

# Promoting continued green helping behaviour: revisiting attribution theory

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## ABSTRACT

**Purpose of the study:** Customers may perform a vital role in assisting fellow customers to purchase green products. Accordingly, this study provides novel insight into factors that may affect customer' continued green helping behaviour directed towards fellow customers, who did not follow their initial recommendations about green purchasing.

**Design/methodology/approach:** Guided by attribution theory and biological psychology research, a quantitative regression model was explored, addressing the sequential relationships between controllability, anger, and continued green helping behaviour, as well as the moderating role of sympathy. External values were examined as a control variable. An online survey was conducted among a purposive sample, comprising 452 customers who had made a green purchase in the preceding twelve months and had assisted other customers with green purchasing.

**Findings:** The research findings evidence that while customer emotions are relevant, decisions to engage in continued green helping behaviours are more likely motivated by perceptions that fellow customers have control over their purchase decisions and customer helpers' external values.

**Recommendations/value:** The study advances knowledge of the application of the attribution theory in relation to affecting continued green helping behaviour. Novel insight is obtained into the interrelationships between selected factors affecting customers' intentions to continue helping fellow customers who did not previously apply their advice.

**Managerial implications:** The study provides guidance into the important role customers could play in assisting fellow customers to engage in green purchasing behaviour and the extent to which marketers may be able to influence these behaviours.

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**Keywords**

Attribution theory; customer citizenship; green marketing; sustainability; values

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**JEL Classification: M31**

## **1. INTRODUCTION**

Environmental preservation is undoubtedly imperative in the 21st century (Sana, 2020). The global environment is characterised by rapid growth in world population, heightened air pollution rates, and polluted groundwater. Procedures are necessary in manufacturing and consumption to contribute to the preservation of Earth's natural resources (Amoako *et al.*, 2022; Sana, 2020). It is imperative for marketers to engage in resource management practices that will allow for the achievement of individual and organisational goals, and simultaneously the preservation of natural resources (Nekmahmud & Fekete-Farkas, 2020).

Several organisations have been contributing to environmental preservation by selling green products (Sana, 2020). Defined as “products which are used naturally, and which are made from non-toxic, recycled materials, or with less packaging/eco-packaging” (Nekmahmud & Fekete-Farkas, 2020), green products may include hybrid cars, soft drinks in recycled bottles, and organic produce (Sana, 2020). Nevertheless, a major challenge faced by marketers is that despite their green product offerings, customers do not always purchase green products and not all green products are easily adopted. Underlying factors contributing to green product resistance include tradition, image, being too expensive, and reduced quality (Sadiq *et al.*, 2021; Flores & Jansson, 2022). Additionally, it has been noted that organisations taking advantage of environmental problems and who are insincere in their marketing efforts may hinder consumer trust (Szabo & Webster, 2021).

Customers may assist in addressing these problems by talking with fellow customers about green product purchasing and addressing their concerns. The notion of customers providing help and support to fellow customers in the marketplace has been well acknowledged in research (Yi & Gong, 2013; Kim & Yi, 2016; Le *et al.*, 2022). Grounded in customer citizenship literature, helping is perceived as voluntary and may include giving advice, sharing expertise, and providing assistance (Abdou *et al.*, 2022). Extant research further indicates that informational interpersonal influence, including observation of other customers' purchases and receiving input from them, positively impacts green purchase intentions (Chang, 2015). Factors, such as attitudes and desire to use the service, may positively contribute to customers helping other customers in a green context (Hwang & Lyu, 2020). Previous research has also

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established that internal values, green attitudes and subjective norms may positively influence green customer citizenship behaviours, such as helping other customers to make green purchase decisions (Van Tonder *et al.*, 2023). Additionally, affective commitment towards fellow customers and general engagement in green helping activities seem to directly influence customers' intentions to continue helping other customers with green purchase decisions (Van Tonder *et al.*, 2022).

Nonetheless, despite these contributions, literature still lacks an advanced understanding of the role of attribution theory in promoting continued green helping behaviour, directed towards fellow customers who did not apply the initial advice provided. Individuals' decisions to provide help also appear to be a function of their emotions and the extent to which they believe other individuals have control over the initial decision made. According to attribution theory (Kelley & Michela, 1980; Weiner, 1980), the reason for an unfortunate event will influence potential helpers' responses. If the person requiring help could have controlled the situation and was not acting responsibly, anger may follow and help may not be provided (DeMotta, 2021). Anger concerns emotions directed towards other people and may transpire when another is blamed for wrongdoings (Gistri *et al.*, 2018; Kim & Yoon, 2020). Previous research has established that anger may contribute to destructive types of behaviours, such as negative word of mouth (Kim & Yoon, 2020). Hence, when customer helpers regard fellow customers they previously helped as responsible for their poor decision-making practices (i.e., not purchasing green products), they may refuse to continue helping these fellow customers, assisting them with their green purchase decisions. If fellow customers could have controlled the situation (by simply choosing more sustainable green alternatives), the customer helpers who previously assisted fellow customers may become angry and refuse to offer fellow customers further help with their green purchasing decisions.

However, the sequential relationships between controllability, anger, and continued green helping could also be influenced by customer helpers' feelings of sympathy towards fellow customers who did not apply the advice. Traditional scholars profess sequential relationships between perceptions of uncontrollable events, sympathy, and helping (Pilati *et al.*, 2015). Yet, in the context of this investigation, the interaction effect between sympathy and anger seems likely, given that the fellow customers being helped with green purchasing are often known to the customer helpers (i.e., friend or family member) and feelings of compassion and kindness may be vested in these relationships. Extant literature further notes that sympathetic individuals generally have a comprehension of others' situations and may be emotionally worried about their welfare (Kim & Yoon, 2020). Sympathy may contribute to lower levels of

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aggression towards other individuals (Harmon-Jones, 2004). Additionally, sympathy may positively influence voluntary behaviours intended to advantage other individuals (Kim & Yoon, 2020). It is, therefore, likely that customer helpers who are angry with fellow customers who did not apply their advice and could have controlled the situation may simultaneously have feelings of sympathy towards these customers, which may reduce anger emotions.

Further knowledge of the above matters is important, as it may aid in providing a more comprehensive understanding of customers' continued green helping behaviours, especially when the advice they initially provided about green product purchasing was not applied. Subsequently, this investigation aims to revisit the attribution theory, to advance understanding of continued green helping behaviour. Specifically, a regression model is explored, addressing the sequential relationships between control, anger, and continued green helping behaviour, as well as the moderating role of sympathy within the proposed model.

External values were studied as a control variable, with possible effects on anger and continued green helping behaviour. External values address matters, such as security, being well respected, warm relationships with others and a sense of belonging (Limon *et al.*, 2009). Hence, it is plausible that customer helpers endorsing external values and seeking social interactions and warm relationships with others may be less likely to hold feelings of anger and may be more inclined to further engage with and assist fellow customers who did not apply their advice about green product purchasing before. Continued green helping behaviours may appeal to customer helpers, endorsing external values, providing an opportunity to be helpful, and nurturing warm and meaningful relationships with others.

