

The Nexus Between Green Influencers and Green Customer Citizenship Behavior: Do Environmental Self-Identity and Dynamic Norms Matter?

Abstract

Purpose- Green customer citizenship behavior (CCB) is a relatively new concept, with limited research on its antecedents. This study used an integrated theoretical framework to examine how green influencer influencers influence green CCB through environmental self-identity.

Design/methodology/approach- The study combines social identity theory with social norms theory to propose a research framework. A within-subject experiment was conducted with 257 coffee shop customers in the United States.

Findings- The results indicate that green influencers are stronger predictors of green CCB compared to non-green influencers, with this relationship mediated by environmental self-identity. Additionally, dynamic norms do not moderate the direct relationship between green influencers and green CCB. However, it moderates this relation indirectly through environmental self-identity.

Originality/value- This study, for the first time, examines the differential impact of green versus non-green influencers on green CCB. It also explores the mechanism by which, and the conditions under which, these two types of influencers most effectively impact green CCB through the mediating role of environmental self-identity and the moderating role of dynamic norms.

Keywords: Green influencer, Green CCB, environmental self-identity, dynamic norms, coffee shop.

Introduction

Green customer citizenship behavior (CCB) involves customers voluntarily engaging in actions that, while not mandatory, support and enhance a firm's environmental initiatives (Deng & Yang, 2022). For example, a customer of a sustainable fashion brand who shares a positive review on social media—highlighting the company's use of recycled materials and ethical labor practices—demonstrates green CCB. While there is a common agreement among scholars that the real birth of the concept of CCB traces back to Groth (2005), the concept of green CCB is relatively new, apparently first introduced in 2020 in van Tonder et al., (2020).

Since then, many studies have emerged to understand this phenomenon better and examine the factors influencing customers to engage in such behavior.

The existing literature on green CCB reveals a broad range of factors influencing this behavior, from corporate initiatives such as environmental CSR initiatives (Waris et al., 2024), green hotel initiatives (Tran et al., 2024) to individual values such as internal values (Van Tonder et al., 2023), to advertising such as attribute of green animation advertising (Y. Zhang & Yang, 2023), to brand attributes such as green attribute transparency (Deng & Yang, 2022), green brand love (Y. Zhang & Yang, 2023), green brand uniqueness, credibility, and innovativeness (B. L. Zhang et al., 2022) and even community expertise (Kuang & Lyu, 2024). While the existing studies provide valuable insights into the factors influencing green CCB, several gaps remain. One significant gap is the influence of individuals. Most studies focus on organizational practices, brand attributes, and community experiences, overlooking the significant role that individuals, especially influencers, might play in shaping green CCB. This research aims to fill this gap and provide new insights into this.

Social media Influencers—anyone who has social media followers (Esber & Wong, 2020)—play a crucial role in shaping public opinion and behavior (Kılıç & Gürlek, 2023). Many studies have shown that influencers can promote ethical behavior, sustainable development, and environmental awareness through their social media pages (Knupfer, Neureiter, & Jörg Matthes, 2023; Polat et al., 2024). The popularity of influencer marketing has been experiencing exponential growth (Alboqami, 2023; Lou & Yuan, 2019). This could be attributed to the growing number of people using social media platforms (e.g., Instagram). In May 2024, the size of the influencer marketing industry surged by approximately 147%, reaching over \$24 billion compared to its 2020 figures (Statista, 2024). Among different types of influencers, green influencers – a subgroup of influencers (Knupfer, Neureiter, & Jörg Matthes, 2023) - have emerged as an increasingly prevalent behavior among environmental advocates that play a vital role in promoting sustainable lifestyles (König & Maier, 2024). Green influencers are social media personalities who specifically promote sustainable lifestyles and eco-consciousness, while non-green influencers are broader content creators who promote various products and lifestyles without an environmental focus (Pittman & Abell, 2021). They are often referred to as “sustainability superheroes” (Townsend, 2022) and typically promote sustainable consumption to their engaged audiences. Lauren Singer (@trashisfortossers) is an example of a green influencer, an American environmental activist known for her dedication to the zero-waste movement.”

The positive outcomes of green influencers on consumer behavior have been well-documented in past studies. For instance, green influencers are seen as significant predictors of purchase intention (Pittman & Abell, 2021), green behavioral intention (Kılıç & Gürlek, 2023), environmental knowledge (Knupfer, Neureiter, & Matthes, 2023), and green usage intention (König & Maier, 2024). Yet, the extent to which green influencers may contribute to green CCB is still unclear. In their systematic review of influencer marketing, Polat et al., (2024) suggested that future studies should explore how green influencers can enhance green CCB across various tourism and hospitality settings. To help bridge this gap, this study aims to investigate green influencers as possible antecedents to green CCB. This study draws on social identity theory (Turner & Tajfel, 1986) by introducing environmental self-identity as a potential mechanism through which green influencers affect green CCB. Environmental self-identity plays a crucial role in understanding why consumers engage in (un)sustainable consumption (Dermody et al., 2015). Social identity theory posits that individuals derive a sense of identity from their group memberships, which can influence their attitudes and behaviors (Ashforth & Mael, 1989). Based on this, the study investigates how green influencers can shape environmental self-identity and, consequently, promote green CCB.

Moreover, the social identity model of pro-environmental action (Fritsche et al., 2018) suggests that individuals' pro-environmental behaviors are likely shaped by their identification with a group and the norms upheld by that group. Social norms are seen as an effective motivator that can drive changes in consumer behavior (Ball et al., 2010). The role of normative concerns on customer pro-environmental behavior has been highlighted in the green CCB literature. For instance, Van Tonder et al. (2023) found that subjective norms (e.g., what do others do?) significantly influence customer pro-environmental behavior (e.g., Green CCB). Their findings underscore the importance of social factors (e.g., subjective norms) in promoting sustainable behavior. However, past studies do not account for how these social influences might change over time or how dynamic societal shifts could impact customer engagement in green CCB. Hence, this study also aims to extend past studies on green CCB (e.g., Van Tonder et al., 2023) by introducing dynamic norms- defined as information that highlights a significant shift in the behaviors or attitudes of others, indicating a trend or movement towards change (Sparkman and Walton 2019)-as social factors that could affect the relationship between green influencers and green CCB, an area that remains underexplored in this context.

In sum, this study aims to answer three main questions: Do green influencers predict green CCB? If so, is this relationship mediated by environmental self-identity? Is the interplay

between green influencers, green CCB, and environmental self-identity moderated by dynamic norms? This study provides at least three novel contributions. First, it advances our understanding of the direct effect that green influencers may have as predictors of green CCB. By doing so, it explores an uncovered relationship and responds to recent calls for further studies that expand our knowledge of green influencers (e.g., Kılıç and Gürlek 2023) and green CCB (e.g., Van Tonder et al. 2023). Second, this study takes a step further by investigating the mechanism through which green influencers affect green CCB by introducing environmental self-identity as a mediator. This responds to calls from past studies within the green CCB domain (e.g., Tran, Nguyen, and Nguyen 2024) for more mediation mechanisms between companies' pro-social initiatives and green CCB. Lastly, this study assesses the proposed conceptual model under two specific conditions—dynamic and static norms—to better understand how green influencers affect green CCB.

