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The Antecedents and Consequences of Social-Media Engagement With A Sustainability-Advertisement

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ABSTRACT

The success of brands' sustainability-related promotion largely depends on consumers' opinions, which they usually share on social media. The objective of this study is to examine the influence of users' opinions about sustainability related social-media posts (i.e., positive or negative captions) on subsequent social-media engagement and purchase intentions for the advertised products. A 2×2 between-subject experiment with 279 respondents in the UK reveals that positive captions elicit a higher level of self-transformative consumption vision and subsequent emotional response than negative captions. This leads to higher social-media engagement with the sustainability-ad and purchase intentions. A significant interaction effect was observed between the types of captions and source expertise on social-media engagement. Although the skewness in the respondents' demographics may limit generalisability, those variables were not significant as control variables. This paper contributes to the sustainability-advertisement literature by considering social-media engagement as both an antecedent and an outcome. This paper offers managers a comprehensive understanding of the process of forming consumers' purchase intention for sustainable products by incorporating self-transformative consumption-vision theory, the pleasure-arousal-dominance theory of emotion, and social influence theory.

1 | Introduction

The consumption patterns of modern societies have been identified as one of the leading causes preventing the achievement of the United Nations' (UN) sustainable development goals (Papaoikonomou et al. 2024). Consumers may favour sustainable consumption; however, their actions may not reflect this, creating an attitude-behaviour gap (Johnstone and Tan 2015). This raises a question: what may motivate them to adopt sustainable consumption behaviour? The UN has pointed out the need for a working consumption model that could reduce harmful impacts (Papaoikonomou et al. 2024; UNEP 2024). Even though the sustainability literature has existed since 1970 (McDonagh and Prothero 2014), it has not meaningfully addressed the evolving challenges of increasingly consumption-oriented societies.

Since almost every sector (e.g., education, government, etc.) is being transformed through digitalisation (Shwedeh 2024; Yas et al. 2024; Paul et al. 2024), this paper attempts to understand the mechanism of promoting sustainable consumption behaviour in the context of social media.

Brands attempt to build their competitive advantage by associating their products, services, or business practices with sustainability. To achieve this, they develop their promotional initiatives through ads which include sustainability-related messages (Johnstone and Tan 2015). Sustainability advertising represents the promotional message focusing on the organisation's sustainable initiatives associated with a product, service or an actual company (Sander et al. 2021). Nevertheless, sustainability-ads do not always lead to consumers' favourable

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attitudes or sales (Yannopoulou et al. 2024). Consumers tend to reject organisations' sustainability-related initiatives if they cannot effectively communicate (Olsen et al. 2014). Such initiatives may also be undermined by consumers' misconceptions (Johnstone and Tan 2015; Peattie and Crane 2005), for example sustainable behaviour entails consuming less (Brooks and Wilson 2015) or sustainable-products are underperforming (Lim 2017) or sustainability ads are exploitative (Craig 2019; Peattie and Crane 2005). Peer-to-peer communications in social-media leave brands with limited control over the information that can shape consumers' opinions (Paul et al. 2024; Chandrasapth et al. 2022). Consumers tend to express their opinions to friends, family and online communities about brands which share communications on issues related to sustainability (Fernández et al. 2022; Angus 2018). This peer-to-peer engagement has been proven to be more influential compared to communications initiated by organisations since consumers trust their peers more than company-led ads (Paul et al. 2024; Angus 2018). Consumers have also reported their lack of trust in AI-generated content in the context of marketing claims and product information. Consumers' interactions with AI chatbots have been accused of having perpetual bias, discrimination, and misinformation (Paul et al. 2023). Hence, platforms that facilitate peer-to-peer communications, such as social-media, can be more effective in promoting sustainable behaviour than corporate communications to customers (Angus 2018).

In the context of sustainability-advertising/ads on social-media, past literature has examined eWOM as both an outcome and an antecedent. As an outcome, the influence of green-influencers (Cheung et al. 2025) or sustainability-ads (Septianto et al. 2021) on eWOM has been investigated. Conversely, sustainable purchase intentions have been studied as an outcome of influencers' reviews (Pittman and Abell 2021; Filieri et al. 2023; Cheung et al. 2025) and of positive/negative eWOM (Kumari and Sangeetha 2022; Filieri et al. 2021). Previous studies which investigated consumer engagement have focused on analysing positive/negative reviews for products with an environmental impact (Filieri et al. 2021), source and review characteristics (Kumari and Sangeetha 2022), emotional appeal (i.e., pride, gratitude, joy, warmth, awe, guilt, etc.), motives, and sharing type (narrowcasting vs. broadcasting) (Septianto et al. 2021; Yang et al. 2025; Dong et al. 2024; Kim et al. 2023). Recent social-media engagement (SME) tools like memes or short videos encourage users to express their opinions (Yang et al. 2025; Razzaq et al. 2023; Dong et al. 2024). Elaborating on this topic, this study focuses on peer-to-peer communications—specifically, the impact of positive/negative opinions regarding company-led sustainability-ads. The use of social-media for the dissemination of such views can amplify other users' perceptions of a corporate message (Paul et al. 2024) as well as consumer engagement with organisations via the online platforms (Voorveld et al. 2018). Hence, this paper explores the influence of peer-to-peer opinion exchanges regarding brands' sustainability-ads on their purchase intention in the context of social-media.

This paper contributes to the sustainability-ad literature by taking a deeper approach to understand the mechanism of the purchase intention of the advertised sustainability-related products on social media. Here, SME is considered as both an antecedent and an outcome. The underlying mechanism of the

initial point of engagement with another is examined through the self-transformative consumption vision (SCV) theory, the pleasure-arousal-dominance (PAD) theory of emotion and attitude. The mechanism of resulting purchase intention is studied through the normative and informative influence of SME.

The adoption of a product by consumers depends on how they envision themselves using it (Yim et al. 2018). Therefore, it is essential to understand whether social-media users' opinions on sustainability-ad influence how their peers envisage themselves consuming the advertised product. Therefore, the mechanism of adopting sustainable purchase behaviour is studied through the lens of SCV (Yim et al. 2018). Moreover, the emotional nature of choosing sustainability-related products leads us to the PAD theory of emotion (Mehrabian 1996; Martin and Schouten 2012; Rowe et al. 2019). Lastly, the influence generated through SME has been examined through social influence theory (Deutsch and Gerard 1955). In a nutshell, we propose that sustainability-ads create consumption visions (SCV), which will instil emotional responses (PAD). The generated emotion then shapes engagement and purchase intention under the influence of peers. Thus, this paper also contributes to the managerial practice by detecting the significant factors for formulating strategies to promote organisations' sustainability-related initiatives.

2 | Literature Review and Hypothesis Development

2.1 | Sustainability

The definition of sustainable-products denotes not only the products which are sustainable themselves, but also the products which are produced, consumed, and disposed of in a sustainable manner (Rowe et al. 2019). Consumption of sustainable-products is increasing (Discetti 2021). However, consumers still have a perception that adopting sustainable behaviour requires substantial effort, money and time as well as consuming less (Herédia-Colaço and Vale 2018). Consumers' reluctance to purchase sustainable-products has also been attributed to a lack of product-specific knowledge (Peattie and Crane 2005) and consumers' perception of sustainable-products being expensive (Kristensson et al. 2017). Additionally, existing consumption patterns are difficult to change (Johnstone and Tan 2015), due to social norms and the practice of consumption (Aagerup and Nilsson 2016).

The information source plays a significant role in consumers' understanding and acceptance of sustainable products and sustainable consumption behaviour (Schaltegger and Wagner 2011). The right communication channels can elicit consumers' trust in brands and motivate them to purchase sustainable products (Discetti 2021). Being wary about greenwashing, consumers tend to believe other consumers, who are devoid of ulterior motive, more than company-led communications (Angus 2018; Craig 2019). Consumers use social media to express and exchange their opinions about brands' stances on sustainability (Paul et al. 2024). This positions online media (e.g., social media, blogs etc.) as an effective channel of communication in terms of increasing awareness and inspiring people to pursue greater social responsibility (McDonagh and Prothero 2014).