Theoretically, the study advances knowledge of the application of the attribution theory in relation to affecting continued green helping behaviour. Novel insight is obtained into the interrelationships between selected factors affecting customer helpers' intentions to continue helping fellow customers who did not previously apply their advice. Practically, the study provides guidance into the important role customer helpers could play in assisting fellow customers to engage in green purchasing behaviour and the extent to which marketers may be able to influence these behaviours.

The theoretical framework is addressed next. Subsequently, the research methodology and findings are outlined. To conclude, the study's theoretical and practical implications are delineated.

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## 2. THEORETICAL FRAMEWORK

### 2.1 Customer citizenship behaviour and continued green helping

Helping as a research construct is grounded in customer citizenship behaviour theory. Customer citizenship behaviour is also referred to as “customer value creation behaviour” (Gong & Yi, 2021:170), as it may afford extraordinary value to an organisation (Gong & Yi, 2021). Customer citizenship behaviour is not needed to ensure a successful product or service delivery, but may produce benefits for an organisation (Liu *et al.*, 2020), such as perceptions of service quality (Gong & Yi, 2021). Typical customer citizenship behaviour actions may include brand recommendations to other customers or customers providing feedback to organisations that could aid in organisational survival and improvements (Liu *et al.*, 2020).

Helping – another dimension of customer citizenship behaviour – relates to actions, such as assisting other customers in acquiring products and educating them on correct service usage (Liu *et al.*, 2020). Helping fellow customers may contribute to them having a pleasant encounter. Helping activities could include giving advice, sharing expertise, and providing support (Gong & Yi, 2021). The help provided may be solicited by fellow customers or simply be offered by helpers, without being asked by fellow customers for assistance (Kim & Yi, 2021). Helping is also not restricted to providing assistance prior to a transaction, but may transpire during or after the transaction has been completed (Anaza, 2014). Hence, for this study, continued green helping behaviour concerned customer helpers being willing to continue providing assistance and guidance to fellow customers regarding green purchasing decisions (Yi & Gong, 2013).

Of further importance is that customer helpers assist in diminishing purchase risk by performing a social evaluator role and offering advice, know-how, and comradeship (Anaza, 2014). Customers helping other customers may produce benefits, such as intentions to remain loyal to the organisation, perceiving the product offering to be of value, and avoidance of service failures (Weretecki *et al.*, 2021). Moreover, several factors have previously been identified as promoting helping behaviour, including perceived usefulness, perceived ease of use of technology, trust towards the retailer, and corporate image (Kim *et al.*, 2020; Van Tonder & Heymans 2020). However, as addressed earlier, the current research was interested in factors motivating customers to continue helping fellow customers with green purchase decisions, when their initial advice was not applied.

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## 2.2 The dimensions of attribution theory

Attribution theory addresses the controllability of events, as well as related emotions, including anger and sympathy. *Controllability* specifically concerns the extent to which individuals could be blamed for the undesirable event that occurred. A controllable cause relates to perceptions – for instance, the individual “could have done otherwise” and hence is responsible for the current situation (Rudolph *et al.*, 2004:818). Controllability in this study was measured as the fellow customer having had control over the eco-unfriendly purchase decision, could have prevented it, and intentionally made the wrong purchase decision (Nikbin *et al.*, 2016).

*Anger* develops if the need for help stems from an event that could have been controlled (e.g., refusal to perform a certain action) (Vargas, 2021). This emotion is experienced following undesirable events and may lead to a consumer response (Antonetti, 2016). Anger can be detected through non-verbal and verbal expressions (Antonetti, 2016). Verbal expressions of anger measured in this study include feelings of irritation and aggravation towards fellow customers who did not previously apply customer helpers’ advice (Reisenzein, 1986).

*Sympathetic individuals* are mindful of other individuals’ state of affairs (Kim & Yoon, 2020). Sympathy concerns “an emotional response based on the apprehension of another’s state or condition” (Eisenberg *et al.*, 1988:237) and has also been described as feeling sorry for another individual (Rudolph *et al.*, 2004). Sympathy may lead to an emotional response, attributed to the effort to feel like the other individual (Meyer *et al.*, 2019), and was measured in this study as relating to pity and concern for others (Reisenzein, 1986). Sympathy transpires when the need for help originates from circumstances beyond an individual’s control (Vargas, 2021). Previous research has established positive links between sympathy and intentions to recommend (Kim & Yoon, 2020).

## 2.3 Hypotheses development

The potential interrelationship between controllability, anger, helping and continued green helping, is motivated by attribution theory. Described in literature as “the theory of motivation and emotion” (Vargas, 2021:399), attribution theory concentrates on the rationale for certain occurrences and the consequences thereof (Weiner, 2000). According to Weiner (1985, 1986, 1991), individuals will seek reasons why certain events transpire, which may affect emotions and behaviour. For example, the extent to which it was possible to control for an undesirable event may influence feelings of anger and subsequently helping behaviour (Vargas, 2021). Several studies have found that emotions indirectly connect the attributions to behavioural responses (Weiner, 1980; Betancourt & Blair, 1992; Graham *et al.*, 1992; Vargas, 2021). Previous research further noted sequential relationships between perceptions of



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controllability, anger, and negative word-of-mouth behaviours (Li *et al.*, 2023), as well as help refusal (DeMotta, 2021). This study proposed that the extent to which fellow customers could have controlled the purchase event (controllability) influences customer helpers' anger towards fellow customers. In turn, anger towards fellow customers may negatively affect customer helpers' intentions to help fellow customers with green purchasing decisions in future.

An interaction effect between sympathy and anger is also likely, given that the fellow customer being helped with green purchasing is often known to the customer helper (i.e., friend or family member) and feelings of compassion and kindness may be vested in these relationships. Further support for a possible interaction effect can be found in a study conducted within the field of biological psychology. Experimental research was performed to ascertain if feelings of sympathy reduce aggression through a reduction of the relative left-frontal activity that is linked to anger. Sympathetic feelings towards the other individuals were prompted, prior to the respondents having to read insulting feedback from the other individuals with respect to an essay the respondents wrote and that was marked by the other individuals. The biometric research findings evidenced that feelings of sympathy may contribute to lower levels of angry aggression towards other individuals (Harmon-Jones, 2004). Therefore, controllability's influence on anger is expected to be lower when sympathy towards fellow customers is high. When fellow customers were in control of the situation and could have chosen a greener alternative, customer helpers may feel less angry towards fellow customers, when they also sympathise with fellow customers.

