicraft products that contributes to the conservation of wildlife in Penang National Park.
	7. I like to stay in a local homestay very much if it contributes to the conservation of wildlife in Penang National Park.
	8. I think, staying in a local homestay that contributes to the conservation of wildlife in Penang National Park is very good.
	9. I always stay in a local homestays that contributes to the conservation of wildlife in Penang National Park.
	10. I like to use local tourist guide services if it contributes to the conservation of wildlife in Penang National Park.
	11. I think, using local tourist guide services that contributes to the conservation of wildlife in Penang National Park is very good.
	12. I always use local tourist guide services that contributes to the conservation of wildlife in Penang National Park.
Dimension and Source	**Items of Environmental Concern**
Limit to growth Dunlap (2000)	1. I believe we are approaching a limit on the number of people the earth can support.
	2. I believe the earth has plenty of natural resources if we just learn how to develop them.
	3. I believe the earth is like a spaceship with very limited room and resources.
	4. I believe the balance of nature is strong enough to cope with the impacts of our modern industrial.
	1. I believe we were meant to rule over the rest of nature.

Anti-anthropocentrism Dunlap (2000)	2. I believe that we have the absolute right to modify the natural environment to suit our needs.
	3. I believe plants and animals have as much right like us to exist.
Exemp-tionalism Dunlap (2000)	1. I believe we will eventually learn enough about how nature works to be able to control it.
	2. I believe despite our special abilities; we are still subject to the laws of nature.
Eco-crisis Dunlap (2000)	1. I believe the so called "ecological crisis" facing humankind has been greatly exaggerated.
	2. I believe human are severely abusing the environment.
	3. I believe if things continue their present course, we will soon experience a major ecological catastrophe.
Ibrahim, Mariapan, Lin, and Bidin (2021b)	**Items of Intentions**
	1. I intend to buy local food vendor that contributes to the conservation of wildlife when vising Penang National Park next year.
	2. I intend to buy local handicraft products that contributes to the conservation of wildlife when visiting Penang National Park next year.
	3. I intend to stay in local homestay that contributes to the conservation of wildlife when visiting Penang National Park next year.
	4. I intend to use local tourist guide service that contributes to the conservation of wildlife when visiting Penang National Park next year.
Perugini & Bagozzi (2001)	**Items of Anticipated Emotions**
	1. When visiting Penang National Park in the future, I will feel very proud if I can buy local products and services that contributes to wildlife conservation.
	2. When visiting Penang National Park in the future, I will feel very happy if I can buy local products and services that contributes to wildlife conservation.
	3. When visiting Penang National Park in the future, I will feel very satisfied if I can buy local products and services that contributes to wildlife conservation.
	4. When visiting Penang National Park in the future, I will feel ashamed if I don't buy local products and services that contributes to wildlife conservation.
	5. When visiting Penang National Park in the future, I will feel guilty if I don't buy local products and services that contributes to wildlife conservation.
	6. When visiting Penang National Park in the future, I will feel uncomfortable if I don't buy local products and services that contributes to wildlife conservation.

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References

Ahmad, W., Kim, W. G., Anwer, Z., & Zhuang, W. (2020). Schwartz personal values, theory of planned behavior and environmental consciousness: How tourists' visiting intentions towards eco-friendly destinations are shaped?. *Journal of Business Research*, *110*, 228-236.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In *Action control* (pp. 11-39). Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-69746-3_2

Ajzen, I. (1991). The theory of planned behaviour. *Organization Behaviour and Human Decision Process*. 50 (2): 179–211. doi:10.1016/0749-5978(91)90020-

Al-Jubari, I., Hassan, A., & Linan, F. (2019). Entrepreneurial intention among University students in Malaysia: integrating self-determination theory and the theory of planned behavior. *International Entrepreneurship and Management Journal*, *15*(4), 1323-1342. https://doi.org/10.1007/s11365-018-0529-0

Aprile, M. C., & Fiorillo, D. (2017). Water conservation behavior and environmental concerns: Evidence from a representative sample of Italian individuals. *Journal of Cleaner Production*, *159*, 119-129.

Babakus, E., & Mangold, W. G. (1992). Adapting the SERVQUAL scale to hospital services: an empirical investigation. *Health services research*, *26*(6), 767.

Bagozzi, R. P., Belanche, D., Casaló, L. V., & Flavián, C. (2016). The Role of Anticipated Emotions in Decision Making. *Paper Presented at a Conference on the Role of Anticipation and Regret in Decision Making, La Jolla, CA*. https://doi.org/10.1002/mar.20905.

