DETERMINING THE FACTORS AFFECTING CARBON OFFSET PURCHASE BEHAVIOUR AMONG OMANI PASSENGERS USING THE PLANNED BEHAVIOUR THEORY

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Abstract:

Carbon offset provides individuals with the opportunity to reduce their emissions by supporting initiatives that avert or eliminate Carbon Dioxide (CO2) from the atmosphere. Several airlines have extended carbon offset to their passengers to alleviate the environmental consequences associated with air travel. Nevertheless, the adoption of carbon offset among passengers, particularly in developing nations, remains limited. This study investigates the factors influencing Purchasing Carbon offset Behaviour (PCOB) among Omani passengers, employing the Theory of Planned Behaviour (TPB). The TPB asserts that individual behaviour is shaped by intention, which is, in turn, determined by Attitude (ATT), Subjective Norm (SN), and Perceived Behavioural Control (PBC). A comprehensive survey was conducted among 482 Omani passengers who had undertaken international and domestic flights from the two main airports in Oman (Muscat and Salalah International Airports). The outcomes of this study indicated that ATT and SN have a positive and substantial influence on PCOB among Omani passengers. Conversely, PBC does not affect PCOB among Omani passengers. The contribution, recommendations, limitations of the research and future studies are discussed at the end of the article.

Keywords: Carbon Offsetting, Climate Change, Theory of Planned Behaviour, Attitude, Subjective Norm, Perceived Behavioural Control, Sustainability, Green Behaviour

1. Introduction:

Climate change is the long-term alteration of temperature and typical weather patterns in a place; it also impacts the environment and human society, such as rising sea levels, extreme weather events, biodiversity loss, and health risks (United Nations, 2022; Zulaikha et al., 2021). According to Abatenh et al. (2018) and Abbass et al. (2022), the main cause of climate change is the human activity of burning fossil fuels, such as coal, oil, and gas, which releases greenhouse gas into the atmosphere. Reducing greenhouse gas emissions and supporting projects that mitigate or adapt to their effects are crucial to protect the environment (Shaari et al., 2023; United States Environmental Protection Agency, 2022).

Carbon offsetting is one way for individuals and organisations to compensate for their CO_2 by supporting projects that reduce or remove emissions from the atmosphere. (Badgley et al., 2021; Homar & Cvelbar, 2023; Truong-Dinh et al., 2023). In addition, carbon offset can help address climate change by accelerating the transition to a low-carbon economy and financing negative emissions technologies (Lu, 2022). However, the demand and supply of carbon offset are

influenced by various factors, such as potential buyers and sellers' awareness, attitudes, norms, and perceived behavioural control (Almaraz et al., 2023). Moreover, carbon offset are a popular tool in global efforts to mitigate climate change, as they allow regulated polluters to compensate for their emissions by supporting projects that reduce or remove carbon dioxide from the atmosphere in unregulated markets. However, carbon offset face several challenges, such as ensuring the additionally, permanence, and verification of emission reductions, as well as avoiding leakage and double counting (Calel et al., 2021). Several international organisations, such as the World Economic Forum, the World Business Council for Sustainable Development, and the Organization for Economic Cooperation and Development (OECD), have been working to promote cooperation and coordination among countries and stakeholders on carbon offsetting-related issues and to provide policy guidance and analysis on how to tackle these challenges (OECD, 2020).

The aviation sector contributes to climate change as it is responsible for approximately 2% of worldwide carbon dioxide emissions (Bösehans et al., 2020; Chibane et al., 2023; Dang et al., 2021; Rotaris et al., 2020). The industry can benefit from utilising carbon offset to reduce its environmental impact. Many passengers may not be aware of the environmental impact of their flights or may not have the motivation or opportunity to purchase carbon offset (Agliardi et al., 2020; Karhunmaa et al., 2023). Therefore, it is essential to understand the factors that affect the intention and behaviour of air travellers regarding carbon offset. This study explores the factors affecting PCOB among Omani passengers using the Theory of Planned Behaviour (TPB).

Literature Review:

1.1 Theory of Planned Behaviour

The TPB is a psychological theory that explains how people's intentions, ATT, SN, and PBC influence their behaviour. It was proposed by Icek Ajzen in 1985 as an extension of the Theory of Reasoned Action (Zulaikha et al., 2021; Ajzen, 1991). According to the theory, the most critical factor determining behaviour is behavioural intention, which is the motivation to perform a specific behaviour. Three factors influence behavioural intention:

ATT: This is the personal evaluation of the behaviour based on the expected outcomes and values of performing it. ATT can be seen when people believe that exercising benefits their health and well-being; they will have a positive ATT towards it.