2.2 | Social-Media Engagement (SME)

One form of social-media engagement is 'Caption' - a form of electronic word of mouth (eWOM). Users tend to express their opinion through captions (Hennig-Thurau et al. 2004). A positive or negative caption can motivate or demotivate other social-media users to engage with content (Nikolinakou and King 2018). Positive SME can include consumption, positive contribution, and co-creation as a form of favourable brand-related behaviour (Dolan et al. 2016). In contrast, negative SME can include detachment, negative contribution, and co-destruction as a form of consumers' unfavourable brand-related behaviour (Dolan et al. 2016).

Peer-to-peer SME is triggered when positive/negative comments are challenged by other users (Izogo et al. 2022). Sincere, honest, and expert sources can influence both SME and purchase decisions (Filieri et al. 2023; Folse et al. 2016). Strong negative posts can also be considered helpful if the source is perceived as an expert. However, for sources who are not perceived as experts, a negative comment can have a poor reflection on themselves (Folse et al. 2016). Additionally, a sustainability-advertisement on social media has a greater impact on purchase intention when disseminated by a less popular source than a popular one. This finding indicates that users' perceptions of popular sources have ulterior/materialistic motives (Pittman and Abell 2021).

Similarly, consumers also evaluate products by imagining themselves in a consumption situation (Phillips et al. 1995). Yim et al. (2018) coined the term Self-transformative Consumption Vision (SCV) for this.

2.3 | Effect of Captions on Self-Transformative Consumption Vision (SCV)

"...we define a self-transformative consumption vision (SCV) as a person's mental visualization process of creating a self-involved imaginative future incident, story or narrative about a product or service in which the consumption outcome is envisioned." (Yim et al. 2018, 2). This theory elaborates on earlier models, such as consumption vision, mental imagery, self-projection, narrative transportation and 'evoked imagery' (Barsalou 2008; Bone and Ellen 1992; Green and Brock 2000; Nielsen et al. 2018; Phillips et al. 1995; Phillips and McQuarrie 2010; Shiv and Huber 2000; Phillips 1996).

Consumers tend to envision themselves in future consumption situations, which are a series of vivid mental images of product-related behaviours and the resulting outcomes which thus influence the purchase behaviour (Phillips et al. 1995; Phillips 1996). Consumption vision is especially useful for evaluating products where consumers have limited experience, their need for consumption is inadequately defined, or consumption is associated with emotional considerations (Phillips et al. 1995). These scenarios align with the struggle to promote sustainable-products. Purchase decisions of sustainable-products are usually emotion-driven (Rowe et al. 2019). Moreover, general consumers have a limited understanding of the performance of these products (Lim 2017).

The intensity of consumption vision depends on the extent to which information is processed (Yim et al. 2018). 'Sustainability' (McDonagh and Prothero 2014) as a topic tends to evoke the need to process related information (e.g., advertisements) (Petty and Cacioppo 2018; Berkowitz 1986; Barsalou 2008; Bone and Ellen 1992). As consumers tend to direct their mental imagery effort towards positive messages (Yim et al. 2018), positive messages have a higher level of acceptance than negative ones (Tanner and Kast 2003). A strong stimulus like a sustainability-ad facilitates the manifestation of mental imagery (MacInnis and Price 1987). Therefore, it is proposed that a sustainability-ad is more mentally stimulating in terms of SCV by a positive caption than a negative one.

H1. *Positively captioned sustainability-ads will generate higher levels of self-transformative consumption vision than negatively captioned sustainability-ads among the users of social-media.*

2.4 | Effect of Source Expertise on Self-Transformative Consumption Vision

Sustainability-ads may influence purchase decisions, if consumers trust the content (Leila et al. 2016). Consumers prefer to trust expert sources due to greenwashing concerns (Craig 2019; Peattie and Crane 2005; Yadav and Pathak 2017; Kim et al. 2019) and due to a lack of sustainability-product related information (Petty and Cacioppo 2018; Berkowitz 1986; Luchs et al. 2010).

Previous research on online debates shows that positive reviews significantly motivate online users to be more willing to accept the opinion of the source (DePelsmacker et al. 2018). Positive messages, like attainable actions, are more persuasive than negative problem statements related to sustainability issues (Song and Kim 2018; Kilbourne and Pickett 2008). Negative messages related to sustainability issues may cause mental resistance, which can in turn increase mental load and thus hinder SCV (Petrova and Cialdini 2005). In contrast, positive feelings elicited by positive messages in the form of eWOM can motivate the processing of related information (Bloch et al. 1986). The positive predisposition of sustainability-ads (Song and Kim 2018; Kilbourne and Pickett 2008) when paired with source expertise may lead to a more prominent effect.

In the case of sustainability-ads, while processing information, high source expertise tends to exert less cognitive load for the consumers because it is perceived as less risky (Shan and King 2015). On social media, information from expert sources is more readily accepted (Hollebeek 2018). Lower levels of cognitive load and positive affiliations with the stimulus tend to arouse more vivid mental imagery than a stimulus with negative affiliation (Shiv and Huber 2000; MacInnis and Price 1987). Hence, it is proposed that SCV will be more vivid when a positive caption is attached to a sustainability-ad than a negative one. This influence will be stronger for perceived source expertise.

H2. *When source expertise is high, a sustainability-ad will lead to higher self-transformative consumption vision than*

when source expertise is low. The effect will be stronger for positively captioned sustainability-ads than for negatively captioned sustainability-ads.

2.5 | Impact of Self-Transformative Consumption Vision on Social-Media Engagement

Mental imagery stimulated by an ad allows consumers to assess actual and potential behaviour (Amit and Greene 2012; Phillips 1996). Consumers tend to project themselves (i.e., SCV) engaging in activities that serve as an intrinsic motivation for adopting a certain behaviour (Yim et al. 2018). The intensity of evoked imagery can influence the formation of one's behavioural intentions (Bone and Ellen 1992). The interactive aspect of social-media can stimulate positive mental imagery, which may result in positive SME (Paul et al. 2024). Sustainability promotions on social-media can enhance SME and subsequent sustainable behaviour (Baek et al. 2022). The mental imagery stimulated by the ad on social-media may motivate interaction over the platform (Seo et al. 2018). Therefore, it is proposed that:

H3. *Self-transformative consumption vision will positively influence the level of social-media engagement with a sustainability-ad.*

2.6 | Emotional Dimensions (PAD: Pleasure, Arousal and Dominance)

Consumption experiences are linked with imaginal and emotional responses (Lacher and Mizerski 1994). Emotional appeal is more influential than intellectual arguments in promoting sustainability and can influence consumption (Martin and Schouten 2012; Bowden 2009). Studies on specific emotions like pride, gratitude, awe and guilt showed enhancement of the appeal of a sustainability-ad on social-media (Septianto et al. 2021; Kim et al. 2023). This emotional arousal prompts SME, especially moderate arousal compared to high or low arousal (Yang et al. 2025). To capture the overall impact of emotions, the PAD theory has been considered rather than specific emotions because the PAD theory measures emotions in dimensions (Mehrabian 1996).

The pleasure dimension is related to the feelings of satisfaction, contentment, or happiness (Richard and Chebat 2016). It refers to the extent of positive or negative feelings toward a stimulus (Bakker et al. 2014; Mehrabian 1996). When consumers envision themselves experiencing a product (i.e., SCV), depending on their pleasant or unpleasant vision, they feel positively or negatively about the product (Phillips and McQuarrie 2010; Yim et al. 2018).

Consumption vision is positively associated with a pleasant feeling regarding a product (Nielsen et al. 2018). Since consumers experience hedonic feelings by consuming sustainable-products due to high ethical claims (Herédia-Colaço and Vale 2018), it is proposed that the imagined consumption situation (i.e., SCV) evoked by a sustainability-ad will generate a feeling of pleasurable emotion.