Last, some scholars additionally found direct effects between controllability and helping, suggesting that in addition to the sequential effect between controllability, emotions, and helping, decisions to help others may be a direct cause of the extent to which helpers simply believed the people requiring help had control over the situation. Generally, the direct effect between controllability and helping appears to be negative (Reisenzein, 1986; Pilati *et al.*, 2015). Therefore, there is a possibility that controllability may also negatively impact continued green helping behaviour directly. Hence, it is hypothesised that:

- H1: Controllability positively and significantly influences anger towards fellow customers.*
- H2: Anger towards fellow customers negatively and significantly influences continued green helping behaviour.*
- H3: Sympathy towards fellow customers moderates the effect of controllability on anger towards fellow customers.*

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*H4: Controllability negatively and significantly influences continued green helping behaviour.*

## **2.4 The controlling effect of external values**

As addressed earlier, external values were selected as a control variable within the proposed model. Values concern preferred end states or ways of doing things (Rokeach, 1973) attained conceptually (Li & Cai, 2012). Extant literature describes values as “culturally rooted desires” or an “abstract form of social cognition” that impacts human behaviour (Li & Cai, 2012). Values are important, as they tend to be stable over time (Li & Cai, 2012) and have been shown to be efficient predictors of consumer behaviour. Typically, values serve as a reference point to reach a decision (Falke *et al.*, 2022). Values may aid in directing behaviour or assisting individuals in assessing themselves (Šagovnović & Kovačić, 2023). Contrasting with needs that may disappear, once fulfilled, values are more enduring in nature (Limon *et al.*, 2009). Values, associated with “what people consider important”, are also a different form of personality traits, denoting “what people are like” (Schwartz, 2012:16-17). Values are more enduring than attitudes and may precede attitudinal developments (Lee & Lyu, 2016).

While several value classification systems have been proposed before, this study supports the work of Kahle (1983), whose list of values is widely accepted among scholars. This list represents different types of personal values that individuals may endorse (Webb & Wong, 2014). Specifically, nine values can be grouped into three broad categories: internal values (self-fulfilment, a sense of accomplishment, and self-respect), external values (being well respected, having a sense of belonging, security, and warm relationships with others), and fun and enjoyment values (fun and enjoyment in life and excitement) (Limon *et al.*, 2009). These groups of values are significant, considering that it is possible to classify respondents based on an assessment of only nine values. According to Falke *et al.* (2020), the values may be more relevant to consumers, compared to other value classification systems, such as the Schwartz (1992) norm-activation theory and Rokeach (1973) value systems.

Central to the external values dimension that is of interest to this study is that the values are met through other human beings (Gurel-Atay *et al.*, 2021) and/or require other people's judgements or views (Weretecki *et al.*, 2021). For example, being well respected underscores admiration and recognition from other individuals. Security concerns safety and being shielded from assault. A sense of belonging addresses acceptance by others and being needed by stakeholders in an individual's social circle. Warm relationships with others underscore companionship and close relationships (Limon *et al.*, 2009).

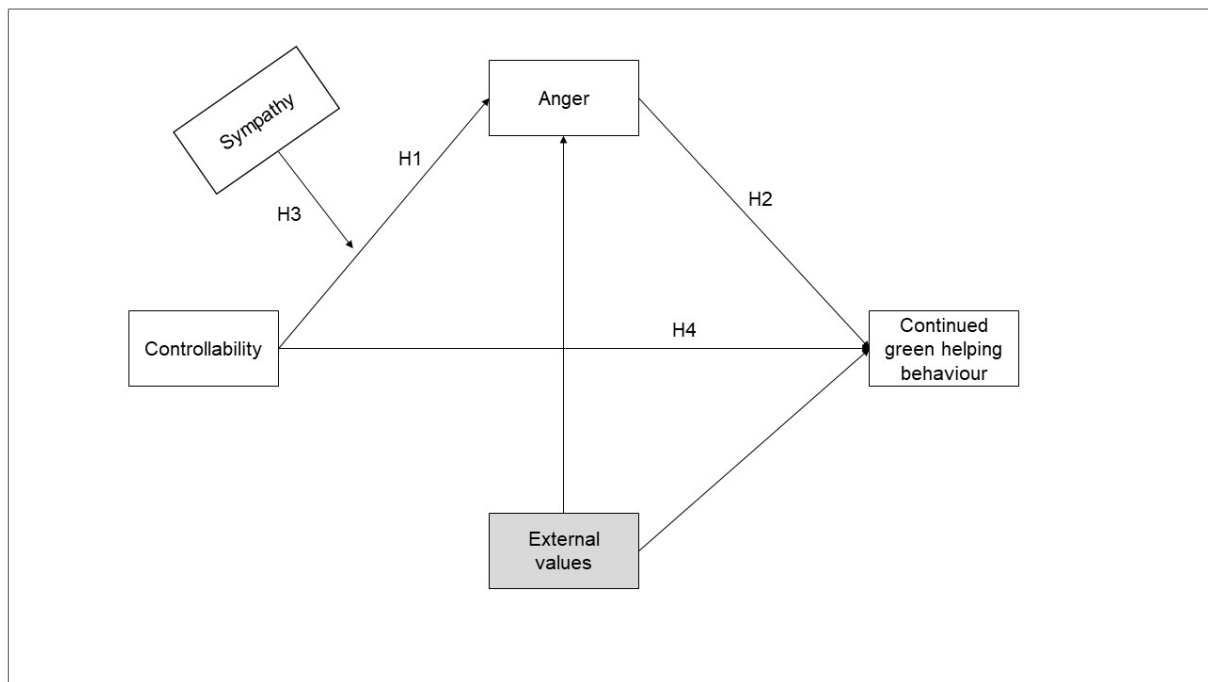


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Considering these underlying premises of external values, it seems further likely that external values may negatively impact customer helpers' anger towards fellow customers who did not apply their advice about green purchasing. Customers seeking admiration and recognition from others, wanting to be shielded from assault, as well as wanting to be needed and accepted by others and benefit from close relationships may feel less aggravated and irritated with fellow customers who ignored their advice. Extant research confirms that forgiveness is related to greater relationship fulfilment and consistency (Cao *et al.*, 2021).

Similarly, green helping behaviours may appeal to customer helpers, endorsing external values, providing an opportunity to be helpful, and nurturing warm and meaningful relationships with others, hence allowing external value fulfilment. Further support for the relationship between external values and continued green helping can be found in previous studies that identified external values as having a positive impact on motives for connecting with people (Šagovnović & Kovačić, 2023). Moreover, previous research found a positive relationship between individuals seeking warm relationships with others and their altruistic behaviours (Webb & Wong, 2014). It has also been found that external values may positively impact behavioural intentions, including positive recommendations to others, exposure encouragement, and lauding of the offering's attributes (Li *et al.*, 2016). Figure 1 presents an outline of the research model investigated.

Figure 1: Research model



Source: Own compilation

### 3. METHODOLOGY

#### 3.1 Sampling method and data collection

This research studied factors affecting continued green helping behaviour. The target population was customers aged 18 years and older who had made a green purchase the year before and had assisted other customers with green purchasing. The framed target population ensured that the respondents had insight into green purchasing and could relate to their experiences in assisting others with green purchasing. Extant research denotes that within a green context, adult respondents may be more apt in participating in difficult decision-making (Sheng *et al.*, 2019).