Literature Review and hypothesis development

Green Influencer

The widespread growth and evolution of social media platforms have revolutionized communication, information sharing, and interpersonal connections. In addition to the increasing number of users, influencers and individuals who have established a strong reputation for their expertise in a specific area within the digital context have emerged as the primary point of contact for users or consumers (Pop et al., 2022). Nearly 50% of consumers trust recommendations from influencers, and 40% make purchases after encountering these recommendations on social media platforms (Digital Marketing Institute, 2021). Therefore, the use of influencers in marketing has become inevitable. Influencers, also known as native advertising or product placement strategy, involve sponsoring a brand's product or service in the content shared by an influencer (J. A. Lee & Eastin, 2021). As a result, since influencers can set trends and persuade followers, many businesses are now identifying and encouraging them to advertise their services (Barbe & Neuburger, 2021).

Recently, social media has evolved beyond platforms for marketing brands and services for various products. They have transformed into a platform that benefits from its broad reach to promote green products (Polat et al., 2024). Social media sites have provided an ideal stage for green influencers to connect with a wide audience and share their messages (Kılıç & Gürlek, 2023; Townsend, 2022). In the context of sustainability and the environment, green influencers are defined as a subset of influencers who focus on content related to sustainability, including

advertising for eco-friendly brands, raising awareness about climate change, and promoting environmental activism (Knupfer, Neureiter, & Jörg Matthes, 2023). By posting engaging and informative content, green influencers can increase awareness of environmental issues and inspire others to take positive action (Knupfer, Neureiter, & Jörg Matthes, 2023). Consequently, green influencers are emerging as a new category of thought leaders who influence public opinions about environmentally conscious products by sharing content on social media platforms (Kılıç & Gürlek, 2023).

Green influencers are a novel and compelling concept that has gained traction in various industries. Several studies have shown that green influencers play a unique role in promoting sustainability. They do this by raising awareness, driving change, supporting green businesses, and fostering communities that are passionate about environmental protection (Kılıç & Gürlek, 2023; Knupfer, Neureiter, & Matthes, 2023; van Tonder et al., 2020). Green influencers can leverage the interactive nature of social media to craft their messages, inspiring sustainable behavior and fostering stronger customer relationships, which in turn leads to increased customer engagement (Knupfer, Neureiter, & Matthes, 2023). For instance, Lifebuoy's collaboration with nearly 100 influencers for Global Handwashing Day resulted in a combined reach of over 3.6 million people worldwide. This initiative significantly boosted awareness and participation, with over 500 million individuals from 100 countries coming together to celebrate handwashing in just one day in October (Sidibe, 2020). Yıldırım, (2021) explored how women influencers can promote and transform sustainable consumption patterns across various domains like fashion, food, travel, and lifestyle. The findings revealed that green influencer women are more influential than their male counterparts in shifting societal behaviors towards sustainability.

The hospitality marketing sector has caught the attention of individuals who have embraced being green influencers. These influencers promote sustainability in various ways, including sharing information about the benefits of sustainable eating with a broad audience. They can endorse restaurants and cafes that follow environmentally friendly practices and share healthy recipes and tips for maintaining a balanced diet. In the tourism and travel context, the study of (Kılıç & Gürlek, 2023) analyzed the posts of green influencers through 4 studies and clarified that green influencer marketing can be divided into two main sub-categories: influence focused on eco-friendly products and influence centered on broader environmental sustainability. The study of (Kılıç & Gürlek, 2023) tested this new scale of green influencers on green behavior intention. In addition, green influencers use social media platforms in the food and café sector

to promote sustainable and healthy food practices. In a recent systematic study, the analysis of 75 studies on influencer marketing in tourism and hospitality has conclusively confirmed the relatively new concept of green influencers (Polat et al., 2024). These influencers have the capacity to greatly affect pro-environmental behaviors, particularly in reducing adverse environmental impacts. The study strongly encourages further examination of the impact of influencers on promoting sustainable practices and shaping positive attitudes toward environmental efforts. Supplement file 1 provides a summary of key studies on green influencers.

Green CCB

The green CCB is close to CCB. CCB refers to voluntary behaviors that go beyond the company's expectations and are not necessary for the success of value creation but still contribute to the firm by providing exceptional value (Groth, 2005). In simpler terms, it involves customers voluntarily engaging in positive behaviors towards companies or brands that surpass basic service expectations. Moreover, green CCB is an extension concept of CCB (van Tonder et al., 2020). This is particularly evident in customers' actions and initiatives to support environmentally friendly companies and products, which contribute to environmental protection.

Evidence suggests that consumers' attitudes, values, and knowledge influence their behavior, and that efforts to communicate information or change attitudes can encourage environmentally sustainable behaviors (Goldman et al., 2020). Green CCB refers to voluntary and discretionary actions by customers that are not obligatory but contribute positively to a company's environmental initiatives (Deng and Yang, 2022). Green CCB consists of voluntary positive actions taken by consumers to minimize the environmental impact of their consumption while endorsing and supporting companies that engage in eco-friendly practices (Hwang & Lyu, 2020). The importance of this behavior lies in supporting the green economy and promoting sustainable practices that minimize environmental harm (Waris et al., 2024). It also helps build a positive reputation for companies that care about the environment,

Green CCB includes speaking positively about firms that sell green brands, recommending these companies to others, and promising friends and family to purchase from them (Deng & Yang, 2022; Van Tonder et al., 2023). The behavior consists of assisting customers with purchasing green products, offering advice to other customers, informing company employees of valuable ideas to improve green products, and giving positive feedback to the firm and its

workers (Van Tonder et al., 2020; Hwanga and Lyu 2019). Previous research within the context of green specified that CCB is multi-dimensional, with advocacy, feedback, and helping behaviors (Van Tonder et al., 2020; Hwanga and Lyu 2019). A study by E. Van Tonder (2022) in South Africa have investigated green CCB as second-order variables and found that internal values effect attitudes, motivating overall green CCB. In addition, subjective norms also effect both green attitudes and CCB. From the perspective of 320 passengers in Korea, Hwang & Lyu (2020) also illustrated that green images significantly predict consumer attitudes and their willingness to choose an environmentally friendly airline, which positively impacts dimensions of green CCB: feedback, advocacy, helping, and tolerance. Supplement file 2 provides a summary of the key studies on green CCB.