H4. *Self-transformative consumption vision will positively influence the level of pleasure towards a sustainability-ad.*

The arousal dimension of PAD refers to the level of mental alertness, which is associated with cognition and a feeling of being stimulated/excited (Bakker et al. 2014; Mehrabian 1996; Richard and Chebat 2016). Processing product information can enhance consumers' emotional responses (Cheung et al. 2025). The 'level of information embedded in a stimulus and repeated exposure to information positively influences the state of arousal' (Mehrabian 1996; Yani-de-Soriano et al. 2013). Cognitive information processing also equates to learning, which is facilitated by SCV (Yim et al. 2018; MacInnis and Price 1987). This positions SCV as an antecedent of arousal.

Arousal also tends to be higher in novel, complex, intense, unfamiliar, improbable, changing, or uncertain consumption settings (Foxall and Yani-de-Soriano 2005). Sustainable-products are deemed to be novel products (Jung et al. 2016). They are also unfamiliar and perceived as complex products due to limited understanding of their characteristics (Luchs and Kumar 2017). SCV stimulated by a sustainability-ad on social-media can act as a source of information and, in turn, facilitate the cognitive processing of information. Hence, it is proposed that the more vividly consumers can envision a mental image, the more aroused they will be.

H5. *SCV will positively influence the level of arousal stimulated by a sustainability-ad.*

The dominance dimension of PAD refers to the degree of freedom to act (Bakker et al. 2014). It reflects the feeling of control/influence/autonomy individuals have over their behaviour under certain circumstances (Mehrabian 1996; Bakker et al. 2014; Richard and Chebat 2016).

SCV can trigger dominance by helping consumers understand their consumption behaviour (Phillips et al. 1995; Yim et al. 2018). By visualising themselves within a consumption event, consumers can gain a better understanding of the consequences of a product-related behaviour (Walker 1997). This makes SCV an antecedent to the perceived freedom to act.

Consumers' intentions to adopt sustainable behaviour diminish when they believe that they are not in control of an aspect of that action (Johnstone and Tan 2015). A sustainability-ad, accompanied by a caption, can help consumers understand how their actions can contribute towards achieving a sustainability-related goal (Han et al. 2019). Free interaction on social-media among consumers can increase their ability to visualise themselves in a consumption act (Schivinski et al. 2016) and, in turn, enhance their perceived level of dominance (Foxall and Yani-de-Soriano 2005).

H6. *Self-transformative consumption vision will positively influence the level of dominance stimulated by a sustainability-ad.*

2.7 | Impact of PAD on Ad-Attitude

Ad-attitude represents the favourable or unfavourable response to an ad, which can evoke emotions (Desmet 2010) and, in turn, influence consumers' future behaviour (Berkowitz 1986). A positive feeling of pleasure (affective response) or arousal

(cognitive response) may result in a favourable ad-attitude (Yim et al. 2018).

Adopting a behaviour related to a sustainable product depends on hedonic feelings (associated with pleasure) evoked by it (Spielmann 2021) and on the information (associated with arousal) regarding the product or the organisation (Algesheimer et al. 2005; Angus 2018). Hence, an ad on social media can lead to a positive ad attitude by evoking pleasant emotions (Eckler and Bolls 2011) and high levels of arousal (Berger and Milkman 2012). It also enables consumers to anticipate the outcome of a consumption behaviour (Phillips 1996; Walker 1997). Therefore, it is proposed:

H7. *Pleasure will positively influence ad-attitude towards a sustainability-ad.*

H8. *Arousal will positively influence ad-attitude towards a sustainability-ad.*

H9. *Dominance will positively influence ad-attitude towards a sustainability-ad.*

Social-media can facilitate the formation of attitudes towards sustainability-related issues (Discetti 2021) via increasing on-line engagement (Bowden 2009). Consumers' pro-sustainable attitudes can be reflected in their SME and the content that they create (Dessart 2017). Hence, a sustainability-ad on social-media, as content, can lead to a favourable attitude, which in turn can increase engagement on social-media with the topic (Voorveld et al. 2018). Therefore, it is proposed:

H10. *Ad-attitude will positively influence social-media engagement with a sustainability ad.*

2.8 | Social Influence

Social Influence Theory (Deutsch and Gerard 1955) suggests that both social norms and information can influence purchase intentions (DeGregorio and Sung 2010). Hence, the adoption of a sustainable behaviour can be influenced by social norms (Aagerup and Nilsson 2016) and by the information about the attributes of a sustainable product (Lim 2017).

2.8.1 | Normative Influence

Social-media can stimulate new norms through engagement with like-minded users (Bolton et al. 2013). This phenomenon occurs because of the users' desire to maintain harmony and prompts them to align their behaviour with the peer expectations (Hsieh and Chang 2016). In the context of sustainability, behaviour is significantly influenced by social norms (Ryoo et al. 2017; Yadav and Pathak 2017). Consumers' engagement on social-media will reflect their level of agreement with the norms and objectives expressed online by their peers (Algesheimer et al. 2005).

H11. *Social-media engagement with a sustainability-ad will have a positive impact on normative influence.*

Social norms formed on social-media tend to influence users' behaviour (Nikolinakou and King 2018) because higher levels of engagement may prompt individuals to reassess their own beliefs and change their behaviour (Bolton et al. 2013). Normative messages tend to influence the adoption of sustainable consumption as consumers tend to choose products with sustainability associations to conform to social norms (Chen et al. 2019). Hence, it is proposed:

H12. *Normative influence will positively impact purchase intentions.*

2.8.2 | Informational Influence

Online interactions on social networks enable individuals to generate new ideas, influence others, or validate a decision (Dholakia et al. 2004; Marbach et al. 2016). In relation to products with sustainability associations, consumers tend to proactively seek information and use social media as sources of information due to the lack of trust in organisations (Angus 2018; Bolton et al. 2013) or a lack of knowledge about product characteristics (Lim 2017). The need to make good decisions may prompt informational influence (Li 2013). If an increasing number of users adopt a particular behaviour, this information may persuade their peers to reevaluate their own actions (Bolton et al. 2013; Hamilton et al. 2017). Therefore, it is proposed:

H13. *Social-media engagement with a sustainability-ad will have a positive impact on informational influence.*

Consumers' purchase intentions may be influenced by an organisation's environmental commitments (Angus 2018), and new information may prompt individuals to re-evaluate their attitudes and beliefs as well as change their behaviour (Li 2013). Information regarding other consumers' actions and preferences may motivate individuals to adopt sustainable consumption (Chen et al. 2019).

H14. *Informational influence will positively impact purchase intentions.*

Figure 1 shows the conceptual framework of the study.

3 | Materials and Methods

A 2×2 survey-based experiment was conducted to examine the influence of positive versus negative captions and high versus low source expertise on ad-attitude, SME with the ad, and purchase intentions. The questionnaire included a stimulus in the form of a Facebook post that contained a print ad and a caption. The suitability of the print ad (Figure 2) and the wording of the caption were finalised after two pretests. The first pretest included interviews with 8 respondents, which aimed at refining the questions by identifying scales which were considered irrelevant (e.g., 'Creation' elements of the original scale by Schivinski et al. 2016) and items which were felt to be out of context. The second pretest validated the stimulation and the questions.