Applying a purposive sampling method, three screening questions were employed to ensure the database only included respondents from the specified target population. The respondents had to indicate that they adhere to the minimum age requirement of exceeding 18 years, purchased green products in the preceding year and helped another customer, providing advice about green purchasing. Only respondents adhering to these criteria were further researched. An accredited research agency in South Africa assisted with data collection. The agency panel members were invited to participate in the self-completion online survey via email. In addressing the survey questions, the respondents were requested to consider a familiar person they previously helped with green purchasing and who disregarded their

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advice. Data analysis was conducted from the Excel spreadsheet that was provided by the research agency, which excluded all respondents' contact information. The survey was accompanied by a cover letter, informing the respondents about participation being voluntary and confidential, the expected completion time of the survey, secured data storage and the contact details of the principal researcher. The respondents were also informed about the intention of the study and had to give their permission for their data may be analysed accordingly.

All surveys completed (452) were deemed adequate for inclusion in the database. Moreover, the database comprised a good balance of male (54.2%) and female (45.4%) respondents, with two respondents not selecting their gender. Overall the respondents who participated in the study could be categorised into four different age categories, ranging from 18 to 26 years (2.2%), 27 to 35 years (9.7%), 36 to 47 years (26.5%), 48 to 66 years (48.5%) and 67 years and older (13.1%). The majority of the respondents worked for an organisation full-time or had their own business (71.7%).

### **3.2 Measurement and analysis**

All measurement scales employed were previously validated. Four items were adopted from Limon *et al.* (2009) to measure external values on a five-point Likert-type scale, varying from "Not important"(1) to "Extremely important"(5). Controllability, anger, sympathy, and further helping were measured on a five-point Likert-type scale, where 1 represented "Not at all" and 5 represented "Very much". Perceptions of fellow customer controllability were measured using three items from Nikbin *et al.* (2016). Anger and sympathy towards fellow customers were measured using measurement scales adapted from Reisenzein (1986), which each included three items. Further helping behaviour was measured using the four-item helping scale of Yi and Gong (2013), which was adapted to measure further helping in relation to green purchasing. The scale items are listed in the Appendix.

Using Mplus 8.8 and the maximum likelihood estimation method (Byrne, 2001), a measurement model including the five constructs of the study was compiled to assess construct validity and reliability. Subsequently, factor scores of the validated measurement model were saved, which served as input in the measurement of Model 7 of the Hayes (2013) Process macro applied in RStudio (RStudio Team, 2020).

## 4. DISCUSSION

### 4.1 Measurement model

All scale items obtained significant loadings and were above the acceptable level of 0.5, except for one item from the controllability factor (Con\_3) and one item from the external values factor (Eval\_4), which only obtained factor loadings greater than 0.4. Factor loadings above 0.4 are still deemed stable (Guadagnoli & Velicer, 1988) and could be maintained in the model. However, a closer inspection of the results evidenced that while Con\_3 was not problematic, Eval\_4 contributed to a much lower average variance extracted (AVE) value of 0.41, suggesting a lack of convergent validity.

Table 1 presents the results of the confirmatory factor analysis that was conducted, excluding Eval\_4. In the revised measurement model, all factor loadings remained significant at  $p < 0.001$  and exceeded 0.5, except for Con\_3 which obtained a factor loading of 0.43. This stable factor loading was maintained in the revised model, considering the associated AVE value of 0.52 for controllability (see Table 2). As further denoted by Table 2, anger, sympathy, and further helping obtained AVE values above 0.5. The AVE value of external values improved to 0.49, which was deemed acceptable, considering it was close to 0.5 and the composite reliability (CR) value for this construct was 0.74 (refer to Table 1). Convergent validity of a construct with an AVE value not exceeding 0.5 is still regarded as acceptable if the CR value is more than 0.6 (Fornell & Larcker, 1981; Shrestha, 2021). The CR values of the remaining four constructs exceeded 0.7. Considering the above and the recommendations of Hair *et al.* (2019), the findings presented in Tables 1 and 2 provide confirmation of convergent validity and reliability with respect to all constructs investigated.

**Table 1: Assessment of latent variables**

Variable items	Std. factor loading	Std. error of loading	CR
Controllability			
Con_1	0.83	0.035	0.75
Con_2	0.82	0.035	
Con_3	0.43	0.044	
Anger			
Ang_1	0.83	0.019	0.90
Ang_2	0.87	0.016	
Ang_3	0.90	0.015	
Sympathy			
Symp_1	0.75	0.025	0.82
Symp_2	0.90	0.023	
Symp_3	0.67	0.033	
Continued green helping			
Chelp_1	0.86	0.016	0.94
Chelp_2	0.92	0.012	
Chelp_3	0.90	0.012	

Chelp_4	0.91	0.012	
<b>External values</b>			
Evalue_1	0.77	0.034	0.74
Evalue_2	0.71	0.035	
Evalue_3	0.60	0.039	

Notes: Con = controllability; Ang = anger; Symp = sympathy; Chelp = continued green helping; Evalue = external values; CR = composite reliability. All factors loaded significantly at  $p < 0.001$ .

Source: Own compilation

Furthermore, Table 2 shows that in relation to all construct pairs measured, the shared variance among the constructs is always lower than their individual AVE values. Hence, discriminant validity was confirmed (Hair *et al.*, 2019).

**Table 2: Latent factor correlation matrix with average variance extracted on the diagonal in brackets**

Variable	1	2	3	4	5
1. Controllability	(0.52)				
2. Anger	0.23	(0.75)			
3. Sympathy	0.24	0.41	(0.61)		
4. Continued green helping	0.40	0.23	0.37	(0.81)	
5. External values	0.31	0.16	0.31	0.51	(0.49)

Notes: All correlations are statistically significant at  $p < 0.001$ .

Source: Own compilation

The revised measurement model further presented acceptable measurement model fit indices, confirming construct validity (Hair *et al.*, 2019) –  $\chi^2(94) = 361.751$ ; ( $\chi^2/\text{df} = 3.85$ ); comparative fit index = 0.94; Tucker-Lewis index = 0.92; root mean square error of approximation = 0.079.

## 4.2 Hypotheses assessment

Table 3 presents the results of the research model investigated.