Environmental self-identity

Identity is a key factor in understanding human behavior, especially regarding consumption choices (Oyserman 2009; Zhao et al. 2024). Self-identity is an individual's perception and understanding of who they are (Cook, Kerr, and Moore 2002) and reflects a person's sense of self (Lalot et al. 2019). The key aspect of one's self-concept pertains to a specific behavior (Conner and Armitage 1998). Building on the concept of self-identity, environmental self-identity in this study refers to the extent to which individuals perceive themselves as persons whose actions are environmentally friendly (Van der Werff et al., 2013b). In other words, it indicates the extent to which individuals perceive themselves as being environmentally conscious (Lalot et al. 2019). For instance, in the coffee shop context, a customer with a high level of environmental self-identity is a customer who uses Butterfly cups that are compostable and recyclable and doesn't need straws to signal to others that they are concerned about environmental aspects. Environmental self-identity is one of the major predictors of consumption choice-making, particularly sustainable consumption behavior (Dermody et al. 2015). While there is a broader literature examining identity-driven behavior in economics (Atkin et al., 2021; Azmat et al., 2019), this study takes a distinct approach grounded in psychological and marketing perspectives. Specifically, this study builds on social identity theory and social norms theory to examine how green influencers activate environmental self-identity, which in turn promotes voluntary pro-environmental behavior. This framing positions environmental self-identity as a psychoosocial mechanism rather than an economic utility function and allows exploitation of non-monetary drivers of sustainable behaviours.

Connecting the dots: Green influencer, environmental self-identity, and green CCB

Social identity theory can link green influencers, environmental self-identity, and green CCB. The central principle of SIT is that individuals form their self-concept based on their membership in social groups, referred to as in-groups. They seek to maintain a positive social identity by favorably comparing their in-group to relevant out-groups (Tajfel 1974). SIT processes are categorization, social identity, and social comparison (Trepte and Loy 2017). As part of this process, people categorize themselves into groups (e.g., environmentalists vs. non-environmentalists) (Billig and Tajfel 1973). They then adopt the identity of these groups and seek to align their attitudes and behavior with group norms (Hogg and Reid 2006). Central to SIT is the notion that when people define and evaluate themselves based on their group membership, they engage in social comparisons to distinguish their group from others (Hogg 2000). In any intergroup situation where categorization serves the purpose of social identification and is relevant to a valued dimension, individuals strive to differentiate their group positively from others to enhance their self-esteem (Turner 1975). Green influencers aim to lead and educate the community in adopting environmentally friendly practices and a sustainable lifestyle (König & Maier, 2024; Pittman & Abell, 2021). In other words, green influencers promote socially desirable norms and values, which are considered significant predictors of pro-environmental behavior and central to individuals' identities (Zhao et al. 2024). Therefore, followers of green influencers will emphasize their environmentally friendly behaviors to differentiate themselves from followers of nongreen influencers positively.

Reimer et al. (2022) state that social identification changes the nature of social categorization, suggesting that as individuals increasingly identify with their environmental group, the categorization becomes more significant and influential in guiding behavior. This differentiation enhances their self-esteem (Bergami and Bagozzi 2000) and reinforces their environmental self-identity, as self-esteem is a core antecedent of environmental self-identity (Whitmarsh & O'Neill, 2010). Previous research indicates that the more strongly one self-identifies as an environmentalist, the higher their intention to act environmentally friendly in the future (Lalot et al. 2019). Therefore, a high level of environmental self-identity is considered a predictor of pro-environmental behavior (Van der Werff, Steg, and Keizer 2013b) because such actions align with one's self-concept and social group norms. Empirically, (Van der Werff et al., 2013b) found a positive association between environmental self-identity and pro-environmental behavior such as willingness to pay more for green energy. All things considered, we posit that there could be a direct relationship between green influencers and

green CCB, and that this relationship is explained by environmental self-identity. Thus, we propose the following two hypotheses:

H1. The influence of different influencer types (green vs. non-green) varies in its relative impact on green CCB.

H2. Environmental self-identity mediates the differential impact of influencer types (Green vs. nongreen) and green CCB.

The moderation effect of dynamic norms

Social norms interventions can potentially enhance intergroup relations and bolster the efficacy of existing interventions (Prentice and Paluck 2020). Norms are common patterns of thinking, feeling, and behaving (Hogg and Reid 2006). While several types of norms are discussed in the literature, the most frequently used social norms are descriptive norms—referring to "what most people are doing" (e.g., recycling because the majority of people in the community do so)—and injunctive norms, which refer to what is socially accepted (e.g., recycling because it is deemed the right thing to do by society) (Berkowitz, 2005). The common point between descriptive and injunctive norms is that both focus on the current state of behavior; in other words, they emphasize *static norms*. However, norms are not always static and can be dynamic, reflecting changes in behavior over time (Sparkman and Walton 2017). An example of a static norm could be saying that the majority of American people make a great effort to consume eco-friendly products. This norm becomes dynamic if we say that, in recent years, the majority of American people have started making a great effort to consume eco-friendly products.

The literature suggests that individuals are influenced by what most people do and adjust their behavior accordingly to fit in (Dong et al. 2023). Dynamic norms, in particular, are significant predictors of personal change and promote behavior change across different contexts (Sparkman and Walton 2019). Sparkman and Walton (2017) demonstrated that dynamic norms (e.g., behaviors that are becoming more common) could lead to greater pro-environmental behaviour than static norms. The effect of norms on consumer perception could be rooted in social norms theory. The social norms theory posits that individuals' attitudes and behaviors are significantly influenced by their perceptions of their social group's actions (Trivedi and Beck 2018). Individuals constantly change their behavior to align with perceived norms (Berkowitz 2005). In this vein, Sparkman and Walton (2017) found that a dynamic-norm message, highlighting the recent increase in the number of people reducing their meat consumption, was more effective at encouraging pro-environmental behavior compared to

static-norm messages that simply indicated how many people currently limit their meat consumption. Similarly, Mortensen et al. (2017) conducted a study where participants faced three types of norm conditions: no norm, static norm, and dynamic norm. Those exposed to the dynamic norm, which showed an increasing participation rate over time, were more inclined to engage in environmental advocacy compared to those in the static norm or no-norm groups. They were more likely to engage in environmental advocacy efforts than those in the static norm condition or the no-norm control group. All considered, we posit in this study that the magnitude effect of green influencers on green CCB will be affected by dynamic norms. Hence we hypothesize:

H3. Dynamic norms moderate the effect of influencer type (green vs. non-green) on green CCB, such that the impact is stronger when dynamic norms are emphasized.

Dynamic norms have also been demonstrated to promote changes in identity, as individuals seek to align themselves with the suggested societal change (Sparkman and Walton 2019). Hence, it is logical to posit that the mediation effect of environmental self-identity on the relationship between green influencers and green CCB could be influenced by dynamic norms. Therefore, we propose the following hypotheses:

H4. The mediation effect of environmental self-identity on the relationship between influencer types and green CCB is moderated by dynamic norms.