Bamberg, S. (2003). How does environmental concern influence specific environmentally related behaviors? A new answer to an old question. *Journal of environmental psychology*, *23*(1), 21-32. https://doi.org/10.1016/S0272-4944(02)00078-6

Black, R., & Cobbinah, P. B. (2018). Local attitudes towards tourism and conservation in rural Botswana and Rwanda. *Journal of Ecotourism*, *17*(1), 79-105. https://doi.org/10.1080/14724049.2016.1258074

Bowling, A., & Ebrahim, S. (2005). Quantitative social science: the survey. *Handbook of health research methods: Investigation, measurement and analysis*, 190-214.

Chao, C. M., Yu, T. K., & Yu, T. Y. (2021). Understanding the factors influencing recycling behavior in college students: the role of interpersonal altruism and environmental concern. *International Journal of Sustainability in Higher Education*. https://doi.org/10.1108/IJSHE-07-2020-0232

Clark, E., Mulgrew, K., Kannis-Dymand, L., Schaffer, V., & Hoberg, R. (2019). Theory of planned behaviour: Predicting tourists' pro-environmental intentions after a humpback whale encounter. *Journal of Sustainable Tourism*, *27*(5), 649-667. https://doi.org/10.1080/09669582.2019.1603237

Cosmides, L., & Tooby, J. (2000). Evolutionary psychology and the emotions. *Handbook of emotions*, *2*(2), 91-115.
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.337.109&rep=rep1&type=pdf

Curtis, G. J., Cowcher, E., Greene, B. R., Rundle, K., Paull, M., & Davis, M. C. (2018). Self-control, injunctive norms, and descriptive norms predict engagement in plagiarism in a theory of planned behavior model. *Journal of Academic Ethics*, *16*(3), 225-239.
https://doi.org/10.1007/s10805-018-9309-2

Devlin, S. J., Dong, H. K., & Brown, M. (1993). Selecting a scale for measuring quality. *Marketing research*, *5*(3), 12-17

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt brace Jovanovich college publishers.

Eagly, A. H., & Chaiken, S. (2007). The advantages of an inclusive definition of attitude. *Social cognition*, *25*(5), 582-602. https://doi.org/10.1521/soco.2007.25.5.582

Egger, M., Ley, M., & Hanke, S. (2019). Emotion recognition from physiological signal analysis: A review. *Electronic Notes in Theoretical Computer Science*, *343*, 35-55.
https://doi.org/10.1016/j.entcs.2019.04.009

Eng, N., Sun, Y., & Myrick, J. G. (2022). Who is your Fitspiration? An Exploration of Strong and Weak Ties with Emotions, Body Satisfaction, and the Theory of Planned Behavior. *Health communication*, 1-13.
https://doi.org/10.1080/10410236.2021.2012978

Esfandiar, K., Dowling, R., Pearce, J., & Goh, E. (2020). Personal norms and the adoption of pro-environmental binning behaviour in national parks: An integrated structural model approach. *Journal of Sustainable Tourism*, *28*(1), 10-32.
https://doi.org/10.1080/09669582.2019.1663203

Ferrer, R. A., & Mendes, W. B. (2018). Emotion, health decision making, and health behaviour. *Psychology & Health*, *33*(1), 1-16.
https://doi.org/10.1080/08870446.2017.1385787

Fink, A., & Litwin, M. S. (1995). *How to measure survey reliability and validity* (Vol. 7). Sage.

Fransson, N., & Garling, T. (1999). Environmental concern: Conceptual definitions, measurement methods, and research findings. *Journal of environmental psychology*, *19*(4), 369-382. https://doi.org/10.1006/jevp.1999.0141

Frenzel, A. C., Becker-Kurz, B., Pekrun, R., Goetz, T., & Ludtke, O. (2018). Emotion transmission in the classroom revisited: A reciprocal effects model of teacher and student enjoyment. *Journal of Educational Psychology, 110*(5), 628–639. https://doi.org/10.1037/edu0000228

Gaiani, S., Caldeira, S., Adorno, V., Segre, A., & Vittuari, M. (2018). Food wasters: Profiling consumers' attitude to waste food in Italy. *Waste Management*, *72*, 17-24.
https://doi.org/10.1016/j.wasman.2017.11.012

Gliem, J. A., & Gliem, R. R. (2003). Calculating, interpreting, and reporting Cronbach's alpha reliability coefficient for Likert-type scales. Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education.

Goodwin, H. (1996). In pursuit of ecotourism. *Biodiversity & Conservation*, *5*(3), 277-291.

Han, H., & Hyun, S. S. (2017). Drivers of customer decision to visit an environmentally responsible museum: Merging the theory of planned behavior and norm activation theory. *Journal of Travel & Tourism Marketing*, *34*(9), 1155-1168.
https://doi.org/10.1080/10548408.2017.1304317

Jain, S., Singhal, S., Jain, N. K., & Bhaskar, K. (2020). Construction and demolition waste recycling: Investigating the role of theory of planned behavior, institutional pressures and environmental consciousness. *Journal of Cleaner Production*, *263*, 121405. 10.1016/j.jclepro.2020.121405

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert scale: Explored and explained. *British journal of applied science & technology*, *7*(4), 396.