**Table 3: Regression results**

Variable	(Model 7)					
	Stage 1 (Anger)					
	Coefficient	S.E.	<i>t</i>	<i>p</i>	CI (low)	CI (high)
Controllability	0.17	0.05	3.43	0.001	0.073	0.269
Sympathy	0.45	0.05	9.10	0.001	0.353	0.547
Controllability*Sympathy	0.00	0.05	0.04	0.965	-0.089	0.093
External values	-0.03	0.07	-0.47	0.636	-0.175	0.107
	Stage 2 (Continued green helping)					
	Coefficient	S.E.	<i>t</i>	<i>p</i>	CI (low)	CI (high)
Controllability	0.24	0.04	6.14	0.001	0.166	0.322
Anger	0.08	0.03	2.42	0.016	0.016	0.150
External values	0.65	0.05	11.92	0.001	0.539	0.752

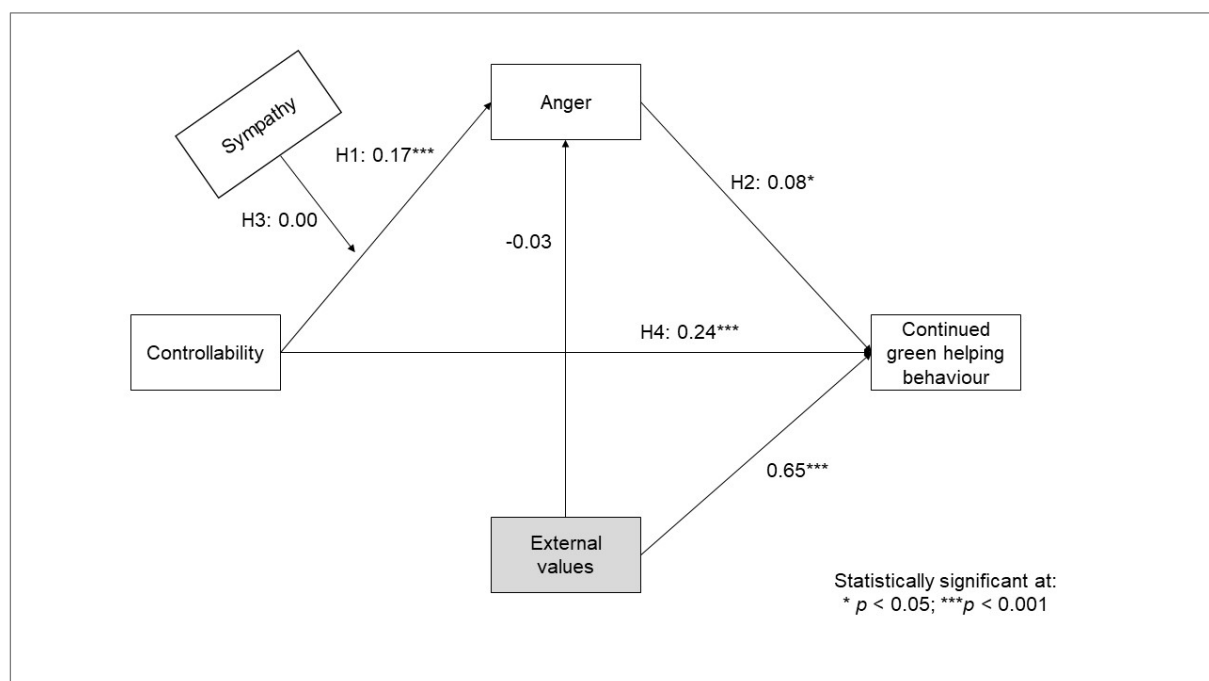
Source: Own compilation

Model 7 of the Hayes (2013) Process macro in RStudio was tested to assess the hypotheses formulated as well as the impact of the control variable (external values). The factor scores obtained from the revised measurement model served as input in the analysis. As depicted by Table 3, the relationship between external values and anger was not significant ( $-0.03$   $p > 0.001$ ). Assessment of the relationship between external values and continued green helping produced the largest coefficient ( $0.65$ ,  $p < 0.001$ ). The relationship between controllability and anger was positive and significant ( $H1$ :  $0.17$   $p < 0.001$ ). Also, the relationship between anger and continued green helping behaviour ( $H2$ :  $0.08$   $p < 0.05$ ) and the relationship between controllability and continued green helping ( $H4$ :  $0.24$   $p < 0.001$ ) were both positive and significant. Hence,  $H1$  was supported.  $H2$  and  $H4$  were not supported. Even though the relationships are significant, negative effect sizes were expected. Overall, the regressions that were significant were all positive and ranged between  $0.08$  and  $0.65$ .

Furthermore, sympathy did not act as a moderator in the proposed model. It is evident from Table 3 that the cross-product term between controllability and sympathy for anger was not significant ( $p = 0.965$ ). Hence,  $H3$  was not supported.

Figure 2 presents a summary of the regression results obtained.

**Figure 2: Regression results**



Source: Own compilation



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## 5. THEORETICAL IMPLICATIONS

This study set out to advance understanding of continued green helping behaviour, by revisiting the attribution theory. Many organisations sell green products to aid in preserving natural resources (Sana, 2020). Customer helpers may play a vital role in assisting fellow customers in purchasing these green products and addressing their concerns (Yi & Gong, 2013; Kim & Yi, 2016; Le *et al.*, 2022). A greater understanding is needed of the factors that may affect continued green customer helping behaviour towards fellow customers who did not apply the initial green purchase advice provided. Guided by attribution theory (Kelley & Michela, 1980; Weiner, 1980) and related contributions (Harmon-Jones, 2004), a regression model was explored, addressing the sequential relationships between controllability, anger, and continued green helping behaviour, as well as the moderating role of sympathy.

Overall, the findings provide novel insight into factors that may affect continued green helping behaviour. In relation to the sequential relationships between controllability, anger, and continued green helping behaviour, it was established that controllability has a positive, though weak, impact on anger (coefficient = 0.17,  $p < 0.001$ ). A further interesting observation is that, contrasting with expectations, anger does not seem to reduce intentions of continued green helping behaviour, but instead has a small positive impact on the further helping behaviours (coefficient = 0.08,  $p < 0.05$ ). Therefore, when customer helpers perceive that fellow customers could have controlled the poor purchase decision made, this may have a marginal effect on their feelings of anger towards fellow customers who did not apply their advice. These feelings of anger may stimulate some intentions to further help fellow customers with green purchasing decisions, although the effect is very small. These findings are in direct contrast to the expectation of the attribution theory, as addressed earlier. A plausible explanation for this occurrence is the importance of environmental preservation in the 21<sup>st</sup> century (Sana, 2020). The anger felt by customer helpers may, against the background of a need for environmental preservation, rather translate into continued green helping behaviours to assist in ensuring fellow customers perceived to be in control of their purchase decisions engage in green purchasing behaviour going forward. However, considering the small effect size obtained, anger may not make a meaningful difference in influencing continued green helping behaviours.

Beyond the sequential relationship investigated, it seems that customer helpers may also directly provide further help to fellow customers they believe are in control of their purchase decisions. This relationship is important, as the direct effect between controllability and continued green helping seems to be relatively strong (coefficient = 0.24,  $p < 0.001$ ). These

findings also contrast earlier studies that denoted negative direct effects between controllability and helping (Reisenzein, 1986; Pilati *et al.*, 2015). The results may again be attributed to the research context of the study investigated. Against the background of the need for environmental preservation, customer helpers, believing fellow customers are in control of their purchase decisions, could decide to provide further help to promote green purchasing among fellow customers they believe are capable of making better purchase decisions. Subsequently, a further implication of the research findings is that decisions to engage in continued green helping behaviour in a green context are not always attributed to felt emotions, but may also be impacted by a more objective and rationalised path, stemming from customer helpers' views of fellow customers and the extent to which they are in control of and capable of making more responsible purchase decisions.