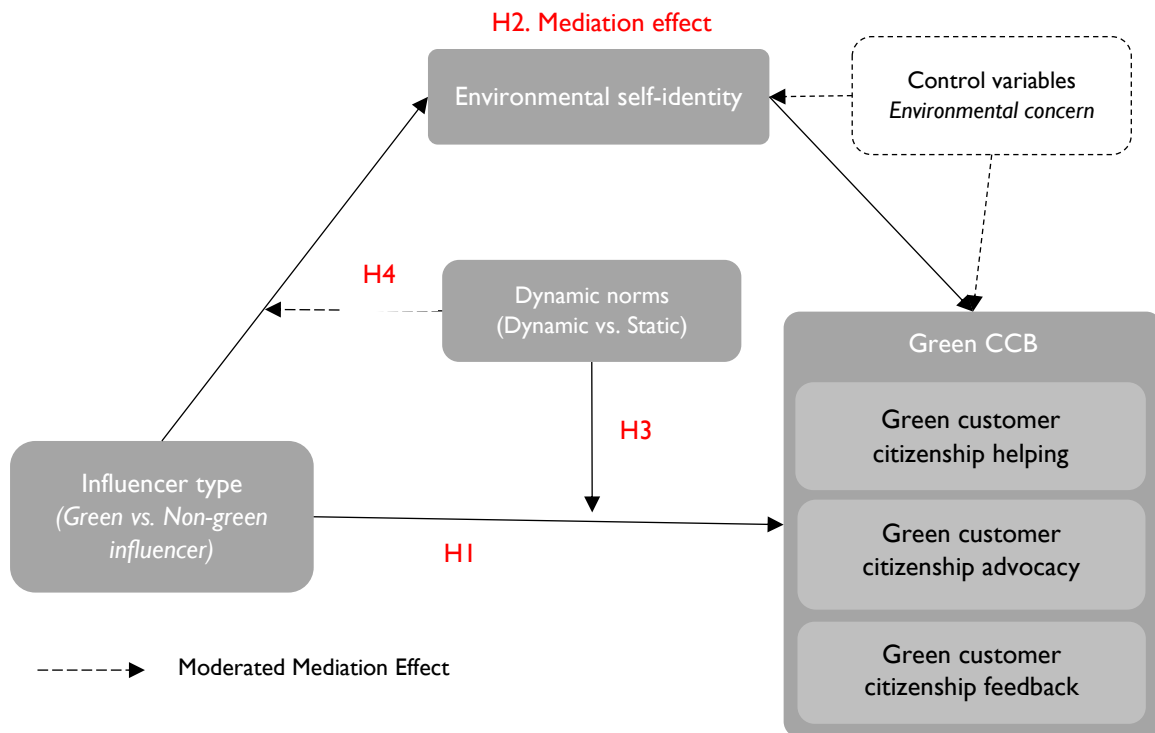


Figure 1. Research model

Source: Authors own work

Methodology

This study employed a 2 (Source of Green Post: Green influencer vs. Non-Green green influencer) by 2 (Dynamic Norms: Dynamic vs. Static) within-subjects experimental design. A total of 257 coffee shop consumers in United States were recruited using MTurk as a sampling source to collect data. MTurk is a crowdsourcing platform widely utilized in experimental design studies (e.g., Aljarah, Dalal, et al., 2022; König & Maier, 2024).

We followed the approach of Aljarah et al. (2022) by using a pre- and post-test design to control for baseline differences and more accurately attribute changes in green CCB to the influencer type manipulation. After reading the background information, participants' initial green CCB (10-item scale, Van Tonder et al., 2023) and environmental self-identity (4-item scale, Whitmarsh & O'Neill, 2010) were measured. Next, the post source was manipulated using two mock Instagram accounts for a fictitious influencer, Stella Nova (Figure 2), to eliminate prior knowledge effects. Inspired by Pittman and Abell (2021), the green influencer condition featured a bio stating Stella is a green influencer, while the non-green condition had the same profile with a neutral bio (Figure 1). Both groups saw the same green post promoting coffee

shops. A manipulation check asked: “Based on the influencer's profile, how much do you think this influencer cares about the environment?” (1 = not at all, 7 = very much).


The dynamic norm manipulation was adapted from Sparkman & Walton (2017) and revised for this study. In the static norm condition, participants read: “30% of people in the U.S. make an effort to use eco-friendly cups.” In the dynamic norm condition, they read: “In the last five years, 30% of people in the U.S. have started making an effort to use eco-friendly cups.” This framing emphasized either the norm’s current status or its change over time, following prior studies (Boenke et al., 2022; Sparkman & Walton, 2017, 2019). To ensure engagement, participants answered an open-ended question: “Why do you think this is?” A manipulation check assessed their perception of eco-friendly cup use trends. Finally, green CCB and environmental self-identity were measured using the same initial scales.

Since an individual's concerns about the environment could affect the influence of environmentally related messages on the message’s effectiveness (Chang et al., 2015; Pittman & Milfeld, 2023), participants' environmental concern is measured as a control variable by adopting a 4 items scale from Chuah et al. (2020). Furthermore, previous research has suggested that participants' perception of the realism of each scenario can influence the observed differences between control and treatment groups (Meertens et al., 2013). Therefore, to verify the realism of the scenarios, a control question was included to evaluate how much participants viewed the scenarios as representative of real-life situations. This assessment used a 7-point Likert scale (1 = Extremely likely, 7 = Extremely unlikely) (Meertens et al., 2013).

Green Influencer




Non-green Influencer

Instagram Search Home Add Post Heart Profile


 **stella.nova** Message Follow

1,250 posts 10,521 followers 21 following

Stella Nova
Eco-warrior on a mission to paint the world green! 🌱


 Sustainability  GreenLive  GreenPlanet

POSTS REELS TAGGED






The grid shows six posts: 1. A person pouring coffee into a green cup with text 'WITH THE COVERED PLASTIC...'. 2. A person at a coffee counter with text 'How Cafés Are Getting Creative With Sustainability Behind The Bar'. 3. A person at a coffee counter. 4. A person at a coffee counter with text 'Sustainable Coffee shops in Germany'. 5. A person at a coffee counter. 6. A person at a coffee counter.

Instagram Search Home Add Post Heart Profile


 **stella.nova** Message Follow

1,250 posts 10,521 followers 21 following

Stella Nova
Embracing life's moments with zest and zeal! 🌟

 Embracing life  Places  Cities

POSTS REELS TAGGED



The grid shows six posts: 1. Hands holding coffee cups. 2. A person at a coffee counter. 3. A person at a coffee counter. 4. A person at a coffee counter. 5. A person at a coffee counter. 6. A person at a coffee counter.

Post



Figure 2. Stimuli

Source: Authors own work

Results

Demographic profile

The majority of respondents (48.2%) were aged 35–44, followed by 27.6% aged 25–34 and 23.7% aged 18–24. In terms of gender, 58.0% identified as male, while 42.0% identified as female. Regarding employment status, 67.3% of participants were employed full-time, with 13.6% identifying as students and 8.2% reporting being unemployed and seeking work. Smaller proportions were working part-time (4.3%) or were homemakers/stay-at-home parents (6.6%). Educational attainment was relatively high among participants: 66.5% held a bachelor's degree, and 6.6% reported having a graduate or professional degree. In contrast, only 10.1% had completed some high school or less. Marital status data indicated that the majority were married (68.1%), followed by divorced (16.3%), single (8.6%), and widowed (7.0%). Annual income was concentrated in the middle-income ranges, with 45.1% earning between \$40,000–\$59,999 and 34.2% earning \$60,000–\$79,999. A smaller percentage reported higher earnings, with 1.9% earning \$100,000 or more, and 0.4% earning less than \$20,000. Detailed demographic information is presented in Table 1.