SN: This is the perceived social pressure to perform or not perform the behaviour based on the opinions and expectations of significant others. For example, if a person thinks their family and friends approve of exercising, they will feel more inclined to do it.

PBC: This is the perceived ease or difficulty of performing the behaviour based on available resources and opportunities. For example, if a person has access to a gym and has enough time to exercise, they will feel more capable of doing it.

The theory also suggests that PBC can directly affect behaviour, especially when behavioural intention is weak or absent. For example, if a person has a low intention to exercise but finds themselves in a situation where they can easily do it, they may still decide to exercise.

1.1   Purchase behaviours:

Purchase behaviour is how consumers decide to buy products or services based on their needs, preferences, and values. It is influenced by various factors such as personal, psychological, social, and environmental (Almohammadi & Abdulghaffar, 2022; Park et al., 2023). Green purchase behaviour is a type of purchase behaviour that reflects the consumers' concern for the environment and their willingness to buy products or services that are eco-friendly, sustainable, and ethical (Han, 2020; Setyawan et al., 2018). Therefore, green purchase behaviour can be motivated by environmental knowledge, concern, perceived consumer effectiveness, ATT, SN, and PBC (Çiner & Doğan-Sağlamtimur, 2019; Prakash & Pathak, 2017).

Passengers carbon offset behaviour is a green behaviour that supports airline's effort to tackle climate change (Cordes et al., 2023; Homar & Cvelbar, 2023). According to Regmi & Rehman (2021) and Cordes et al. (2023), carbon offsetting reduces the impact of one's carbon emissions by investing in projects that prevent or remove an equivalent amount of greenhouse gas from the atmosphere. Carbon offsetting can be considered a green behaviour if it is done voluntarily and in addition to reducing one's emissions (Chartier & Tsayem Demaze, 2022) However, another study by (Elferink, 2022) indicated that carbon offsetting alone is not enough to solve the climate crisis and should not be used as an excuse to avoid taking action to lower one's carbon footprint. Also, it has to be done with caution and transparency to ensure the quality and credibility of the projects and avoid greenwashing.

1.2   Attitude (ATT)

ATT represents one's positive or negative evaluation of the outcome resulting from a behaviour (Ajzen, 1991). It can be defined as a psychological construct that refers to a learned tendency to evaluate things in a certain way (Ajzen, 2015). ATT can include evaluations of people, issues, objects, or events. (Kaur, 2020). ATT is influenced by various factors such as experience, social norms, values, and emotions (Ajzen & Driver, 1992).

ATT can have an impact on green purchases, which is a type of purchase behaviour that reflects the consumers' concern for the environment and their willingness to buy products or services that are eco-friendly, sustainable, and ethical (Chartier & Tsayem Demaze, 2022) Therefore, ATT towards green products is a critical factor affecting green purchase intention, which is the motivation to perform a specific green behaviour. (Rahman, 2018). A positive ATT towards green products can increase the demand for a product (Tan et al., 2023). However, ATT alone may not be sufficient to predict green purchase behaviour, as other factors such as perceived value, trust, social influence, and perceived behavioural control may also play a role (Asif et al., 2022).

ATT can also impact passenger carbon offsetting (Shaari et al., 2021). It is influenced by various factors such as environmental knowledge, concern, responsibility, guilt, and altruism. Another study by Khand (2018) showed that a positive ATT towards carbon offsetting can increase the willingness to pay and the intention to offset one's flight emissions. However, according to Ahmad et al. (2016), ATT may not always translate into action, as other factors such as cost, convenience, trust, and social norms may also affect the decision on whether or not to offset. According to Chen et al. (2022), ATT, along with fear of the COVID-19 pandemic, green product literacy, green product orientation, and social influence, significantly positively affected green product behavioural intention among Malaysian consumers. Another study by Zhuang et al. (2021) found that ATT, along with green perceived value and trust, significantly influenced green purchase intention among consumers from different countries. Also, the study found that ATT had a weak positive effect on green purchase intention to visit green hotels among Chinese consumers, while personal norms and implicit environmental ATT had a stronger positive effect. However, a study by Tao et al. (2021) found that ATT had no significant effect on green purchase intention among Chinese consumers, while environmental indebtedness, self-efficacy, and controllability did.