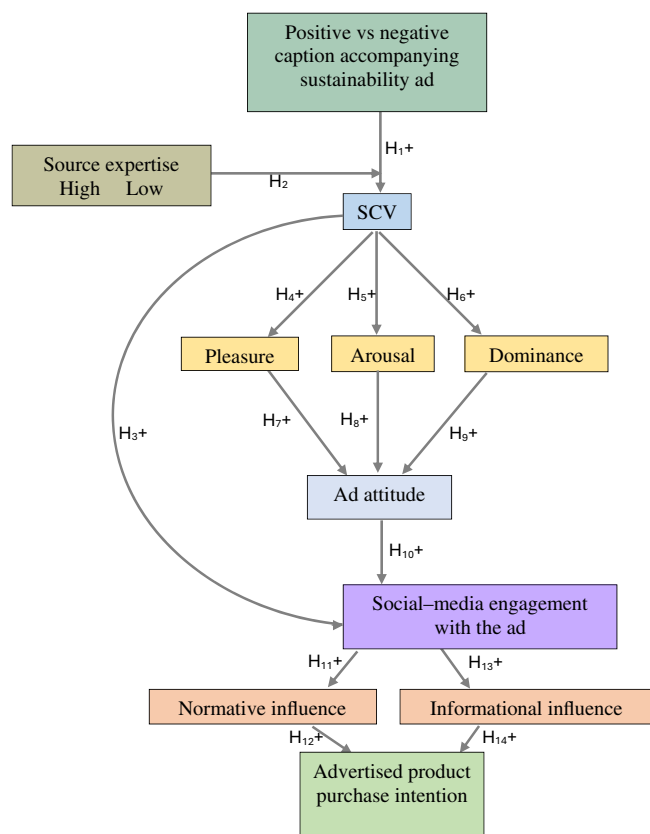


FIGURE 1 | The conceptual framework: Understanding engagement with sustainable ads (Source: Developed by authors).



FIGURE 2 | Stimulation-sustainability ad (Source: Developed by authors).

The captions presented to the respondents read ‘At last companies are joining the fight for the planet’ and ‘Fighting for the planet is an advertising tool now’, representing a positive and negative view, respectively. The level of ‘Source expertise’ was manipulated by providing the following information about the source- ‘working in the coffee industry for 5 years’ for ‘high expertise’ and ‘not a coffee drinker’ for ‘low expertise’ (adapted from Berkowitz 1986; Mun et al. 2013).

Data was collected from 344 respondents from the UK in exchange for remuneration (Tabachnick et al. 2014). Respondents were randomly assigned to 4 groups to a post containing an ad

(Figure 2) with a positive/negative caption and information about the source (high/low expertise).

The homogeneous sample included participants who were digitally native and knowledgeable about sustainability issues to ensure the internal validity of the experiment (Calder et al. 1981; Yim and Yoo 2020; Bolton et al. 2013) (Table 1). The sample size meets Cohen (1988)’s assumptions for ANOVA and two-way ANOVA as well as Tabachnick et al. (2014)’s assumptions for regression analysis. Each experiment group also exceeds the minimum number of 50 respondents (Table 1) (Simmons et al. 2013). To check respondents’ attention, the questionnaire included a neutral question asking them to follow specific instructions. The final dataset included 279 responses after discarding 15 responses with missing values and 50 responses which failed the attention check question (Oppenheimer et al. 2009).

The experimental design aimed to reduce confounding effects and enhance internal validity. First, the choice of a fictitious coffee brand avoided any positive or negative brand associations (Zikmund et al. 2010). Second, coffee is a product with moderate emotional attachment (mid region of FCB product map-Ratchford 1987). This reduced the effect of the product category on the response (Herédia-Colaço and Vale 2018). The coffee industry is also known for its sustainability footprint (sustaincofee.org 2019).

3.1 | Experimental Manipulations Checks

The Manipulation test was carried out by using the first 40 respondents (10 from each group). High and low source expertise was manipulated by presenting the following statements to the participants: ‘5 years of expertise in the industry’ and ‘Not a coffee drinker’, respectively. Respondents’ perception of the source expertise was measured by a 7-point semantic differential scale (Ohanian 1990). An independent *t*-test shows a significant manipulation effect between high ($M = 5.96$, $SD = 1.09$) and low ($M = 2.55$, $SD = 1.44$, $t(38) = -8.42$, $p < 0.000$) source expertise. Source expertise was focused on the ‘product’ rather than on sustainability because engagement with a post may be neutral or even negative if users suspect an ulterior motive on the part of the source (Hughes et al. 2019). Since the context of the study is sustainability-ads, the stimulation focuses on the coffee to reduce respondent bias.

3.2 | Reliability and Validity

Table 2 contains a concise version of the items of the scale and satisfactory reliability and validity tests. The original items of the survey will be found in Appendix S1. However, the original 3-item mental fluency scale had $\alpha < 0.70$. To address this, Item 1 (0.474) and Item 3 (0.252) were eliminated, because they showed low standardised regression weights in AMOS PLS. The retained item also fits best with the definition of SCV. Nonetheless, AMOS requires a minimum of two items per construct. Hence, the construct was not included in the discriminant validity test (Table 3) based on confirmatory factor analysis (model fit: RMSEA = 0.055, GFI = 0.741

TABLE 1 | Demographics of the respondents and group distribution.

Characteristics		Frequency	%			Frequency	%
Gender	Male	83	29.7	Age	18–25	225	80.6
	Female	194	69.5		26–35	47	16.8
	Neutral	1	0.4		36–45	5	1.8
	I do not want to disclose	1	0.4		Older than 45	2	0.7
Income	Under £15,000	64	22.9	Education	GCSE	4	1.4
	£15,000–£24,999	49	17.6		A level or equivalent	81	29
	£25,000–£34,999	39	14.0		Master's degree	71	25.4
	£35,000–£44,999	17	6.1		Bachelor's degree	113	40.5
	£45,000–£54,999	14	5.0		Doctorate	6	2.2
	£55,000–£64,999	9	3.2		Other	4	1.4
	£65,000–£74,999	6	2.2		A level or equivalent	81	29
	£75,000 and over	26	9.3				
	Prefer not to specify	55	19.7				
Source expertise							
Group distribution		High		Low			
Types of captions							
Positive		<i>n</i> = 66		<i>n</i> = 76			
Negative		<i>n</i> = 70		<i>n</i> = 67			

and Chi-Square = 2698.532 (1473), $p = 0.000$). For robustness, multicollinearity has been tested on 2 models by taking SME and purchase intention as DV. Table 2 shows that the constructs are free from multicollinearity, with VIFs less than 5 and tolerance values greater than 0.20 (Antonetti et al. 2019; Pallant 2010; Field 2018; Paul 2024). Table 3 suggests satisfactory discriminant validity because of exceeding $\sqrt{\text{AVE}}$ compared to the correlations of the corresponding constructs (Song et al. 2019). Harman's single-factor test indicated that there were no common method bias issues (39.034% of variance explained) (Podsakoff et al. 2003; Tehseen et al. 2017; Paul 2024).

4 | Findings and Results

The effect of positive and negative captions on SCV (H1) was tested using MANOVA with positive and negative captions as independent variables (IV) and SCV, a second-order formative construct with 4 dimensions (image quality, engrossment, self-projection and mental fluency), as dependent variable (DV) (Hair et al. 2017).

Pillai's Trace test confirmed H1 by highlighting a significant difference between respondents who were exposed to positive and negative captions on the levels of SCV ($V = 0.035$, $F(4, 274) = 2.48$, $p = 0.045$) (Table 4). However, this difference was related to 'image quality' ($F(1, 277) = 8.15$, $p = 0.005$). The other SCV dimensions, engrossment ($F(1, 277) = 0.051$, $p = 0.821$), self-projection ($F(1, 277) = 0.201$, $p = 0.655$), and mental fluency

($F(1, 277) = 0.615$, $p = 0.434$) did not have a significant difference (Table 5).

More elaborate profile analysis demonstrated (Figure 3) that when respondents were exposed to the positive caption, their level of image quality was greater ($M = 4.52$, $SD = 1.39$) than when exposed to a negative caption ($M = 4.02$, $SD = 1.58$). Though notable differences in caption have been observed on the other three dimensions of SCV, they were not statistically significant. For the positive caption, self-projection ($M = 3.48$, $SD = 1.35$) and mental fluency ($M = 4.47$, $SD = 1.59$) were higher than the negative caption (self-projection $M = 3.4$, $SD = 1.53$; and mental fluency $M = 4.32$, $SD = 1.62$). In contrast, the level of engrossment was higher in the case of the negative caption ($M = 2.63$, $SD = 1.28$) compared to the positive caption ($M = 2.60$, $SD = 1.13$).