Table 1. Demographic profile

Demographic Category	Item	Frequency	Percentage
Age	18-24	61	23.7%
	25-34	71	27.6%
	35-44	124	48.2%
	45-54	1	0.4%
Gender	Male	149	58.0%
	Female	108	42.0%
Employment Status	Working full-time	173	67.3%
	Working part-time	11	4.3%
	Unemployed and looking for work	21	8.2%
	A homemaker or stay-at-home parent	17	6.6%
	Student	35	13.6%
Education Level	Some high school or less	26	10.1%
	High school diploma or GED	18	7.0%
	Some college, but no degree	9	3.5%
	Associates or technical degree	16	6.2%
	Bachelor's degree	171	66.5%
	Graduate or professional degree	17	6.6%
Marital Status	Single	22	8.6%
	Married	175	68.1%
	Divorced	42	16.3%
	Widowed	18	7.0%
Annual Income	Less than \$20,000	1	0.4%
	\$20,000 to \$39,999	13	5.1%
	\$40,000 to \$59,999	116	45.1%
	\$60,000 to \$79,999	88	34.2%
	\$80,000 to \$99,999	34	13.2%
	\$100,000 or More	5	1.9%

Source: Authors own work

Manipulation check

A manipulation check is a standard technique used in experimental research (e.g, Lee & Ham, 2023; X. Zhao et al., 2024) to determine whether the experimental manipulation was successfully perceived by participants as intended. The manipulation check showed that participants perceived Stella as a green influencer more strongly in the green influencer condition ($M = 5.30$, $SD = 1.21$) than in the non-green condition ($M = 2.52$, $SD = 1.46$), with a significant difference ($F(257) = 275.25$, $p < 0.05$). A chi-square test confirmed a significant link between dynamic norms and perceptions of eco-friendly cup use, $\chi^2(1, N = 259) = 69.378$, $p < .001$, indicating the effectiveness of the manipulation. Scenario realism was tested using Meertens et al.'s (2013) approach, with no significant differences between conditions ($F(1,257) = 1.14$, $p = 0.28$). Most participants found the scenario realistic ($M = 5.07$, $SD = 1.59$).

Construct reliability

Cronbach's alpha (α) is employed to evaluate the reliability of the continuous variables in the study. The results indicate satisfactory reliability for all variables ($\alpha_{\text{Pre Green CCB}} = 0.88$; $\alpha_{\text{Post Green CCB}} = 0.87$; $\alpha_{\text{Pre Environmental Self-Identity}} = 0.78$; $\alpha_{\text{Post Environmental Self-Identity}} = 0.82$; $\alpha_{\text{Environmental Concern}} = 0.81$) (Nunnally, 1978).

Hypotheses testing

A repeated-measures general linear model was conducted to assess whether participants' willingness to engage in green CCB differed depending on the type of influencer they were exposed to (H1). This analysis included time (pre- vs. post-exposure) as a within-subject factor, influencer type (green vs. non-green) as a between-subjects factor, and environmental concern as a covariate. At baseline (pre-exposure), no significant differences in green CCB were observed between the two groups ($F(1, 256) = 2.94$, $p > .05$), with similar mean scores ($M = 4.92$ for the green influencer group and $M = 4.83$ for the non-green influencer group). However, a significant interaction effect between time and influencer type was observed, $F(1, 257) = 66.58$, $p < .05$. Participants exposed to green influencers reported a larger increase in green CCB ($M = 6.07$, $SE = 0.03$) compared to those in the non-green condition ($M = 5.79$), suggesting that green influencers were more effective in promoting sustainable behavior. This supports the expectation that the type of influencer affects green behavioral intentions over time.

To examine whether the effect of influencer type on green CCB operates through changes in environmental self-identity (H2), a mediation analysis was conducted using PROCESS macro

Model 4 (Hayes 2013) with 5,000 bootstrap samples and 95% bias-corrected confidence intervals. This approach is in line with past studies (Aljarah, 2022; Nickerson et al., 2021; Su et al., 2020). In this model, the independent variable (influencer type) was coded as 0 (non-green) and 1 (green), the mediator was the change in environmental self-identity, and the outcome was the change in green CCB. Pre-exposure scores were included as covariates to isolate post-manipulation effects, and environmental concern was also controlled. The analysis revealed a significant indirect effect of influencer type on green CCB through environmental self-identity ($\beta = .283$, 95% CI [.1591, .3909]). This suggests that exposure to a green influencer increased participants' self-perception as environmentally conscious individuals, which in turn led to greater willingness to engage in green behaviors—consistent with the hypothesized mediation pathway (H2).

A further analysis explored whether the influence of green versus non-green influencers on green CCB varied depending on whether static or dynamic social norms were present (H3). A two-way ANOVA found no significant interaction between influencer types and dynamic norms ($F(243) = 1.91$, $p > 0.05$), indicating that the presence of dynamic norms did not significantly amplify or weaken the direct effect of influencer type on green behavioral intentions. This result suggests that dynamic norms alone did not moderate the relationship between influencer type and green CCB. Hence, H3 is not supported.

Finally, to explore whether dynamic norms enhanced the indirect effect of influencer type on green CCB via environmental self-identity (H4), a moderated mediation analysis was conducted using PROCESS macro Model 8. Using the Macro Process tool (Model 8), results showed a significant indirect effect of environmental self-identity on the influencer type–green CCB relationship under both static ($\beta = .1295$, 95% CI [.0282, .2396]) and dynamic ($\beta = .3670$, 95% CI [.1915, .5411]) norm conditions. The effect was stronger under dynamic norms. The moderated mediation index confirmed a significant difference (Index = .2375, 95% CI [.0348, .4292]), confirming that dynamic norms amplified the strength of the mediating process. These findings align with the proposition that the effectiveness of green influencers in promoting environmentally conscious behavior is enhanced when participants also perceive that such behaviors are increasingly normative. Hence, H4 is supported.

Discussion

Theoretical contributions

This study makes significant theoretical contributions in three key areas. First, it is the pioneering research to explore the differential impact of two types of influencers—green influencers versus non-green influencers—on green CCB. While prior studies have investigated the consequences of green influencers (Knupfer et al., 2023) and the antecedents of green CCB (Waris et al., 2024), none have explored the association between these two phenomena. Our findings extend the existing literature by providing empirical evidence that content posted by green influencers is a stronger predictor of green CCB than content from non-green influencers. This supports earlier research indicating the positive effects of influencers on pro-environmental behavior and confirms the status of green influencers as digital opinion leaders (Knupfer et al., 2023). For instance, Kılıç and Gürlek (2023) demonstrated that green influencer marketing significantly predicts green purchase intention, while Knupfer et al., (2023) found that engagement with green influencers on social media promotes environmental activism. Thus, our study introduces a novel consequence of green influencers, empirically showing their influence on green CCB. Additionally, this research addresses calls for further studies to deepen our understanding of green CCB (e.g., Deng and Yang, 2022; Van Tonder et al., 2023). Specifically, it responds directly to a recent call by Tran et al. (2024) to further examine the moderating and mediating variables that enhance our understanding of green CCB.