Contrasting with the findings of Harmon-Jones (2004), this study did not find sympathy to lead to reduced feelings of anger. Again, it is plausible that in the context of the current investigation, the need for environmental preservation and the importance of all customers engaging in sustainable behaviours may have contributed to sympathy not affecting customer helpers' feeling of anger towards fellow customers who did not apply their initial advice about green purchasing.

With respect to the control variable, it is important to point out that external values did not seem to affect anger towards fellow customers but, interestingly, had the strongest effect on continued green helping behaviours (coefficient = 0.65,  $p < 0.001$ ). This finding is significant for several reasons. A novel perspective is provided on the relationship between values and continued green helping behaviour. Aligned to expectations, customers seeking companionship, recognition, and acceptance by others (Limon *et al.*, 2009) may engage in further helping behaviours with respect to green purchasing, even though fellow customers did not apply their initial advice. Customer helpers endorsing external values may, therefore perceive further engagements of helping behaviour as an opportunity to connect with other individuals, allowing external value fulfilment and to have meaningful relationships with other individuals. This finding is further important as values tend to be stable over time (Li & Cai, 2012) and may be a more reliable predictor of continued green helping behaviour than controllability over the long term.

## 6. MANAGERIAL IMPLICATIONS

The research findings evidence that customer helpers have the potential to assist in promoting green purchasing behaviour among fellow customers and may persist in performing these

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behaviours even though the initial advice about green purchasing was not applied. Customer helpers could make a valuable contribution, facilitating green purchasing behaviours and addressing lingering concerns of fellow customers as well as unresolved issues they may have about green purchasing.

Moreover, while customer emotions, such as anger, may have a small positive influence on continued green helping behaviours, decisions to engage in further helping behaviours (when the initial green advice was not applied) are more likely motivated by perceptions that fellow customers have control over their purchase decisions (they could have made a more responsible product choice) as well as customer helpers' external values, directing further engagement and helping behaviours. Consequently, for green retailers and marketers to facilitate further conversations and helping behaviours among customers, it could be useful to focus on perceptions of controllability and fellow customers' external values.

Various initiatives could be employed to ensure sufficient information is available that will enable customers to make responsible product selections and enhance perceptions of controllability. For example, informative product labels that are simple to read and understand could assist with easily distinguishing between environmentally sustainable and unsustainable products, thus limiting confusion and miscommunication being used as an excuse for poor product selections. Cross-channel communication, including radio, print, websites, interactive apps, and even chatbots, may further assist in educating customers about green products and the options available. Product trials and useful tips on social media platforms could also assist in this regard.

Additionally, further initiatives to engage in green helping behaviours may appeal to customer helpers, endorsing external values, providing an opportunity to be helpful, and nurturing warm and meaningful relationships with others. Hence, forums could be used to create a green customer community and facilitate discussions about more appropriate green product selections. Roadshows, promotions, and new product launches may also be useful in stimulating conversations within the customer helpers' social circle, providing opportunities for assistance and help regarding more responsible purchase decisions.

## **7. LIMITATIONS AND DIRECTIONS FOR FURTHER RESEARCH**

Environmental preservation is crucial in the 21st century. Accordingly, the current research provides insight into factors that may affect customer helpers' willingness to continue helping fellow customers who previously ignored their advice about green purchasing. Future research may want to extend the proposed model by examining the role of other values in influencing

continued green helping behaviours. It is also unclear if customer helpers may want to continue providing help if their advice is continuously ignored by fellow customers. A longitudinal study could provide clarity on this matter. A cross-border multicultural study is needed to validate the research model and to determine if help concerning green purchasing decisions would be more readily offered in developing countries as opposed to developed countries. Further insight is also needed into the conversations between customers and the level of advice (autonomous or dependency) customer helpers provide to fellow customers about green purchasing (Kim & Yi, 2016). For example, are fellow customers merely being helped to make responsible product selections in a given situation or are they being guided to independently make responsible purchase decisions in future across a broad spectrum of product categories? It could also be interesting to assess differences in helping behaviours across various green product categories.

## REFERENCES

- Abdou, A.H., Shehata, H.S., Mahmoud, H.M.E., Albakhit, A.I. & Almakhayitah, M.Y. 2022. The effect of environmentally sustainable practices on customer citizenship behavior in eco-friendly hotels: does the green perceived value matter? *Sustainability*, 14(12):7167. [<https://doi.org/10.3390/su14127167>].
- Amoako, G.K., Dzogbenuku, R.K., Doe, J. & Adjaisson, G.K. 2022. Green marketing and the SDGs: emerging market perspective. *Marketing Intelligence and Planning*, 40(3):310-327. [<https://doi.org/10.1108/MIP-11-2018-0543>].
- Anaza, N.A. 2014. Personality antecedents of customer citizenship behaviors in online shopping situations. *Psychology and Marketing*, 31(4):251-263. [<https://doi.org/10.1002/mar.20692>].
- Antonetti, P. 2016. Consumer anger: a label in search of meaning. *European Journal of Marketing*, 50(9/10):1602-1628. [<https://doi.org/10.1108/EJM-08-2015-0590>].
- Betancourt, H. & Blair, I. 1992. A cognition (attribution)-emotion model of violence in conflict situations. *Personality and Social Psychology Bulletin*, 18(3):343-350. [<https://doi.org/10.1177/0146167292183011>].
- Byrne, B.M. 2001. Structural equation modeling with AMOS: basic concepts, applications, and programming. Mahwah, NJ: Lawrence Erlbaum.
- Cao, W., van der Wal, R.C. & Taris, T.W. 2021. When work relationships matter: interpersonal forgiveness and work outcomes. *International Journal of Stress Management*, 28(4):266-282. [<https://doi.org/10.1037/str0000192>].
- Chang, S.-H. 2015. The influence of green viral communications on green purchase intentions: the mediating role of consumers' susceptibility to interpersonal influences. *Sustainability*, 7(5):4829-4849. [<https://doi.org/10.3390/su7054829>].
- DeMotta, Y. 2021. Dialectical thinking as a driver of charitable giving. *Psychology and Marketing*, 38(9):1404-1416. [<https://doi.org/10.1002/mar.21526>].
- Eisenberg, N., Fabes, R.A., Bustamante, D., Mathy, R.M., Miller, P.A. & Lindholm, E. 1988. Differentiation of vicariously induced emotional reactions in children. *Developmental Psychology*, 24(2):237-246. [<https://doi.org/10.1037/0012-1649.24.2.237>].
- Falke, A., Schröder, N. & Hofmann, C. 2022. The influence of values in sustainable consumption among millennials. *Journal of Business Economics*, 92(6):899-928. [<https://doi.org/10.1007/s11573-021-01072-7>].