Subsequent discriminant analysis highlighted the fact that the discriminant function explained 100% of the variance. This indicates that, though the contribution is low, the overall difference between the groups with positive and negative captions is due to 4 dimensions of SCV (canonical discriminant function coefficient $R^2 = 0.035$). The discriminant function significantly differentiated the groups with positive and negative captions (Wilk's lambda $\Lambda = 0.97$, Chi square $\chi^2(4) = 9.76$, $p = 0.045$). The correlations among SCV dimensions and the discriminant functions also highlighted the fact that image quality was the most discriminating factor of all four SCV dimensions (image quality $r = 0.902$, mental fluency $r = 0.248$, self-projection $r = 0.142$, and engrossment $r = -0.072$) (Field 2018).

TABLE 2 | Reliability and validity tests.

Constructs	EFA	CFA
	Factor loading	Outer loading
Image Quality (Yim et al. 2018) $\alpha = 0.922$; CR = 0.92; Multicollinearity: DV engagement- (Tolerance = 0.53; VIF = 1.887) DV purchase behaviour (Tolerance = 0.526; VIF = 1.901)		
• Vague—vivid	0.868	0.816
• Sketchy- detailed	0.911	0.88
• Unclear- clear	0.911	0.891
• Dim- sharp	0.911	0.875
Engrossment (Yim et al. 2018) $\alpha = 0.832$; CR = 0.83; Multicollinearity: DV engagement- (Tolerance = 0.83; VIF = 1.204) DV purchase behaviour (Tolerance = 0.805; VIF = 1.243)		
• Disconnected from the real world.	0.751	0.591
• Losing track of time	0.796	0.662
• Feeling of being in a different world.	0.876	0.838
• Feeling like a different person	0.840	0.873
Self-projection (Yim et al. 2018) $\alpha = 0.888$; CR = 0.89; Multicollinearity: DV engagement- (Tolerance = 0.39; VIF = 2.592) DV purchase behaviour (Tolerance = 0.366; VIF = 2.735)		
• Images of self in the ad	0.773	0.7
• Picturing oneself in the ad	0.775	0.706
• Inspiration of mental images as a part of the scenario.	0.877	0.838
• Constructing a story about oneself.	0.850	0.823
• Projecting oneself into the ad	0.880	0.859
Mental fluency (Yim et al. 2018); Multicollinearity: DV engagement- (Tolerance = 0.45; VIF = 2.206) DV purchase behaviour (Tolerance = 0.445; VIF = 2.248)		
Easiness of imagination	n/a	n/a
Pleasure (Russell et al. 1981) $\alpha = 0.909$, CR = 0.91; Multicollinearity: DV engagement- (Tolerance = 0.30; VIF = 3.343) DV purchase behaviour (Tolerance = 0.27; VIF = 3.7)		
• Annoyed—pleased	0.882	0.865
• Dissatisfied—satisfied	0.893	0.861
• Unhappy—happy	0.872	0.827
• Bored—relaxed	0.810	0.751
• Despairing – hopeful	0.825	0.789

(Continues)

TABLE 2 | (Continued)

Constructs	EFA	CFA
	Factor loading	Outer loading
Arousal (Russell et al. 1981) $\alpha = 0.845$, CR = 0.84; Multicollinearity: DV engagement- (Tolerance = 0.59; VIF = 1.692) DV purchase behaviour (Tolerance = 0.555; VIF = 1.801)		
• Sluggish—Frenzied	0.750	0.704
• Unaroused—aroused	0.719	0.675
• Sleepy Wide awake	0.705	0.638
• Calm—excited	0.775	0.691
• Relaxed—stimulated	0.767	0.675
• Dull—jittery	0.784	0.753
Dominance (Russell et al. 1981) $\alpha = 0.726$, CR = 0.74; Multicollinearity: DV engagement (Tolerance = 0.91; VIF = 1.103) DV purchase behaviour (Tolerance = 0.899; VIF = 1.113)		
• Submissive—dominant	0.625	0.529
• Influenced—influential	0.735	0.667
• Controlled—controlling	0.726	0.661
• Guided—autonomous	0.746	0.644
• Cared for—in control	0.508	0.376
• Awed—important	0.570	0.494
Ad-attitude (Tucker et al. 2012) $\alpha = 0.949$, CR = 0.95; Multicollinearity: DV engagement- (Tolerance = 0.37; VIF = 2.722) DV purchase behaviour (Tolerance = 0.362; VIF = 2.762)		
• Favourable—unfavourable	0.922	0.891
• Good – bad	0.955	0.946
• Like – dislike	0.931	0.916
• Positive – negative	0.915	0.877
SME (Schivinski et al. 2016) $\alpha = 0.756$, CR = 0.78; Multicollinearity: DV purchase behaviour (Tolerance = 0.454; VIF = 2.202)		
• Spending a couple of seconds watching the ad.	0.496	0.361
• Wanting to comment	0.779	0.663
• Wanting to share	0.894	0.864
• Wanting to ‘Like’	0.849	0.815

(Continues)

TABLE 2 | (Continued)

Constructs	EFA		CFA	
	Factor loading		Factor loading	Outer loading
Informational influence (Li 2013) $\alpha = 0.750$; CR = 0.75; Multicollinearity: DV purchase behaviour (Tolerance = 0.604; VIF = 1.656)				
• Other people's reaction	0.814			0.669
• Asking for information to make a choice	0.806			0.642
• Information from others is helpful.	0.830			0.8
Normative influence (Li 2013) $\alpha = 0.861$; CR = 0.86; Multicollinearity: DV purchase behaviour (Tolerance = 0.551; VIF = 1.816) DV sustainable behaviour (Tolerance = 0.551; VIF = 1.816)				
• Importance of what others think	0.798			0.748
• Feeling similar to other people	0.771			0.706
• Making a good impression on others	0.836			0.789
• Others' expectations	0.814			0.741
• Achieving a sense of belongingness	0.790			0.74
Purchase intention (Manika et al. 2017) $\alpha = 0.923$; CR = 0.93				
• Unlikely – Likely	0.928			0.935
• Improbable—Probable	0.937			0.948
• Impossible—Possible	0.870			0.844
• Uncertain—Certain	0.753			0.692
• Definitely would NOT—Definitely would	0.711			0.647
• No Chance—Certainly	0.897			0.847
Source expertise (Ohanian 1990) $\alpha = 0.950$; CR = 0.95; Multicollinearity: DV engagement- (Tolerance = 0.75; VIF = 1.34) DV purchase intention (Tolerance = 0.715; VIF = 1.398)				
• Expert—Not an expert	0.889			0.855
• Experienced—Inexperienced	0.935			0.925
• Knowledgeable—Unknowledgeable	0.908			0.886
• Qualified—Unqualified	0.917			0.89
• Skilled—Unskilled	0.916			0.895

Note: Skewness SE = 0.146; Kurtosis SE = 0.291.

TABLE 3 | Discriminant validity: Fornell-Larcker criterion.