Second, this study advances the literature by examining how green influencers impact green CCB, specifically by introducing environmental self-identity as a mediating factor. Doing so highlights the crucial role of environmental self-identity in the relationship between green influencers and green CCB. Past research argued that environmental self-identity mediates the relationship between values and sustainable consumption (Dermody et al. 2015). Our empirical findings confirm that green influencers enhance customers' environmental self-identity, subsequently motivating voluntary pro-environmental behaviors manifested as green CCB. Previous research has concentrated on factors such as trust and attitude (Pittman and Abell 2021), perceived fit with personal interest and environmental consciousness (Kılıç & Gürlek, 2023), and environmental commitment (Pittman and Milfeld 2023) to explain the impact of green influencers on consumer behavior. Our study, however, leverages SIT to introduce environmental self-identity as a key mediating mechanism that explains the effect of green influencers on consumer behavior.

Third, this study makes a substantial theoretical contribution to the literature on dynamic norms and green consumer behavior by examining its moderation effect on the relationship between the construct of the study. Previous research has demonstrated that dynamic norms can promote sustainable behaviors by highlighting changes in collective behavior over time (Boenke et al., 2022; Sparkman & Walton, 2017). However, this study uniquely identifies that while dynamic norms do not directly affect the relationship between green influencers and green CCB, they significantly enhance the mediating effect of environmental self-identity. This finding aligns with and extends Sparkman and Walton's (2017) conclusions by showing that dynamic norms strengthen the internal psychological processes that facilitate behavior change, rather than directly altering behavior through external influence. Moreover, while Boenke et al. (2022) focused on the source credibility of dynamic norm messages, this research highlights the critical boundary conditions created by dynamic norms, thus providing a more general understanding of their function. In particular, this study empirically confirmed that the power of environmental self-identity in explaining the relationship between green influencers and green CCB is stronger when customers perceive the norm as dynamic rather than static. This, in turn, suggests that dynamic norms create a more conducive environment for identity-based behavior change.

Managerial contributions

The present study yields several valuable implications for practical application. First, the finding that content from green influencers is a stronger predictor of customer pro-environmental voluntary behaviors (e.g., Green CCB) than non-green influencers suggests that companies should strategically prioritise partnerships with influencers who have a clearly articulated environmental mission. Managers should implement structured influencer vetting processes that assess not only reach and engagement but also credibility, past environmental advocacy, and audience alignment. For example, firms could create sustainability influencer criteria to ensure brand alignment and avoid greenwashing risks.

Second, this study highlighted the crucial role of environmental self-identity as a mediating factor in the relationship between green influencers and green CCB. Managers should go beyond product promotion and instead craft influencer content that reinforces consumers' self-perception as environmentally responsible individuals. This can be achieved, for instance, through using narrative storytelling where the influencer shares personal environmental journeys, encouraging followers' perception in eco-challenges or pledges to foster identity engagement, and aligning messaging with core consumer values, such as community impact or

ethical conception. By doing so, consumers will internalise green values, which may increase the likelihood of voluntary eco-friendly behaviour.

Third, the study reveals that dynamic norms significantly enhance the mediating effect of environmental self-identity on green CCB. This suggests that timely, data-driven norm messaging should be integrated into green campaigns. Managers should incorporate dynamic norm messages into their marketing communications to amplify the impact of green influencers. This can be done by continuously monitoring the community and identifying positive trending beliefs and behaviors. For instance, brands can emphasize increasing recycling rates or participation in eco-friendly initiatives. By doing so, companies can create a more conducive environment for identity-based behavior change, ultimately driving greater consumer engagement in sustainable practices.

Limitations and suggestions for future studies

No study is without limitations. Using MTurk participants may introduce bias, as they are more familiar with online surveys and often motivated by monetary incentives, limiting generalizability. Future research could use real customers for broader applicability. This study measured green CCB as an intention rather than actual behavior; field experiments could examine real actions. Additionally, a fictitious influencer was used—future studies should explore real influencers for greater ecological validity. The source of dynamic norms may also impact consumer responses (Boenke et al. 2022); investigating whether an influencer or brand as the source alters the effect is needed. Lastly, this study did not consider message consistency—future research should examine whether repeated pro-environmental posts from a green influencer influence consumer responses.

References

- Aljarah, A., Dalal, B., Ibrahim, B., & Lahuerta-Otero, E. (2022). The attribution effects of CSR motivations on brand advocacy: psychological distance matters! *Service Industries Journal*, 42(7), 583–605. <https://doi.org/10.1080/02642069.2022.2041603>
- Aljarah, A., Ibrahim, B., Lahuerta-Otero, E., & García de los Salmones, M. del M. (2022). Doing good does not always lead to doing well: the corrective, compensating and cultivating goodwill CSR effects on brand defense. *Current Issues in Tourism*, 26(20), 3397–3410. <https://doi.org/10.1080/13683500.2022.2139225>

- Ashforth, B. E., & Mael, F. (1989). Social Identity Theory and the Organization. *Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.5465/AMR.1989.4278999>
- Atkin, D., Colson-Sihra, E., & Shayo, M. (2021). How do we choose our identity? A revealed preference approach using food consumption. *Journal of Political Economy*, 129(4), 1193–1251. <https://doi.org/10.1086/712761>;ISSUE:ISSUE:10.1086/JPE.2021.129.ISSUE-4;SUBPAGE:STRING:ACCESS
- Azmat, S., Khan, R. N., & Ahmad, G. (2019). The limits of social identity impact on economic preferences. *Journal of Behavioral and Experimental Finance*, 24, 100239. <https://doi.org/10.1016/J.JBEF.2019.100239>
- Ball, K., Jeffery, R. W., Abbott, G., McNaughton, S. A., & Crawford, D. (2010). Is healthy behavior contagious: Associations of social norms with physical activity and healthy eating. *International Journal of Behavioral Nutrition and Physical Activity*, 7(1), 1–9. <https://doi.org/10.1186/1479-5868-7-86/TABLES/3>
- Barbe, D., & Neuburger, L. (2021). Generation Z and digital influencers in the tourism industry. In *Generation Z Marketing and Management in Tourism and Hospitality: The Future of the Industry* (pp. 167–192). Springer.
- Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology*, 39(4), 555–577. <https://doi.org/10.1348/014466600164633>
- Berkowitz, A. (2005). An overview of the social norms approach. In *Changing the Culture of College Drinking: A Socially Situated Prevention Campaign* (Vol. 1, pp. 193–214).
- Billig, M., & Tajfel, H. (1973). Social categorization and similarity in intergroup behaviour. *European Journal of Social Psychology*, 3(1), 27–52. <https://doi.org/10.1002/EJSP.2420030103>
- Boenke, L., Panning, M., Thurow, A., Hörisch, J., & Loschelder, D. D. (2022). Who can nudge for sustainable development? How nudge source renders dynamic norms (in-)effective in eliciting sustainable behavior. *Journal of Cleaner Production*, 368, 133246. <https://doi.org/10.1016/J.JCLEPRO.2022.133246>