- 
- Flores, P.J. & Jansson, J. 2022. SPICe—determinants of consumer green innovation adoption across domains: a systematic review of marketing journals and suggestions for a research agenda. *International Journal of Consumer Studies*, 46(5):1761-1784. [<https://doi.org/10.1111/ijcs.12810>].
- Fornell, C. & Larcker, D.F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1):39-50. [<https://doi.org/10.2307/3151312>].
- Gistri, G., Corciolani, M. & Pace, S. 2018. The interaction effect between brand identification and personal crisis relevance on consumers' emotional reactions to a fashion brand crisis. *Journal of Global Fashion Marketing*, 9(3):252-269. [<https://doi.org/10.1080/20932685.2018.1461021>].
- Gong, T. & Yi, Y. 2021. A review of customer citizenship behaviors in the service context. *The Service Industries Journal*, 41(3-4):169-199. [<https://doi.org/10.1080/02642069.2019.1680641>].
- Graham, S., Hudley, C. & Williams, E. 1992. 'Attributional and emotional determinants of aggression among African-American and Latino young adolescents. *Developmental Psychology*, 28(4):731-740. [<https://doi.org/10.1037/0012-1649.28.4.731>].
- Guadagnoli, E. & Velicer, W.F. 1988. Relation of sample size to the stability of component patterns. *Psychological Bulletin*, 103(2):265-275. [<https://doi.org/10.1037/0033-2909.103.2.265>].
- Gurel-Atay, E., Sirgy, M.J., Webb, D., Ekici, A., Lee, D.-J. & Kahle, L.R. 2021. What motivates people to be materialistic? Developing a measure of materialism motives. *Journal of Consumer Behaviour*, 20(3):590-606. [<https://doi.org/10.1002/cb.1887>].
- Hair, J.F., Jr., Black, W.C., Babin, B.J. & Anderson, R.E. 2019. Multivariate data analysis. 8<sup>th</sup> ed. Hampshire: Cengage.
- Harmon-Jones, E. 2004. Contributions from research on anger and cognitive dissonance to understanding the motivational functions of asymmetrical frontal brain activity. *Biological Psychology*, 67(1-2):51-76. [<https://doi.org/10.1016/j.biopsycho.2004.03.003>].
- Hayes, A.F. 2013. Introduction to mediation, moderation, and conditional process analysis: a regression-based approach. New York, NY: Guilford.
- Hwang, J. & Lyu, S.O. 2020. Relationships among green image, consumer attitudes, desire, and customer citizenship behavior in the airline industry. *International Journal of Sustainable Transportation*, 14(6):437-447. [<https://doi.org/10.1080/15568318.2019.1573280>].
- Kahle, L.R. 1983. Social values and social change: adaptation to life in America. New York, NY: Praeger Publishers.
- Kelley, H.H. & Michela, J.L. 1980. Attribution theory and research. *Annual Review of Psychology*, 31(1):457-501. [<https://doi.org/10.1146/annurev.ps.31.020180.002325>].
- Kim, H.-R. & Yoon, S.-Y. 2020. How to help crowded destinations: tourist anger vs. sympathy and role of destination social responsibility. *Sustainability*, 12(6):2358. [<https://doi.org/10.3390/su12062358>].
- Kim, M., Yin, X. & Lee, G. 2020. The effect of CSR on corporate image, customer citizenship behaviors, and customers' long-term relationship orientation. *International Journal of Hospitality Management*, 88:102520. [<https://doi.org/10.1016/j.ijhm.2020.102520>].
- Kim, S.Y. & Yi, Y. 2016. Give a man a fish or teach him to fish. *Asia Marketing Journal*, 18(2):1-23. [<https://doi.org/10.15830/amj.2016.18.2.1>].
- Kim, S.Y. & Yi, Y. 2021. Inter-customer helping behaviors: a virtuous cycle or unwanted intrusion? *The Service Industries Journal*, 41(9-10):633-647. [<https://doi.org/10.1080/02642069.2018.1461842>].
- Le, A., Tan, K.-L., Yong, S.-S., Soonsap, P., Lipa, C.J. & Ting, H. 2022. Perceptions towards green image of trendy coffee cafés and intention to re-patronage: the mediation role of customer citizenship behavior. *Young Consumers*, 23(2):165-178. [<https://doi.org/10.1108/YC-03-2021-1291>].



- Lee, H.-J. & Lyu, J. 2016. Personal values as determinants of intentions to use self-service technology in retailing. *Computers in Human Behavior*, 60:322-332. [<https://doi.org/10.1016/j.chb.2016.02.051>].
- Li, M. & Cai, L.A. 2012. The effects of personal values on travel motivation and behavioral intention. *Journal of Travel Research*, 51(4):473-487. [<https://doi.org/10.1177/0047287511418366>].
- Li, M., Cai, L. A. & Qiu, S. 2016. A value, affective attitude, and tourist behavioral intention model. *Journal of China Tourism Research*, 12(2):179-195. [<https://doi.org/10.1080/19388160.2016.1225620>].
- Li, Z.C., Tao, W. & Wu, L. 2023. The price of good friendships: examining the roles of relationship norms and perceived controllability in service failure encounters. *International Journal of Business Communication*, 60(1):105-129. [<https://doi.org/10.1177/2329488420907119>].
- Limon, Y., Kahle, L.R. & Orth, U.R. 2009. Package design as a communications vehicle in cross-cultural values shopping. *Journal of International Marketing*, 17(1):30-57.
- Liu, H., Yang, J. & Chen, X. 2020. Making the customer-brand relationship sustainable: the different effects of psychological contract breach types on customer citizenship behaviours. *Sustainability*, 12(2):630. [<https://doi.org/10.3390/su12020630>].
- Meyer, F., Huber, F. & Huber, S. 2019. The suffering company: consumer compassion towards companies exposed to negative events. *Psychology & Marketing*, 36(4):321-341. [<https://doi.org/10.1002/mar.21181>].
- Nekmahmud, M. & Fekete-Farkas, M. 2020. Why not green marketing? Determinates of consumers' intention to green purchase decision in a new developing nation. *Sustainability*, 12(19):7880. [<https://doi.org/10.3390/su12197880>].
- Nikbin, D., Hyun, S.S., Iranmanesh, M., Maghsoudi, A. & Jeong, C. 2016. Airline travelers' causal attribution of service failure and its impact on trust and loyalty formation: the moderating role of corporate social responsibility', *Asia Pacific Journal of Tourism Research*, 21(4):355-374. [<https://doi.org/10.1080/10941665.2015.1048265>].
- Pilati, R., Ferreira, M.C., Porto, J.B., Borges, L.d.O., Lima, I.C.d. & Lellis, I.L. 2015. Is Weiner's attribution-help model stable across cultures? A test in Brazilian subcultures', *International Journal of Psychology*, 50(4):295-302. [<https://doi.org/10.1002/ijop.12100>].
- Reisenzein, R. 1986. A structural equation analysis of Weiner's attribution-affect model of helping behavior. *Journal of Personality and Social Psychology*, 50(6):1123-1133. [<https://doi.org/10.1037/0022-3514.50.6.1123>].
- Rokeach, M. 1973. The nature of human values. New York, NY: Free Press.
- RStudio Team. 2020. RStudio. Integrated development for R. Boston, MA: RStudio.
- Rudolph, U., Roesch, S., Greitemeyer, T. & Weiner, B. 2004. A meta-analytic review of help giving and aggression from an attributional perspective: contributions to a general theory of motivation. *Cognition and Emotion*, 18(6):815-848. [<https://doi.org/10.1080/02699930341000248>].
- Sadiq, M., Adil, M. & Paul, J. 2021. An innovation resistance theory perspective on purchase of eco-friendly cosmetics. *Journal of Retailing and Consumer Services*, 59:102369. [<https://doi.org/10.1016/j.jretconser.2020.102369>].
- Šagovnović, I. & Kovačić, S. 2023. Predicting travel motivation with personality and personal values – the roles of big five plus honesty/humility personality traits and Kahle's values. *International Journal of Hospitality & Tourism Administration*, 24(4):614-643. [<https://doi.org/10.1080/15256480.2021.2025189>].
- Sana, S.S. 2020. Price competition between green and non green products under corporate social responsible firm. *Journal of Retailing and Consumer Services*, 55:102118. [<https://doi.org/10.1016/j.jretconser.2020.102118>].