Nevertheless, this implies that there is still much to uncover regarding the factors that impact ATT or those that are influenced by ATT. Extensive research has been conducted on the subject, revealing the prevalence of environmentally friendly ATT among consumers (Tao et al., 2021).

Based on the above argument, it can be concluded that the impact of ATT on green PCOB may vary depending on the context, culture, and other factors. It may not be a universal or consistent predictor of green behaviour. Hence, the following hypothesis is raised:

H1: Attitude has a positive and significant impact on on purchasing carbon offset behaviour among Omani passengers.

1.3 **Subjective Norm:**

SN refer to the pressure people perceive from others who are important to them to perform or not perform the indicated behaviour (Rivis et al., 2009). A consumer's beliefs about how others behave or expect them to behave will influence their intentions (Ajzen, 1991). In addition, the SN is a psychological concept that refers to the perceived social pressure or expectation to engage in a particular behaviour. It reflects the extent to which an individual thinks other people who are important to them want them to perform the behaviour in question and how motivated they feel to comply with this perceived social pressure (Asare, 2015).

SN is a critical factor affecting green purchase behaviour (Choi, 2015; Choi et al., 2016; Gössling & Dolnicar, 2023; Li et al., 2023; Tao et al., 2021; Zhuang et al., 2021). A positive SN can increase the demand and satisfaction with green products. However, SN alone may not be sufficient to predict green purchase behaviour, as other factors such as perceived value, trust, social influence, and perceived behavioural control may also play a role (Zhuang et al., 2021).

The role of SN in influencing consumer behaviour is well-established. Researchers have identified that perceived norms have significance. Choi & Ritchie (2014) and Choi (2016) highlighted that SN can positively impact PCOB among passengers. In another study, Chen (2013) emphasizes the positive influence of personal norms and positive anticipated emotions on desires to participate in carbon offset schemes. Chen et al. (2022) found that subjective norm significantly and positively affected green purchase intention during the COVID-19 pandemic.

One study by Tao et al. (2021) found that SN had no significant effect on green purchase intention among Chinese consumers. Zhuang et al. (2021) indicated that SN had a weak positive effect on green purchase intention among consumers from different countries. Therefore, SN's impact on green carbon offset purchase behaviours may vary depending on the context, culture, and other factors. The following is the next hypothesis.

H2: Subjective Norm has a positive and significant impact on purchasing carbon offset behaviour among Omani passengers.

1.4 Perceived Behavioural Control (PBC)

PBC is a psychological concept that refers to the perceived ease or difficulty of performing a specific behaviour. It is based on the availability of resources, opportunities, and the individual's ability and confidence (Asare, 2015). It assesses the presence or absence of requisite recourses, opportunities (time, money, skills) that facilitate or impede a behaviour (Ajzen, 1991).

PBC can impact green purchase behaviour (Tao et al., 2021). Also, PBC is a critical factor affecting green purchase intention, which is the motivation to perform a specific green behaviour (Zhuang et al., 2021). A PBC can increase the demand for and satisfaction with green products (Asif et al., 2022). However, PBC alone may not be sufficient to predict green purchase behaviour, as other factors such as perceived value, trust, social influence, and SN may also play a role. (Rahman, 2018)

PBC can also impact PCOB (Tao et al., 2021). A high PBC can increase the willingness to pay and the intention to offset one's flight emissions (Lu & Shon, 2012). Chen et al. (2022) study found that PBC significantly positively affected green purchase intention during the COVID-19 pandemic. Another study by Zhuang et al. (2021) found that PBC significantly influenced green purchase intention among consumers. On the other hand, Tao et al. (2021) found that PBC had no significant effect on green purchase intention. Zhuang et al. (2021) argued that PBC had a weak positive effect on green purchase intention to visit green hotels among, while personal norm had a more substantial positive effect. Therefore, it seems that the impact of PBC on green carbon offset purchase behaviours may vary depending on the context, following is the next hypothesis.

H3: Perceived Behavioural Control has a positive and significant impact on purchasing carbon offset behaviour among Omani passengers.

2. Methodology

This section aims to evaluate the research framework and validate the measurement items of the study. The validity and reliability of the measurement items are examined as well. After that, the proposed hypothesis and the theoretical framework are assessed.