Correlations													
	Mental fluency	Image quality	Engrossment	Self projection	Pleasure	Arousal	Dominance	Attitude	Engagement	Purchase	Information	Norm	Expertise
Mental_fluency													
Image_quality	0.449**	0.866											
Engrossment	0.199**	0.202**	0.750										
Self_projection	0.696**	0.529**	0.369**	0.788									
Pleasure	0.553**	0.570**	0.156**	0.513**	0.820								
Arousal	0.387**	0.393**	0.217**	0.462**	0.529**	0.690							
Dominance	0.162**	0.226**	−0.013	0.199**	0.180**	0.226**	0.572						
Attitude	0.491**	0.498**	0.081	0.455**	0.757**	0.420**	0.164**	0.908					
Engagement	0.456**	0.438**	0.226**	0.543**	0.652**	0.476**	0.172**	0.538**	0.704				
Purchase	0.475**	0.539**	0.116	0.535**	0.613**	0.488**	0.192**	0.555**	0.571**	0.827			
Information	0.309**	0.252**	0.125*	0.361**	0.348**	0.270**	0.150*	0.310**	0.449**	0.391**	0.707		
Norm	0.362**	0.238**	0.304**	0.439**	0.237**	0.396**	0.089	0.167**	0.364**	0.323**	0.541**	0.745	
Expertise	0.327**	0.391**	0.150*	0.389**	0.424**	0.330**	0.07	0.410**	0.450**	0.409**	0.254**	0.268**	0.890

Note: The Diagonal line represents $\sqrt{\text{AVE}}$ and the other values represent the correlation between respective constructs.

**Correlation is significant at the 0.01 level (2-tailed).

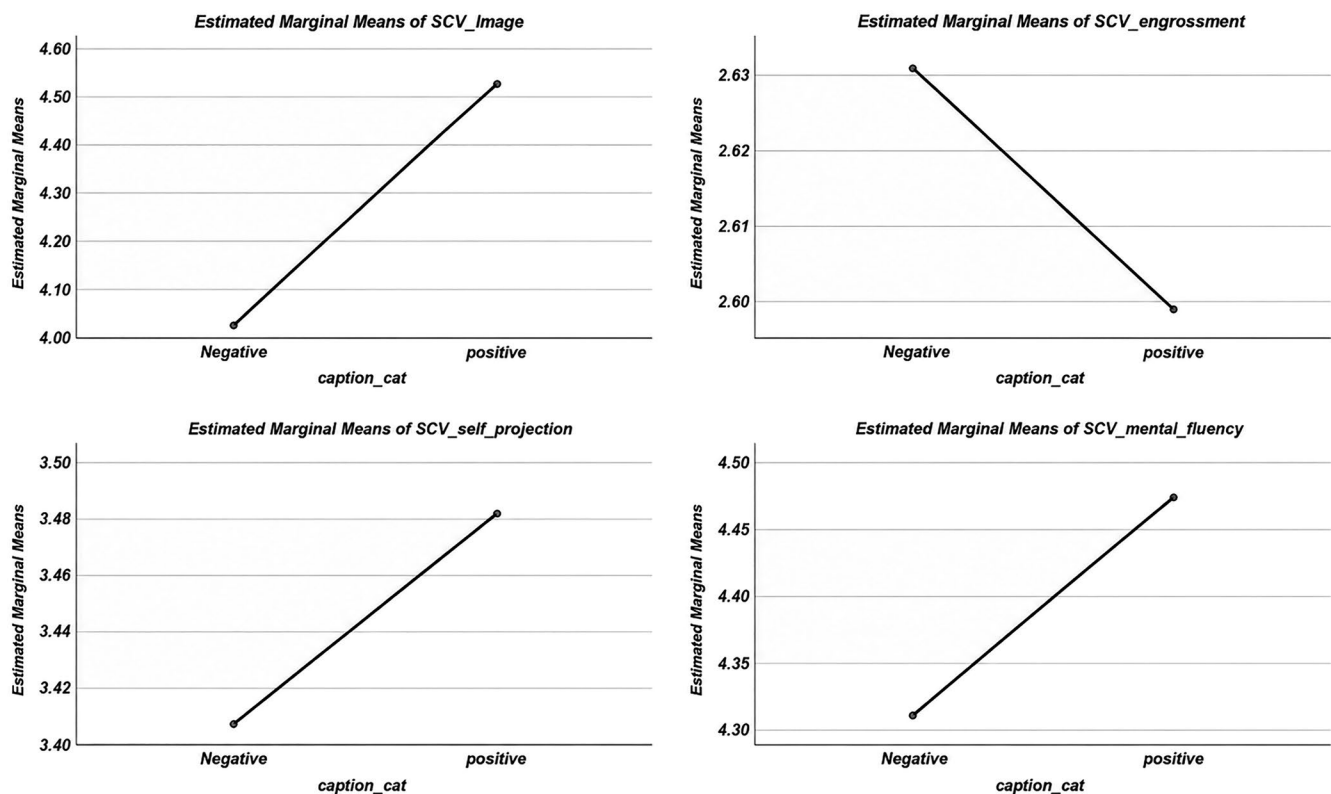
*Correlation is significant at the 0.05 level (2-tailed).

TABLE 4 | Multivariate tests^a.

Effect	Value	<i>F</i>	Hypothesis df	Error df	Sig.	Partial Eta squared	
Types of captions	Pillai's Trace	0.035	2.476 ^b	4.000	274.000	0.045	0.035

^aDesign: Intercept + Types of captions.^bExact statistic.**TABLE 5** | Tests of between-subjects effects (H1).

Source	Dependent variable	Type III sum of squares	df	Mean square	<i>F</i>	Sig.	Partial eta squared
Types of captions	Image_quality	18.010	1	18.010	8.146	0.005	0.029
	Engrossment	0.075	1	0.075	0.051	0.821	0.000
	Self_projection	0.417	1	0.417	0.201	0.655	0.001
	Mental_fluency	1.583	1	1.583	0.615	0.434	0.002

**FIGURE 3** | Profile graphs of dimensions of SCV.

The interaction between the type of caption (positive and negative), level of source expertise (High and low) and SCV (H2) was examined through two-way MANOVA. Pillai's Trace test highlighted non-significant interactions between the types of captions and the level of source expertise and SCV ($V=0.019$, $F(4, 271)=1.34$, $p=0.254$) (Table 6). The main effect of the types of captions on SCV was significant ($V=0.039$, $F(4, 271)=2.75$, $p=0.028$), but the impact of the level of source expertise was non-significant ($V=0.013$, $F(4, 271)=0.925$, $p=0.450$) (Table 6). The significant difference was attributed to image quality (Table 7).

The same results emerged when a series of *t*-tests was conducted examining all possible pairs among the 4 groups (2 types of

caption $\times$ 2 levels of expertise) (Table 8). Among the pairs, only image quality showed significant differences depending on the captions.

There was no significant difference among the pairs when they were compared based on source expertise. However, when compared on the basis of captions, for the high expertise condition a significant difference was observed in terms of SCV-Image quality ($\{M_{\text{Positive caption high expertise}}=4.7$, $SD=1.4$ and $(M=4.15$ Negative caption high expertise', $SD=1.5$; $t(134)=2.2$, $p=0.029\}$). Similarly, for the low expertise condition, a marginal difference was observed due to the type of caption in terms of SCV-image quality ($M_{\text{Positive caption low expertise}}=4.4$,

TABLE 6 | Multivariate tests^a.

Effect		Value	<i>F</i>	Hypothesis df	Error df	Sig.	Partial eta squared
Types of captions	Pillai's Trace	0.039	2.755 ^b	4.000	271.000	0.028	0.039
Level of Expertise	Pillai's Trace	0.013	0.925 ^b	4.000	271.000	0.450	0.013
Caption * Expertise	Pillai's Trace	0.019	1.343 ^b	4.000	271.000	0.254	0.019

^aDesign: Intercept + types of captions + level of Expertise + caption * Expert.^bExact statistic.**TABLE 7** | Tests of between-subjects effects (H2).