- Chang, H., Zhang, L., & Xie, G. X. (2015). Message framing in green advertising: the effect of construal level and consumer environmental concern. *International Journal of Advertising*, 34(1), 158–176. <https://doi.org/10.1080/02650487.2014.994731>
- Chuah, S. H. W., El-Manstrly, D., Tseng, M. L., & Ramayah, T. (2020). Sustaining customer engagement behavior through corporate social responsibility: The roles of environmental concern and green trust. *Journal of Cleaner Production*, 262, 121348. <https://doi.org/10.1016/J.JCLEPRO.2020.121348>
- Conner, M., & Armitage, C. J. (1998). Extending the Theory of Planned Behavior: A Review and Avenues for Further Research. *Journal of Applied Social Psychology*, 28(15), 1429–1464. <https://doi.org/10.1111/J.1559-1816.1998.TB01685.X>
- Cook, A. J., Kerr, G. N., & Moore, K. (2002). Attitudes and intentions towards purchasing GM food. *Journal of Economic Psychology*, 23(5), 557–572. [https://doi.org/10.1016/S0167-4870\(02\)00117-4](https://doi.org/10.1016/S0167-4870(02)00117-4)
- Deng, Y. Y., & Yang, Y. C. (2022). Exploring the role of green attributes transparency influencing green customer citizenship behavior. *British Food Journal*, 124(5), 1473–1484. <https://doi.org/10.1108/BFJ-03-2021-0223/FULL/PDF>
- Dermody, J., Hanmer-Lloyd, S., Koenig-Lewis, N., & Zhao, A. L. (2015). Advancing sustainable consumption in the UK and China: the mediating effect of pro-environmental self-identity. *Journal of Marketing Management*, 31(13–14), 1472–1502. <https://doi.org/10.1080/0267257X.2015.1061039>
- Digital Marketing Institute. (2021). 20 Surprising Influencer Marketing Statistics Articles Social Media Marketing by Digital Marketing Institute. In *Digital Marketing Institute*.
- Dong, Y., Liu, Z., Zhang, Y., & Jiang, J. (2023). Perceived descriptive norms strengthen the global human identification—general pro-environmental behavior association: Empirical evidence from survey studies. *Journal of Cleaner Production*, 418, 138134. <https://doi.org/10.1016/J.JCLEPRO.2023.138134>
- Fritsche, I., Barth, M., Jugert, P., Masson, T., & Reese, G. (2018). A social identity model of pro-environmental action (SIMPEA). *Psychological Review*, 125(2), 245–269. <https://doi.org/10.1037/REV0000090>

- Goldman, D., Hansmann, R., Činčera, J., Radović, V., Telešienė, A., Balžekienė, A., & Vávra, J. (2020). Education for Environmental Citizenship and Responsible Environmental Behaviour. *Conceptualizing Environmental Citizenship for 21st Century Education*, 115–137. https://doi.org/10.1007/978-3-030-20249-1_8
- Groth, M. (2005). Customers as Good Soldiers: Examining Citizenship Behaviors in Internet Service Deliveries. *Journal of Management*, 31(1), 7–27. <https://doi.org/10.1177/0149206304271375>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*.
- Hogg, M. A. (2000). Subjective Uncertainty Reduction through Self-categorization: A Motivational Theory of Social Identity Processes. *European Review of Social Psychology*, 11(1), 223–255. <https://doi.org/10.1080/14792772043000040>
- Hogg, M. A., & Reid, S. A. (2006). Social Identity, Self-Categorization, and the Communication of Group Norms. *Communication Theory*, 16(1), 7–30. <https://doi.org/10.1111/J.1468-2885.2006.00003.X>
- 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>
- Kılıç, İ., & Gürlek, M. (2023). Green influencer marketing: conceptualization, scale development, and validation: an application to tourism products. *Journal of Sustainable Tourism*. <https://doi.org/10.1080/09669582.2023.2273755>
- Knupfer, H., Neureiter, A., & Jörg Matthes. (2023). From social media diet to public riot? Engagement with “greenfluencers” and young social media users’ environmental activism. *Computers in Human Behavior*, 139, 107527. <https://doi.org/10.1016/J.CHB.2022.107527>
- Knupfer, H., Neureiter, A., & Matthes, J. (2023). From social media diet to public riot? Engagement with “greenfluencers” and young social media users’ environmental activism. *Computers in Human Behavior*, 139, 747–5632. <https://doi.org/10.1016/j.chb.2022.107527>

- König, S., & Maier, E. (2024). Preaching to the choir: Do green influencers make a difference? *Journal of Cleaner Production*, *447*, 141449.
<https://doi.org/10.1016/J.JCLEPRO.2024.141449>
- Kuang, T., & Lyu, D. (2024). The influence of green virtual brand community experience on green customer citizenship behavior. *Social Behavior and Personality*, *52*(2).
<https://doi.org/10.2224/SBP.12922>
- Lalot, F., Quiamzade, A., Falomir-Pichastor, J. M., & Gollwitzer, P. M. (2019). When does self-identity predict intention to act green? A self-completion account relying on past behaviour and majority-minority support for pro-environmental values. *Journal of Environmental Psychology*, *61*, 79–92. <https://doi.org/10.1016/J.JENV.2019.01.002>
- Lee, D., & Ham, C. D. (2023). AI versus Human: Rethinking the Role of Agent Knowledge in Consumers' Coping Mechanism Related to Influencer Marketing. *Journal of Interactive Advertising*, *23*(3), 241–258.
<https://doi.org/10.1080/15252019.2023.2217830>
- Lee, J. A., & Eastin, M. S. (2021). Perceived authenticity of social media influencers: scale development and validation. *Journal of Research in Interactive Marketing*, *15*(4), 822–841.
- Lou, C., & Yuan, S. (2019). Influencer Marketing: How Message Value and Credibility Affect Consumer Trust of Branded Content on Social Media. *Journal of Interactive Advertising*, *19*(1), 58–73. <https://doi.org/10.1080/15252019.2018.1533501>
- Meertens, R. M., Van De Gaar, V. M., Spronken, M., & De Vries, N. K. (2013). Prevention praised, cure preferred: Results of between-subjects experimental studies comparing (monetary) appreciation for preventive and curative interventions. *BMC Medical Informatics and Decision Making*, *13*(1), 1–12. <https://doi.org/10.1186/1472-6947-13-136/TABLES/5>
- Mortensen, C. R., Neel, R., Cialdini, R. B., Jaeger, C. M., Jacobson, R. P., & Ringel, M. M. (2017). Trending Norms: A Lever for Encouraging Behaviors Performed by the Minority. *Social Psychological and Personality Science*, *10*(2), 201–210.
<https://doi.org/10.1177/1948550617734615>