2.1 Survey Instrument

The research followed a quantitative approach and used survey strategy. A self-administered questionnaire, part of the survey instrument, was used for data collection. The questionnaire consists of two parts: Survey introduction and measurement items. Four constructs (ATT, SN, PBC, and PCOB) were measured using 17 questions, as shown in Appendix A. The measurement items were adopted from previous literature and adjusted based on the needs of this study. Two academics and one industry experts reviewed the questionnaire to ensure content validity. Table 1 shows the number of items for each measurement and the references:

Table 1: Measurements items Details

Variable	No. of Measurement Items	References
Attitude (ATT)	4	Denton et al. (2020); Eslaminassab & Ehmer (2022);
Subjective Norm (SN)	4	Denton et al. (2020); Choi et al. (2015); Kamalanon et al. (2022)
Perceived Behavioural Control (PBC)	4	Denton et al. (2020); Choi et al. (2015); Wong et al. 2020
Purchasing Carbon Offset Behaviour (PCOB)	5	Denton et al. (2020); Jou & Chen, (2015); Choi et al. (2015); Kamalanon et al. (2022); Taufique & Vaithianathan (2018)

Also, A 5-point Likert scale was used, with "1" representing strongly disagree and "5" representing strongly agree.

2.2 Data collection

The target population of this study is Omani passengers who travelled through the two main airports in Oman (Muscat and Salalah International Airports). Those two airports were chosen as more 90% of the international and domestic traffic in Oman goes thorough them. Many of the previous studies regarding PCOB used passengers in their sampling frame, such as studies

conducted by Akter et al. (2009), Brouwer et al. (2008), Fatihah & Rahim (2017), Lu & Shon (2012), Ritchie et al. (2021), Rotaris et al. (2020), Shaari et al. (2020), Wong et al. (2020) and Zhang et al. (2022). The data was collected using a self-administered questionnaire, which was distributed using Microsoft Forms though social media face to face at the airports. The received responses were 482; however, 94 responses were removed after conducting suspicious and outliers' checks. The valid and used data for this study were 388 responses. This number is higher than the minimum required sample size using G-power (119 responses). The demographic details of the respondents are shown in Appendix B.

2.3   Data analysis

Statistical Package for the Social Sciences (SPSS 29.0) and Partial Least Square (SMART PLS 4.0) software were used for data cleaning and analysis in this study. SPPS was mainly used for data cleaning by removing suspicious items and outliers. The validity and reliability of the measurement, as well as the relationship between independent and dependent variables, were evaluated using SMART PLS.

3. Result:
3.1   Measurement Items Assessment:

First, the study examined the normality of the data distribution and collinearity; the results show that the data is normally distributed and there is no issue with collinearity. The reliability and validity of the measurement items were also examined to ensure the survey questions were accurate and valid. Internal consistency were be measured using Cronbach Alpha (CA) and Composite Reliability (CR) (Saunders et al., 2009; Sekaran & Bougie, 2016). As the CA and CR values are higher than 0.7 (Table 2), it can be concluded that the study has no issue with internal consistency.

Table 2: Internal Consistency

	Cronbach Alpha(CA)	Composite Reliability(CR)
PCOB	0.948	0.96
ATT	0.942	0.959
SN	0.907	0.935
PBC	0.866	0.917

Convergent validity has been established as the factor loading for all items is higher than 0.708 (Hair et al., 2016; Ramayah et al., 2018), except for the third measurement item for Perceived Behavioural Control (PBC3), which was removed, and AVE values for all variables are higher than 0.5, as shown in Table 3

Table 3: Convergent Validity

Construct	Item	Loading	Average variance extracted (AVE)
Purchasing Carbon Offset Behaviour (PCOB)	PCOB1	0.912	0.828
	PCOB2	0.93	
	PCOB3	0.932	
	PCOB4	0.919	
	PCOB5	0.855	
Attitude (ATT)	Att1	0.927	0.853
	Att2	0.916	
	Att3	0.938	
	Att4	0.913	
Subjective Norm (SN)	SN1	0.877	0.782
	SN2	0.916	
	SN3	0.884	
	SN4	0.86	
Perceived Behavioural Control (PBC)	PBC1	0.887	0.787
	PBC2	0.886	
	PBC4	0.889	

Divergent validity can be established using cross-loading, the Fornell-Larcker criterion, and the HTMT Criterion (Hair et al., 2016; Ramayah et al., 2018). As all items are loading high in their construct (Table 4), the values in bold in the Fornell-lacker criterion table (Table 5) are higher than the values below them and to the left, and all values in the HTMT Criterion table (Table 6) are less than 0.9, it can be confirmed that this study does not have any issue with divergent validity.