- Schwartz, S.H. 1992. Universals in the content and structure of values: theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 24:1-65. [[https://doi.org/10.1016/S0065-2601\(08\)60281-6](https://doi.org/10.1016/S0065-2601(08)60281-6)].
- Schwartz, S.H. 2012. An overview of the Schwartz theory of basic values. *Online Readings in Psychology and Culture*, 2(1):11-20. [<https://doi.org/10.9707/2307-0919.1116>].
- Sheng, G., Xie, F., Gong, S. & Pan, H. 2019. The role of cultural values in green purchasing intention: empirical evidence from Chinese consumers. *International Journal of Consumer Studies*, 43(3):315-326. [<https://doi.org/10.1111/ijcs.12513>].
- Shrestha, N. 2021. Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1):4-11. [<https://doi.org/10.12691/ajams-9-1-2>].
- Szabo, S. & Webster, J. 2021. Perceived greenwashing: the effects of green marketing on environmental and product perceptions. *Journal of Business Ethics*, 171:719-739. [<https://doi.org/10.1007/s10551-020-04461-0>].
- Van Tonder, E., Fullerton, S., De Beer, L.T. & Saunders, S.G. 2023. Social and personal factors influencing green customer citizenship behaviours: the role of subjective norm, internal values and attitudes. *Journal of Retailing and Consumer Services*, 71:103190. [<https://doi.org/10.1016/j.jretconser.2022.103190>].
- Van Tonder, E. & Heymans, A. 2020. The role of trust in influencing customer willingness to help fellow customers with online-only retailers' self-services: a mediated model. *Journal of Contemporary Management*, 17(2):22-50. [<https://doi.org/10.35683/jcm20037.63>].
- Van Tonder, E., Mkhondo, B.C., Bisschoff, C. & Fullerton, S. 2022. When the going gets tough: motivations of customer helpers' further green helping behavior intentions. In Association of Marketing Theory and Practice Proceedings 2022. Vol. 26. [Internet: [https://digitalcommons.georgiasouthern.edu/amp-proceedings\\_2022/65?utm\\_source=digitalcommons.georgiasouthern.edu%2Famp-proceedings\\_2022%2F65&utm\\_medium=PDF&utm\\_campaign=PDFCoverPages](https://digitalcommons.georgiasouthern.edu/amp-proceedings_2022/65?utm_source=digitalcommons.georgiasouthern.edu%2Famp-proceedings_2022%2F65&utm_medium=PDF&utm_campaign=PDFCoverPages); downloaded on 11 August 2023].
- Vargas, M.E. 2021. An attribution-emotion-action interpretation of the "evil eye" in everyday conflict situations. *Journal of Applied Social Psychology*, 51(4):399-403. [<https://doi.org/10.1111/jasp.12743>].
- Webb, D. & Wong, J. 2014. Exploring antecedents of charitable giving and their impact on subjective well-being in Singapore. *Social Indicators Research*, 117:65-87. [<https://doi.org/10.1007/s11205-013-0331-x>].
- Weiner, B. 1980. A cognitive (attribution)-emotion-action model of motivated behavior: an analysis of judgments of help-giving. *Journal of Personality and Social Psychology*, 39(2):186-200. [<https://doi.org/10.1037/0022-3514.39.2.186>].
- Weiner, B. 1985. An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4):548-573. [<https://doi.org/10.1037/0033-295X.92.4.548>].
- Weiner, B. 1986. An attributional theory of motivation and emotion. New York, NY: Springer-Verlag.
- Weiner, B. 1991. Metaphors in motivation and attribution. *American Psychologist*, 46(9):921-930. [<https://doi.org/10.1037/0003-066X.46.9.921>].
- Weiner, B. 2000. Attributional thoughts about consumer behavior. *Journal of Consumer Research*, 27(3):382-387. [<https://doi.org/10.1086/317592>].
- Weretecki, P., Greve, G. & Henseler, J. 2021. Experiential value in multi-actor service ecosystems: scale development and its relation to inter-customer helping behavior. *Frontiers in Psychology*, 11:593390. [<https://doi.org/10.3389/fpsyg.2020.593390>].
- Yi, Y. & Gong, T. 2013. Customer value co-creation behavior: scale development and validation. *Journal of Business Research*, 66(9):1279-1284. [<https://doi.org/10.1016/j.jbusres.2012.02.026>].

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## APPENDIX

### **Controllability** (Nikbin *et al.*, 2016)

- Con\_1: Had control over the eco-unfriendly purchase decision
- Con\_2: Could have prevented the eco-unfriendly purchase decision
- Con\_3: Intended to make the eco-unfriendly purchase decision

### **Anger** (Reisenzein, 1986)

- Ang\_1: Anger
- Ang\_2: Irritation
- Ang\_3: Aggravation

### **Sympathy** (Reisenzein, 1986)

- Symp\_1: Sympathy
- Symp\_2: Pity
- Symp\_3: Concern

### **Continued green helping behaviour** (Yi & Gong, 2013)

- Chelp\_1: Assist this person if he/she needs help with green purchasing decisions.
- Chelp\_2: Help this person if he/she seems to have problems with green purchase decisions
- Chelp\_3: Teach this person about green purchase decisions
- Chelp\_4: Give advice to this person about green purchase decisions

### **External values** (Limon *et al.*, 2009)

- Evalue\_1: Sense of belonging
- Evalue\_2: Warm relationships with others
- Evalue\_3: Being well respected
- Evalue\_4: Security