- Nickerson, D., Lowe, M., Pattabhiramaiah, A., & Sorescu, A. (2021). The Impact of Corporate Social Responsibility on Brand Sales: An Accountability Perspective. *Journal of Marketing*, 86(2), 5–28. <https://doi.org/10.1177/00222429211044155>
- Nunnally, J. C. (1978). *Psychometric Theory*. McGraw-Hill Book Company.
- Oyserman, D. (2009). Identity-based motivation and consumer behavior. *Journal of Consumer Psychology*, 19(3), 276–279. <https://doi.org/10.1016/J.JCPS.2009.06.001>
- Pittman, M., & Abell, A. (2021). More Trust in Fewer Followers: Diverging Effects of Popularity Metrics and Green Orientation Social Media Influencers. *Journal of Interactive Marketing*, 56, 70–82. <https://doi.org/10.1016/J.INTMAR.2021.05.002>
- Pittman, M., & Milfeld, T. (2023). Enviro-Bragging: When Influencers Should Not Be Humble about a Brand’s Sustainability. *Journal of Interactive Advertising*, 23(3), 259–274. <https://doi.org/10.1080/15252019.2023.2232781>
- Polat, E., Çelik, F., Ibrahim, B., & Gursoy, D. (2024). Past, present, and future scene of influencer marketing in hospitality and tourism management. *Journal of Travel & Tourism Marketing*, 41(3), 322–343. <https://doi.org/10.1080/10548408.2024.2317741>
- Pop, R. A., Săplăcan, Z., Dabija, D. C., & Alt, M. A. (2022). The impact of social media influencers on travel decisions: the role of trust in consumer decision journey. *Current Issues in Tourism*, 25(5), 823–843. <https://doi.org/10.1080/13683500.2021.1895729>
- Prentice, D., & Paluck, E. L. (2020). Engineering social change using social norms: lessons from the study of collective action. *Current Opinion in Psychology*, 35, 138–142. <https://doi.org/10.1016/J.COPSYC.2020.06.012>
- Reimer, N. K., Schmid, K., Hewstone, M., & Ramiah, A. Al. (2022). Self-Categorization and Social Identification. *Theories in Social Psychology, Second Edition*, 273–295. <https://doi.org/10.1002/9781394266616.CH11>
- Sidibe, M. (2020). *Brands on a mission : how to achieve social impact and business growth through purpose*. <https://www.routledge.com/Brands-on-a-Mission-How-to-Achieve-Social-Impact-and-Business-Growth-Through-Purpose/Sidibe/p/book/9780367428334>
- Sparkman, G., & Walton, G. M. (2017). Dynamic Norms Promote Sustainable Behavior, Even if It Is Counternormative. *Psychological Science*, 28(11), 1663–1674. <https://doi.org/10.1177/0956797617719950>

- Sparkman, G., & Walton, G. M. (2019). Witnessing change: Dynamic norms help resolve diverse barriers to personal change. *Journal of Experimental Social Psychology*, 82, 238–252. <https://doi.org/10.1016/J.JESP.2019.01.007>
- Statista. (2024). *Global influencer market size 2024 | Statista*.
<https://www.statista.com/statistics/1092819/global-influencer-market-size/>
- Su, L., Lian, Q., & Huang, Y. (2020). How do tourists' attribution of destination social responsibility motives impact trust and intention to visit? The moderating role of destination reputation. *Tourism Management*, 77, 103970.
<https://doi.org/10.1016/J.TOURMAN.2019.103970>
- Tajfel, H. (1974). Social identity and intergroup behaviour. *Social Science Information*, 13(2), 65–93. <https://doi.org/10.1177/053901847401300204>
- Townsend, S. (2022). *Greenfluencers: How Social Media Creators Are Becoming Sustainability Superheroes*.
<https://www.forbes.com/sites/solitairetownsend/2022/12/09/greenfluencers-how-social-media-creators-are-becoming-sustainability-superheroes/?sh=192ca64a1a2f>
- Tran, D. Van, Nguyen, D. M., & Nguyen, T. (2024). Fostering green customer citizenship behavioral intentions through green hotel practices: the roles of pride, moral elevation, and hotel star ratings. *Journal of Sustainable Tourism*.
<https://doi.org/10.1080/09669582.2024.2316296>
- Trepte, S., & Loy, L. S. (2017). Social Identity Theory and Self-Categorization Theory. *The International Encyclopedia of Media Effects*, 1–13.
<https://doi.org/10.1002/9781118783764.WBIEME0088>
- Trivedi, N., & Beck, K. H. (2018). Do significant others influence college-aged students texting and driving behaviors? Examination of the mediational influence of proximal and distal social influence on distracted driving. *Transportation Research Part F: Traffic Psychology and Behaviour*, 56, 14–21.
<https://doi.org/10.1016/J.TRF.2018.04.002>
- Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. *European Journal of Social Psychology*, 5(1), 1–34.
<https://doi.org/10.1002/EJSP.2420050102>

- Turner, J. C., & Tajfel, H. (1986). The social identity theory of intergroup behavior. *Psychology of Intergroup Relations*, 5, 7–24.
- Van der Werff, E., Steg, L., & Keizer, K. (2013a). I Am What I Am, by Looking Past the Present. *Environment and Behavior*, 46(5), 626–657.
<https://doi.org/10.1177/0013916512475209>
- Van der Werff, E., Steg, L., & Keizer, K. (2013b). The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour. *Journal of Environmental Psychology*, 34, 55–63. <https://doi.org/10.1016/J.JENVP.2012.12.006>
- van Tonder, E., Fullerton, S., & de Beer, L. T. (2020). Cognitive and emotional factors contributing to green customer citizenship behaviours: a moderated mediation model. *Journal of Consumer Marketing*, 37(6), 639–650. <https://doi.org/10.1108/JCM-06-2019-3268/FULL/PDF>
- 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>
- Waris, I., Suki, N. M., Ahmed, A., & Barkat, W. (2024). Environmental corporate social responsibility initiatives and green customer citizenship behavior in tourism industry: the mediating roles of green trust, customer-company identification and green corporate image. *Social Responsibility Journal*, ahead-of-print(ahead-of-print).
<https://doi.org/10.1108/SRJ-07-2023-0378/FULL/PDF>
- Whitmarsh, L., & O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology*, 30(3), 305–314.
<https://doi.org/10.1016/J.JENVP.2010.01.003>
- Yıldırım, S. (2021). Do green women influencers spur sustainable consumption patterns? Descriptive evidences from social media influencers. *Ecofeminism and Climate Change*, 2(4), 198–210. <https://doi.org/10.1108/EFCC-02-2021-0003>

Zhang, B. L., Yang, Y. C., & Xiang, L. (2022). What makes a restaurant customer become a green citizen? *Social Behavior and Personality*, 50(7).

<https://doi.org/10.2224/SBP.11540>

Zhang, Y., & Yang, Y. C. (2023). Exploring the role of green animation advertising influencing green brand love and green customer citizenship behavior. *BMC Psychology*, 11(1), 1–8. <https://doi.org/10.1186/S40359-023-01050-4/TABLES/4>

Zhao, A. L., Dermody, J., Koenig-Lewis, N., & Hanmer-Lloyd, S. (2024). Cultivating sustainable consumption: The role of harmonious cultural values and pro-environmental self-identity. *Journal of Consumer Behaviour*, 23(2), 1014–1031.

<https://doi.org/10.1002/CB.2261>

Zhao, X., Zhu, Z., Shan, M., Cao, R., & Chen, H. (Allan). (2024). “Informers” or “entertainers”: The effect of social media influencers on consumers’ green consumption. *Journal of Retailing and Consumer Services*, 77, 103647.

<https://doi.org/10.1016/J.JRETCONSER.2023.103647>