Table 4: Cross Loading

	ATT	PBC	PCOB	SN
ATT1	**0.927**	0.703	0.761	0.652
ATT2	**0.916**	0.7	0.725	0.628
ATT3	**0.938**	0.735	0.761	0.685
ATT4	**0.913**	0.734	0.751	0.684
PBC1	0.656	**0.887**	0.598	0.614
PBC2	0.627	**0.886**	0.589	0.598
PBC4	0.774	**0.889**	0.694	0.654

PCOB1	0.738	0.654	**0.912**	0.58
PCOB2	0.738	0.653	**0.93**	0.624
PCOB3	0.79	0.675	**0.932**	0.646
PCOB4	0.74	0.623	**0.919**	0.648
PCOB5	0.683	0.626	**0.855**	0.655
SN1	0.578	0.556	0.573	**0.877**
SN2	0.662	0.636	0.634	**0.916**
SN3	0.696	0.691	0.661	**0.884**
SN4	0.592	0.593	0.578	**0.86**

Table 5: Fornell-Larcker criterion

	ATT	PBC	PCOB	SN
ATT	**0.924**			
PBC	0.778	**0.887**		
PCOB	0.812	0.71	**0.91**	
SN	0.718	0.703	0.693	**0.885**

Table 6: HTMT Criterion

	ATT	PBC	PCOB	SN
ATT				
PBC	0.855			
PCOB	0.858	0.78		
SN	0.773	0.787	0.746	

3.2   Structural Model Assessment

This study examines the impact of the TPB elements (Att, SN, and PBC) on PCOB among Omani Passengers. Three hypotheses were examined as part of this study. The researcher framework and the relationship between the three IVs and DV are shown in Figure 1. To establish a significant relationship the below values must be met:

▪   P-value less than 0.05, t-value more than1.65 (One Tail), t-value more than 1.96 (Two Tail) (Hair et al., 2016; Ramayah et al., 2018)

▪   No zero is scattered between PCI-LL and PCI-UL (Hair et al., 2016; Ramayah et al., 2018).

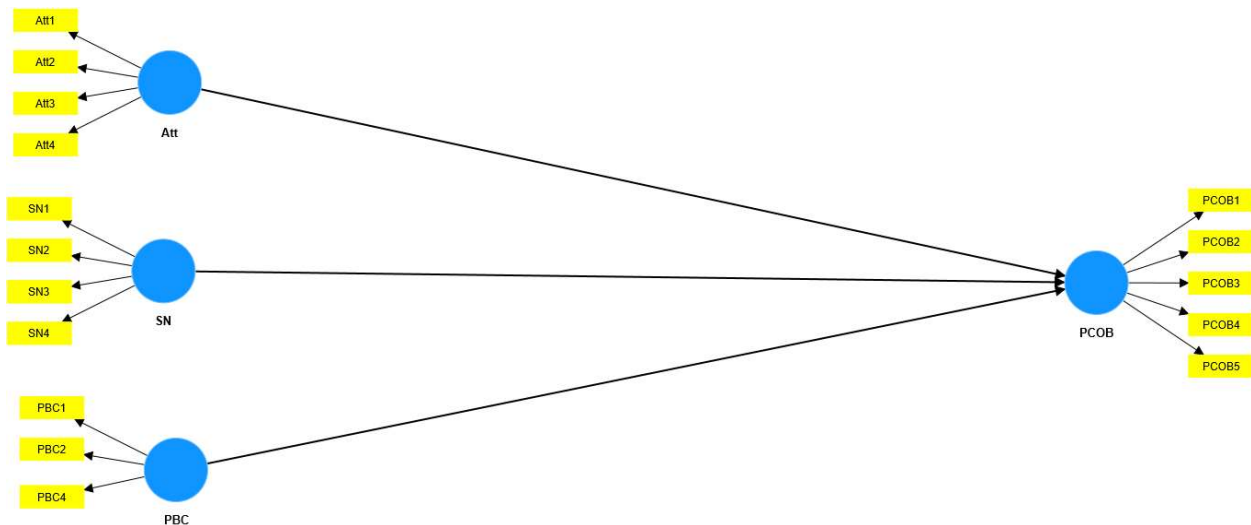▪   Effect size is 0.02 or higher (Cohen, 1988)

Figure 1: Study Framework (PLS Format)

H1: Attitude has a positive and significant impact on Purchasing Carbon Offset Behaviour among Omani Passengers.