Source	Dependent variable	Type III sum of squares	df	Mean square	<i>F</i>	Sig.	Partial eta squared
Types of captions	Image_quality	20.399	1	20.399	9.330	0.002	0.033
	Engrossment	0.018	1	0.018	0.012	0.912	0.000
	Self_projection	0.616	1	0.616	0.298	0.586	0.001
	Mental_fluency	2.088	1	2.088	0.810	0.369	0.003
Level of expert	Image_quality	7.136	1	7.136	3.264	0.072	0.012
	Engrossment	0.003	1	0.003	0.002	0.963	0.000
	Self_projection	0.913	1	0.913	0.442	0.507	0.002
	Mental_fluency	0.200	1	0.200	0.077	0.781	0.000
Caption * Expertise	Image_quality	0.005	1	0.005	0.002	0.964	0.000
	Engrossment	2.543	1	2.543	1.771	0.184	0.006
	Self_projection	3.961	1	3.961	1.918	0.167	0.007
	Mental_fluency	0.052	1	0.052	0.020	0.888	0.000

SD=1.4) and ($M_{\text{Negative caption low expertise}}=3.9$, SD=1.6; $t(141)=1.95$, $p=0.05$). The congruence between caption type and level of expertise caused the greatest difference between groups ($M_{\text{Positive caption high expertise}}=4.7$, SD=1.4) and ($M_{\text{Negative caption Low expertise}}=3.9$, SD=1.6; $t(131)=3.102$, $p=0.002$) in terms of SCV Image quality. However, there was no significant difference on any of the SCV dimensions for incongruent groups – ‘positive caption–low expertise’ and ‘negative caption–high expertise’.

Regression analysis was employed to explore the remaining relationships (H3–H14), highlighting significant relationships (Table 9). Higher levels of SCV influenced SME (H3) as well as all the dimensions of emotion (H4–H6). The aroused emotion influenced the ad-attitude (H7–H9), which in turn affected SME (H10). The increased SME led to greater social influence (H11, H13) on purchase intentions for the advertised brand (H12, H14).

4.1 | Testing Control Variables: Age, Gender and Education

All the causal relationships were also tested by controlling for age, gender and education. The results of hierarchical regression in Table 10 show that when the independent variables were introduced (model 2) with the control variable (model 1), R^2 change

(ΔR^2) was significant in every case. This implies that the change in the dependent variables was attributed to the independent variables, rather than to the control variables (Pallant 2010).

5 | Discussion

5.1 | Antecedents of SME With Sustainability-Ads

The main effect of the types of captions on SCV was significant; however, the respective effect of source expertise was not. It can be argued that since the social-media users are increasingly aware of sustainability-related issues, it is less likely that their behaviour will be influenced by other users (Berkowitz 1986). Users may be reluctant to consider a peer as an expert on sustainability. Therefore, information from an expert source regarding sustainability does not tend to influence generating a visual mental image (Amit and Greene 2012; Ryoo et al. 2017).

The results also suggest that a positive caption tends to significantly prompt higher image quality within the SCV framework. Self-projection and mental fluency also tend to be more influenced by a positive caption. In contrast, engrossment tends to be influenced by a negative caption. Negative comments can elicit greater interest in people than positive ones, which makes individuals more engrossed (Trusov et al. 2009).

TABLE 8 | Pairwise comparisons of positive and negative captions between the high and low expertise levels on the 4 dimensions of SCV.

	Positive caption			Negative caption		
	High expertise	Low expertise		High expertise	Low expertise	
Image_quality	4.70	4.37	$t(140)=1.41$	4.15	3.88	$t(135)=1.01$
	1.40	1.38	$p=0.16$	1.50	1.65	$p=0.31$
Engrossment	2.49	2.69	$t(140)=-1.04$	2.70	2.56	$t(135)=0.64$
	1.17	1.09	$p=0.298$	1.25	1.33	$p=0.53$
Self_projection	3.42	3.54	$t(140)=-0.54$	3.56	3.24	$t(135)=1.2$
	1.35	1.36	$p=0.587$	1.57	1.47	$p=0.22$
Mental_fluency	4.52	4.43	$t(140)=0.30$	4.31	4.33	$t(135)=-0.05$
	1.17	1.15	$p=0.76$	1.62	1.63	$p=0.96$
	High expertise			Low expertise		
	Positive caption	Negative caption		Positive caption	Negative caption	
Image_quality	4.70	4.15	$t(134)=2.2$	4.37	3.88	$t(141)=1.95$
	1.40	1.50	$p=0.029$	1.38	1.65	$p=0.05$
Engrossment	2.49	2.70	$t(134)=-1.00$	2.69	2.56	$t(128.07)=0.64$
	1.17	1.25	$p=0.319$	1.09	1.33	$p=0.52$
Self_projection	3.41	3.56	$t(134)=-0.57$	3.54	3.24	$t(141)=1.26$
	1.35	1.57	$p=0.57$	1.36	1.47	$p=0.211$
Mental_fluency	4.52	4.31	$t(134)=0.713$	4.43	4.33	$t(141)=0.40$
	1.67	1.62	$p=0.48$	1.53	1.63	$p=0.69$
	Positive caption high expertise	Negative caption low expertise		Positive caption low expertise	Negative caption high expertise	
Image_quality	4.70	3.87	$t(131)=3.10$	4.37	4.15	$t(144)=-0.93$
	1.40	1.65	$p=0.002$	1.37	1.50	$p=0.35$
Engrossment	2.49	2.56	$t(131)=-0.31$	2.69	2.70	$t(144)=0.05$
	1.17	1.33	$p=0.76$	1.09	1.25	$p=0.96$
Self_projection	3.42	3.24	$t(131)=0.71$	3.54	3.56	$t(144)=0.08$
	1.35	1.47	$p=0.48$	1.36	1.57	$p=0.93$
Mental_fluency	4.51	4.33	$t(131)=0.65$	4.43	4.31	$t(144)=-0.46$
	1.67	1.62	$p=0.51$	1.53	1.62	$p=0.65$

Note: The top value in each cell is the mean; the bottom value is the standard deviation.

Previous studies suggest that messages can stimulate consumers' working memory, a function of image-quality and self-projection (Barsalou 2008; Yim et al. 2018). This generated image prompts recipients' moral judgement (Amit and Greene 2012). Since sustainability has been associated with morality (Herédia-Colaço and Vale 2018), sustainability-ads with a positive message should also inspire image quality through working memory. This impact is greater for positive captions than negative captions because of consumers' inclination towards positive messages regarding sustainability issues (Song and Kim 2018). Likewise, SCV components- 'image

quality' and 'self-projection' can also significantly influence SME.

Furthermore, SCV has significantly influenced all emotional dimensions, namely, pleasure, arousal and dominance. Image quality contributed to this influence, in line with the previous results. Emotional responses evoked by the sustainability-ad tend to influence ad-attitude, which enhances SME. This study suggests that when consumers can visualise themselves being exposed to the sustainability-ad, they tend to feel pleasure and arousal. In alignment with the previous studies, this study

TABLE 9 | Summary of causal relationships.

Hypothesized relationships IV → DV	Beta	SE	Sig	R ²	Hypothesis supported?
H3: SCV → SME	Image quality ($\beta = 0.195$, $p = 0.001$); Engrossment ($\beta = 0.037$, $p = 0.492$), Self-projection ($\beta = 0.339$, $p = 0.000$), Mental fluency ($\beta = 0.126$, $p = 0.072$)		0.000	0.335	Yes
H4: SCV → Pleasure	Image quality ($\beta = 0.379$, $p = 0.000$), Engrossment ($\beta = -0.020$, $p = 0.689$), Self-projection ($\beta = 0.099$, $p = 0.161$), Mental fluency ($\beta = 0.318$, $p = 0.000$)		0.000	0.439	Yes
H5: SCV → Arousal	Image quality $\beta = 0.195$, $p = 0.002$; Engrossment $\beta = 0.059$, $p = 0.297$; Self-projection $\beta = 0.266$, $p = 0.001$; Mental fluency $\beta = 0.102$, $p = 0.166$		0.000	0.252	Yes
H6: SCV → Dominance	Image quality ($\beta = 0.169$, $p = 0.016$); engrossment ($\beta = -0.101$, $p = 0.109$); self-projection ($\beta = 0.142$, $p = 0.119$); mental fluency ($\beta = 0.007$, $p = 0.929$)		0.001	0.069	Yes
H7: Pleasure → Ad-attitude	0.876	0.045	0.000	0.573	Yes
H8: Arousal → Ad-attitude	0.576	0.075	0.000	0.177	Yes
H9: Dominance → Ad-attitude	0.255	0.092	0.006	0.027	Yes
H10: Ad-attitude → SME	0.526	0.049	0.000	0.290	Yes
H11: SME → Normative influence	0.370	0.057	0.000	0.133	Yes
H12: Normative influence → Purchase intention	0.338	0.06	0.000	0.104	Yes
H13: SME → informational influence	0.481	0.058	0.000	0.202	Yes
H14: informational influence → Purchase intention	0.388	0.055	0.000	0.153	Yes

also identified dominance as the least influenced dimension. ‘Dominance’ has received limited empirical support compared to ‘pleasure’ and ‘arousal’ (Kim and Johnson 2016; Desmet 2010; Russell et al. 1981). Consumers tend to appreciate sustainability initiatives by organisations and they become alerted when they are exposed to relevant information. However, they tend to have limited understanding of how their actions and behaviour may make a difference. (Desmet 2010; Russell et al. 1981).