Kaiser, F. G., Hubner, G., & Bogner, F. X. (2005). Contrasting the theory of planned behavior with the value-belief-norm model in explaining conservation behavior *Journal of applied social psychology*, *35*(10), 2150-2170. https://doi.org/10.1111/j.1559-1816.2005.tb02213.x

Krosnick, J. A. (2018). Questionnaire design. In *The Palgrave handbook of survey research* (pp. 439-455). Palgrave Macmillan, Cham.

Kozlowski, D., Hutchinson, M., Hurley, J., Rowley, J., & Sutherland, J. (2017). The role of emotion in clinical decision making: an integrative literature review. *BMC medical education*, *17*(1), 1-13.

Leedy, P. D., & Ormrod, J. E. (2005). *Practical research* (Vol. 108). Saddle River, NJ, USA: Pearson Custom.

Lee, S. J., & Lina Kim, H. (2018). Roles of perceived behavioral control and self-efficacy to volunteer tourists' intended participation via theory of planned behavior. *International Journal of Tourism Research*, *20*(2), 182-190. https://doi.org/10.1002/jtr.2171

Leone, L., Perugini, M., & Bagozzi, R. (2005). Emotions and decision making: Regulatory focus moderates the influence of anticipated emotions on action evaluations. *Cognition & Emotion*, *19*(8), 1175-1198. https://doi.org/10.1080/02699930500203203

Maichum, K., Parichatnon, S., & Peng, K. C. (2017). The influence of environmental concern and environmental attitude on purchase intention towards green products: a case study of young consumers in Thailand. *International Journal of Business Marketing and Management*, *2*(3), 1-8.

Malik, M. I., Mir, F. N., Hussain, S., Hyder, S., Anwar, A., Khan, Z. U., & Waseem, M. (2019). Contradictory results on environmental concern while re-visiting green purchase awareness and behavior. *Asia Pacific Journal of Innovation and Entrepreneurship*. https://doi.org/10.1108/APJIE-11-2018-0061

Mbaiwa, J. E. (2018). Effects of the safari hunting tourism ban on rural livelihoods and wildlife conservation in Northern Botswana. *South African Geographical Journal= Suid-Afrikaanse Geografiese Tydskrif*, *100*(1), 41-61. https://hdl.handle.net/10520/EJC-c70f54aaa

Morrish, L., Rickard, N., Chin, T. C., & Vella-Brodrick, D. A. (2018). Emotion regulation in adolescent well-being and positive education. *Journal of Happiness Studies*, *19*(5), 1543-1564.

Naia, A., Baptista, R., Biscaia, R., Januário, C., & Trigo, V. (2017). Entrepreneurial intentions of sport sciences students and theory of planned behavior. *Motriz: Revista de Educação Física*, *23*, 14-21.https://doi.org/10.1590/s1980-6574201700010003

Nandi, S., & Singh, S. (2021). Young Adults' Engagement with Facebook Advertisements: An Exploratory Study Using Theory of Planned Behaviour. *Indian Journal of Marketing*, *51*(2), 9-28. DOI: 10.17010/ijom/2021/v51/i2/157548

Olsen, C., & St George, D. M. M. (2004). Cross-sectional study design and data analysis. *College entrance examination board*, *26*(03), 2006. http://www.yes-

competition.org/media.collegeboard.com/digitalServices/pdf/yes/4297_MODULE_05. pdf

Oteng-Peprah, M., De Vries, N., & Acheampong, M. A. (2020). Households' willingness to adopt greywater treatment technologies in a developing country–Exploring a modified theory of planned behaviour (TPB) model including personal norm. *Journal of environmental management*, *254*, 109807. https://doi.org/10.1016/j.jenvman.2019.109807

Parkinson, J., Russell-Bennett, R., & Previte, J. (2018). Challenging the planned behavior approach in social marketing: emotion and experience matter. *European Journal of Marketing*. https://doi.org/10.1108/EJM-05-2016-0309

Pinto Dos Santos, D., Giese, D., Brodehl, S., Chon, S. H., Staab, W., Kleinert, R., & Baeßler, B. (2019). Medical students' attitude towards artificial intelligence: a multicentre survey. *European radiology*, *29*(4), 1640-1646. https://doi.org/10.1007/s00330-018-5601-1

Qi, X., & Ploeger, A. (2019). Explaining consumers' intentions towards purchasing green food in Qingdao, China: The amendment and extension of the theory of planned behavior. *Appetite*, *133*, 414-422. https://doi.org/10.1016/j.appet.2018.12.004