H_1 is the first hypothesis in this study; it examines if there is a positive and strong relationship between Att and PCOB among Omani passengers. Table 7 shows the t-value and p-value, PCI LL, and PCI UL, f^2 for H_1. As all the values are within the required threshold to establish a relationship it can be confirmed that there is a significant and positive relationship between ATT and PCOB.

H2: Subjective Norm has a positive and significant impact on Purchasing Carbon Offset Behaviour among Omani Passengers.

Based on the t-value and p-value, PCI LL, PCI UL, and f^2 for H_2, shown in Table 7, it can be confirmed that SN also had a positive and significant impact on PCOB among Omani passengers.

H3: Perceived Behavioural Control has a positive and significant impact on Purchasing Carbon Offset Behaviour among Omani Passengers.

This study rejected H_3 as the t-value, p-value, PCI LL, and PCU UL (Table 7) do not meet the requirements to establish a relationship. Also, there is nil effect size as the f^2 is below 0.02. Thus, PBC does not have a positive and significant relationship with PCOB.

Table 7: Hypotheses Testing

No. (H)	Relationship	Std. Beta	Std. Dev	t-value	p-value	PCI LL	PCI UL	f^2	Effect Size	Decision
H1	ATT -> PCOB	0.591	0.058	10.252	p<0.001	0.472	0.701	0.380	Significant	Accepted
H2	SN -> PCOB	0.201	0.05	4.01	p<0.001	0.105	0.3	0.057	Small	Accepted
H3	PBC -> PCOB	0.099	0.058	1.7	0.089	-0.01	0.218	0.012	Nil	Rejected

4. Discussion

Using the TPB , the study highlighted the main factors that affect PCOB among Omani passengers. ATT, SN, and PBC are three elements examined in this study. Based on analysis results, POCB among Omani passengers is affected by ATT. Passengers with a positive ATT toward the environment tend to offset their flight when traveling. This finding is supported by many previous literature, such as studies conducted by Choi et al. (2016), Dang et al. (2021), Ritchie et al. (2021), Zhang et al. (2019), (2022), and Zhang (2022). Omani passengers are also affected by the opinions and recommendations of other people, especially family and close friends. The study found that SN positively and strongly correlates with PCOB among Omani passengers. Denton et al. (2020) and Wong et al. (2020) studies supported this finding as they argued that family and close friends influence passengers' offsetting willingness and behaviour. The final hypothesis of this research examined the relationship between PBC and PCOB among Omani passengers. Based on the analysis, PBC does affect PCOB among Omani passengers. In contrast to this study, many of the previous research in green purchases (including carbon offsetting) argued that there is a positive and significant relationship between the two variables (Denton et al., 2020; Han, 2022; Tao et al., 2021; Tolanuwat & Jangsiriwattanna, 2021).

5. Conclusion

The aviation industry is vital as it connects people and contributes to the economy. However, the industry is contributing negatively to the environment as 2% of CO_2 is emitted by aviation. Passengers can contribute to the current effort to protect the environment by offsetting their flights. This study focused on the main factors that affect PCOB among Omani passengers using the elements of the TPB (ATT, SN, PBC). The study found that ATT and SN have a direct and positive

impact on PCOB. This finding is aligned with many previous studies regarding carbon offsetting. However, the study indicated that PBC does not have a positive and strong relationship with PCOB among Omani passengers, which contradicts previous research in this area. The characteristics of Omani passengers may differ from those of other nationalities surveyed before. Airlines operating in Oman and the Omani government shall focus on ATT and SN when designing marketing strategies and creating policies regarding carbon offsetting.

6. Contribution

The study will contribute to the current literature on carbon markets and behavioural change theories in Oman as there are limited studies in this area. It will also provide practical implications for policymakers, airlines, and offset providers in promoting carbon offset among air travelers in the country. The study will help identify the barriers and enablers of carbon offset and suggest strategies to increase Omani passengers' awareness, motivation, and opportunities to offset their flight emissions. The study will ultimately support mitigating climate change and achieving sustainable development goals in Oman.