The findings suggest that a sustainability-ad can generate emotions that can inspire favourable reactions. This emotional response can influence ad-attitude and the subsequent SME with the sustainability-ad. The findings elaborate on past research, which suggests that when consumers feel proud of past sustainability-related behaviour, it tends to increase their

sustainable purchase intentions (Rowe et al. 2019). Alternatively, where emotions like ‘anger’ are aroused due to misconduct by organisations, they are reflected negatively in terms of pleasure and dominance and positively in arousal. In this case, although individuals are aware of the situation, they feel that they have no control. This can lead consumers to engage in negative word of mouth (Antonetti and Manika 2017).

5.2 | Consequences of SME With Sustainability-Ads

Consumers’ SME tends to impact normative and informational influence. Their purchase behaviour towards a brand can be influenced by their peers’ opinions (Hamilton et al. 2017). Due to

TABLE 10 | Impact of control variables.

Results of regression analysis by controlling variables—age gender and education. <i>N</i> = 279				
Dependent variable	Independent variable	β	R^2	ΔR^2
SME	Control_variables		0.008	
	SCV_image	0.186***	0.33	0.322***
	SCV_engrossment	0.032		
	SCV_self projection	0.385***		
	SCV_mental fluency	0.013		
Pleasure	Control_variables		0.002	
	SCV_image	0.328***	0.422	0.420***
	SCV_engrossment	−0.039		
	SCV_self projection	0.22***		
	SCV_mental fluency	0.171***		
Arousal	Control_variables		0.005	
	SCV_image	0.136**	0.25	0.245***
	SCV_engrossment	0.041		
	SCV_self projection	0.235***		
	SCV_mental fluency	−0.017		
Dominance	Control_variables		0.003	
	SCV_image	0.1*	0.078	0.075***
	SCV_engrossment	−0.075		
	SCV_self projection	0.076		
	SCV_mental fluency	0.058		
Ad-attitude	Control_variables		0.028	
	Pleasure	0.874***	0.598	0.570***
	Control_variables		0.028	

(Continues)

TABLE 10 | (Continued)

Results of regression analysis by controlling variables—age gender and education. <i>N</i> = 279				
Dependent variable	Independent variable	β	R^2	ΔR^2
Ad-attitude	Arousal	0.579***	0.206	0.178***
	Control_variables		0.028	
Ad-attitude	Dominance	0.242**	0.052	0.024**
	Control_variables		0.008	
SME	Ad-attitude	0.530***	0.293	0.286***
	Control_variables		0.002	
Purchase intention	Ad-attitude	0.595***	0.32	0.318***
	Control_variables		0.018	
Normative influence	SME	0.372***	0.151	0.133***
	Control_variables		0.023	
Informative influence	SME	0.474***	0.217	0.194***
	Control_variables		0.002	
Purchase intention	Normative influence	0.347***	0.11	0.108***
	Control_variables		0.002	
Purchase intention	Informative influence	0.401***	0.161	0.159***

Note: The first row of every cell represents model 1 with the control variables and the second row represents model 2 with the independent variables from the model.

*** $p < 0.001$.

** $p < 0.005$.

* $p < 0.05$.

informational influence, consumers tend to accept the views of peers as accurate. Moreover, normative influence tends to create a feeling of superiority among group members (Harmeling et al. 2017). Engagement with a post may generate a subsequent information cascade driven by a platform's algorithm, which can motivate users to reevaluate existing norms or consumption patterns. Social influence theory suggests that adopting a sustainable consumption behaviour is a function of information and norms inspired by SME. This elaborates on previous literature, which suggests that sustainable behaviour may be adopted to enhance the integration within a group rather than for individuals to differentiate themselves from their peers (Brooks and Wilson 2015; Aagerup and Nilsson 2016).

5.3 | Implications and Limitations

This study has enriched the sustainability-ad literature by incorporating SCV, PAD and social influence theory in the context of social-media. The work clarifies the process which can increase SME and in turn positively influence purchase decisions regarding a sustainable-product. Through user generated content (i.e., posts, comments, images, videos etc.) brands can get valuable insights and assess the brand image through consumers' shared opinions. This knowledge can be used by brands to create value, increase agility, facilitate problem-solving activities, and enhance consumers' attachment with the brand (Paul et al. 2024). An increasing number of brands are incorporating sustainability agendas in their business practice; hence, managers need to gauge the underlying factors that potentially influence consumers (Sharma et al. 2025). For example, to promote sustainable-products, brands should gauge the pulse of the market by prompting general users' SME, rather than using expert influencers. They could further focus on content which can evoke pleasure and cognitive responses. In other words, their sustainability-ads should be informative and positive in nature.

The skewness of the sample in relation to age (18–25), education (bachelor's degree), and gender (mostly female) may limit the generalisability of the results. However, age, education and gender have no statistically significant effect on the results. Furthermore, the study examined a variety of constructs within a single study to facilitate the understanding of the influence of positive/negative posts on social-media on sustainable consumption. Future research can include research designs with multiple studies examining each effect separately to verify our results. In addition, 'image quality' in SCV, pleasure, and arousal in PAD have been identified as the most influential factors; hence, future studies can focus on these constructs.

6 | Conclusion

Consumption trends are shifting towards adopting and attaining sustainability (Discetti 2021). Moreover, organisations' drive towards digital transformation inspires them to utilise social-media strategies to promote brand awareness and loyalty as well as the innovativeness of products (Paul et al. 2024; Sharma et al. 2025). Consumers' sustainable consumption behaviour can direct organisations to invest in sustainable practices (Papaoikonomou et al. 2024). Consumers' perceptions of firms' sustainability-related initiatives can determine their reputation, profit, and similar future endeavours. Promoting initiatives related to sustainability, or initiatives which can prompt consumers to adopt a sustainable behaviour, requires an understanding of how consumers form their attitudes and perceptions. This paper provides critical insight into two well-established aspects of sustainability: source expertise and posts on company-led posts on social-media for higher SME. The findings highlight the fact that opinions expressed by consumers can have a significant influence on their peers' consumption vision, emotions, and SME, as well as sustainable consumption.

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Disclosure

Position of the paper: Top research areas of International Journal of Consumer Studies (IJCS) include- consumer behaviour, sustainability, sustainable consumption, consumption behaviour, and purchase intention. This denotes that the content of this paper directly aligns with the IJCS's areas of interest. Permission of reproduce materials from other sources: The advertisement used as stimulation has been designed by the authors.

Ethics Statement

The paper is developed from the PhD thesis of the first author, which was completed under the ethical guidelines of Newcastle University.

Consent

The data has been collected after the explicit consent from the respondents. Grammarly has been used for initial proofreading.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data is available at <https://doi.org/10.7910/DVN/KN9YVF>.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. **Appendix S1:** Questionnaire.