Rattray, J., & Jones, M. C. (2007). Essential elements of questionnaire design and development. *Journal of clinical nursing*, *16*(2), 234-243. https://doi.org/10.1111/j.1365-2702.2006.01573.x

Rivis, A., & Sheeran, P. (2003). Descriptive norms as an additional predictor in the theory of planned behaviour: A meta-analysis. *Current psychology*, *22*(3), 218-233. https://doi.org/10.1007/s12144-003-1018-2

Sanne, P. N., & Wiese, M. (2018). The theory of planned behaviour and user engagement applied to Facebook advertising. *South African Journal of Information Management*, *20*(1), 1-10. https://doi.org/10.4102/sajim.v20i1.915

Saqlain, M., Munir, M. M., Rehman, S. U., Gulzar, A., Naz, S., Ahmed, Z., & Mashhood, M. (2020). Knowledge, attitude, practice and perceived barriers among healthcare workers regarding COVID-19: a cross-sectional survey from Pakistan. *Journal of Hospital infection*, *105*(3), 419-423. https://doi.org/10.1016/j.jhin.2020.05.007

Sekaran, U. (2003). Towards a guide for novice research on research methodology: Review and proposed methods. *Journal of Cases of Information Technology*, *8*(4), 24-35.

Sharma, A., & Foropon, C. (2019). Green product attributes and green purchase behavior: a theory of planned behavior perspective with implications for circular economy. *Management Decision*. https://doi.org/10.1108/MD-10-2018-1092

Si, H., Shi, J. G., Tang, D., Wu, G., & Lan, J. (2020). Understanding intention and behavior toward sustainable usage of bike sharing by extending the theory of planned behavior. *Resources, Conservation and Recycling*, *152*, 104513. https://doi.org/10.1016/j.resconrec.2019.104513

Stronza, A. (2007). The economic promise of ecotourism for conservation. *Journal of Ecotourism*, *6*(3), 210-230. https://doi.org/10.2167/joe177.0

Stronza, A., & Pêgas, F. (2008). Ecotourism and conservation: Two cases from Brazil and Peru. *Human Dimensions of Wildlife*, *13*(4), 263-279.

Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *How to Choose a Sampling Technique for Research (April 10, 2016)*.

Tan, C. S., Ooi, H. Y., & Goh, Y. N. (2017). A moral extension of the theory of planned behavior to predict consumers' purchase intention for energy-efficient household appliances in Malaysia. *Energy Policy*, *107*, 459-471. https://doi.org/10.1016/j.enpol.2017.05.027

Tarnowski, P., Kołodziej, M., Majkowski, A., & Rak, R. J. (2017). Emotion recognition using facial expressions. *Procedia Computer Science*, *108*, 1175-1184. https://doi.org/10.1016/j.procs.2017.05.025

Tooby, J., & Cosmides, L. (2008). The evolutionary psychology of the emotions and their relationship to internal regulatory variables. https://www.cep.ucsb.edu/papers/emotionIRVLewisCh8.pdf

Uzun, A. M., & Kilis, S. (2020). Investigating antecedents of plagiarism using extended theory of planned behavior. *Computers & Education*, *144*, 103700. https://doi.org/10.1016/j.compedu.2019.103700

Van Teijlingen, E. R., & Hundley, V. (2001). The importance of pilot studies.

Xiao, X., & Wong, R. M. (2020). Vaccine hesitancy and perceived behavioral control: a meta-analysis. *Vaccine*, *38*(33), 5131-5138. https://doi.org/10.1016/j.vaccine.2020.04.076

Yadav, P., Singh, J., Srivastava, D. K., & Mishra, V. (2021). Environmental pollution and sustainability. In *Environmental Sustainability and Economy* (pp. 111-120). Elsevier. 10.1016/B978-0-12-822188-4.00015-4

Yue, B., Sheng, G., She, S., & Xu, J. (2020). Impact of consumer environmental responsibility on green consumption behavior in China: The role of environmental concern and price sensitivity. *Sustainability*, *12*(5), 2074. https://doi.org/10.3390/su12052074

Zaremohzzabieh, Z., Ahrari, S., Krauss, S. E., Samah, A. A., Meng, L. K., & Ariffin, Z. (2019). Predicting social entrepreneurial intention: A meta-analytic path analysis based on the theory of planned behavior. *Journal of Business Research*, *96*, 264-276. https://doi.org/10.1016/j.jbusres.2018.11.030

Ziegler, J., Araujo, G., Labaja, J., Snow, S., King, J. N., Ponzo, A., & Dearden, P. (2021). Can ecotourism change community attitudes towards conservation?. *Oryx*, *55*(4), 546-555. DOI: https://doi.org/10.1017/S0030605319000607 https://www.dosm.gov.my/v1/uploads/files/1_Articles_By_Themes/Prices/HIES/HIS-Report/HIS_Pulau_Pinang.pdf