7. Recommendation

Based on the study analysis and results, the main recommendations of the study are:

- Airlines operating in Oman and the Omani government shall focus on ATT and SN when creating marketing strategies and introducing new policies. The two constructs have a positive and significant relationship with PCOB.

- The airlines and government shall run promotional campaigns to increase awareness about the impact of climate change and the role of carbon offsetting in protecting the environment. ATT and SNc can be affected by increased awareness and promotional campaigns.

- The airlines can add an option on their website allowing passengers to share carbon offsetting options with their families. This option can increase the purchase of carbon as Omani passengers are affected by the opinions and recommendations of their friends and families.

8. Limitations and Future Studies

The study has some drawbacks that indicate areas for further research. The study relied on a convenience sample of Omani passengers who flew by air in the previous years. This might affect the applicability of the results to other groups or settings. Future research should employ a more robust sampling method, such as stratified random sampling, to enhance the accuracy and dependability of the results. The study adopted a cross-sectional approach to investigate the links between ATT, SN, PBC, and PCOB. This might not reflect the changes and complexities of these variables over time. Future research should use a longitudinal approach to monitor the variations in these variables and their impacts on PCOB over time. The study used self-reported measures to evaluate purchasing carbon offset behaviour. This might introduce errors such as social desirability or memory lapses. Future research should use factual measures to confirm PCOB, such as by using bills or statements from carbon offset providers. The study only examined three factors from the theory of planned behaviour to account for PCOB. Other factors might affect PCOB, such as

environmental awareness, personal norms, moral obligation, perceived value, marketing mix, or situational factors. Future research should investigate these factors and their impact on purchasing carbon offset behaviour among Omani passengers.

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Appendix A (Questionnaire)

Strongly Disagree (1), Disagree (2), Neutral (3), Agree (4), Strongly Agree (5)

Item No.	Questions	1	2	3	4	5
PCOB	**Purchasing Carbon Offset Behaviours**					
PCOB1	I am willing to participate in the airline carbon offset policy					
PCOB2	I will pay for carbon offsetting on my next flight					
PCOB3	I will purchase carbon offset for ecological reasons					
PCOB4	When booking an airline ticket, I will purchase the one that has carbon offsetting					
PCOB5	I would be willing to make personal sacrifices to reduce carbon emissions even though the immediate results may not seem significant					
ATT	**Attitude**					
ATT1	I like the idea of offsetting carbon emissions when I travel					
ATT2	I have a favorable attitude toward offsetting carbon emissions					
ATT3	Offsetting carbon emissions when I travel would be a worthwhile effort					
ATT4	I can help to limit the effects of carbon emission that airlines produce through my actions					
SN	**Subjective Norm**					

SN1	Most people who are important to me think I should offset carbon emissions when I travel					
SN2	People whose opinions I value would prefer that I offset reduce or offset carbon emissions when I travel					
SN3	People will have a good impression of me if I purchase carbon offsetting					
SN4	People around me influence me to purchase carbon offset					
PBC	**Perceived Behavioural Control**					
PBC1	It would be easy for me to offset carbon emissions when buying an airline ticket					
PBC2	I have control over my ability (ability can be related to resources, time and skills) to offset carbon emissions					
PBC3	It is mostly up to me whether or not I pay for carbon offsetting of my flight					
PBC4	I am confident that if I want to, I can adopt green practices when traveling by air by purchasing carbon offset					

Appendix B (Demographic Profiling)

No.	Characteristics	Category	Frequency Total: **388**	Percentage
1-	Gender	Male	273	70%
		Female	115	30%
2-	Age	29 and less	98	25%
		30-39	208	54%
		40-49	74	19%
		50 and more	8	2%
3-	Education Level	High School	54	14%
		Diploma	52	13%
		Bachelor	218	56%
		Master	57	15%
		PDH or Equivalent	7	2%

		Other	0	0%
4-	Job Level	Student	59	15%
		Administrative	140	36%
		Manager	44	11%
		Head of Department	53	14%
		Executive	3	1%
		Other	89	23%
5-	Frequency of Travel	Once each five years	118	30%
		Once a year	146	38%
		2-3 times a year	70	18%
		More than 3 times a year	35	9%
		Other	19	5%
6-	Average Monthly income	less than 500 OMR	43	11%
		500 - 1000 OMR	121	31%
		1001 - 1500 OMR	96	25%
		More than 1500 OMR	71	18%
		Prefer not answer this question	57	15%