Article

The Process Through Which Young Adults Form Attitudes Towards Sustainable Products Through Social Media Exposure in Kuwait

Khalida Al-Kenane [1], Ahmed Almoraish [2,*], Dalal Al-Enezi [3], Awrad Al-Matrouk [4], Nour AlBuloushi [1] and Faisal AlReshaid [5]

1   Business Administration Department, Gulf University for Science and Technology, Mubarak Al-Abdullah 32093, Kuwait; alkenane.k@gust.edu.kw (K.A.-K.); albuloushi.n@gust.edu.kw (N.A.)
2   Department of Marketing and Strategy, Cardiff University, Cardiff CF10 3EU, UK
3   Business Department, Kuwait College of Science and Technology, Doha 35004, Kuwait; dalal_enezi@hotmail.com
4   Brokerage, National Bank of Kuwait, Kuwait City 13050, Kuwait; almatrouk28@icloud.com
5   College of Business & Economics, American University of Kuwait, Safat 13034, Kuwait; falreshaid@auk.edu.kw
*   Correspondence: almoraisha1@cardiff.ac.uk

Abstract: This study investigates how social media exposure shapes young adults' attitudes and intentions toward sustainable products in Kuwait—a high-income, oil-dependent context undergoing a digital and cultural shift. Integrating the Theory of Planned Behavior (TPB) and the Elaboration Likelihood Model (ELM), the research explores the mediating roles of environmental responsibility, social influence, and consumer attitudes in the formation of sustainable purchase intentions. Data were collected via an online survey of 702 respondents aged 18–30 and analyzed using structural equation modeling (SEM). The findings reveal that social media usage significantly influences sustainable purchase intention, social influence, and consumer attitudes. Environmental responsibility emerges as a key driver of both attitudinal and normative pathways. Notably, the study finds no direct link between consumer attitude and intention, highlighting a persistent attitude–behavior gap. The results offer theoretical insights into digital persuasion and normative influence while providing practical guidance for marketers and policymakers promoting sustainability in digitally connected, non-Western societies.

Keywords: sustainable consumption; social media; young adults; TPB; ELM; Kuwait; structural equation modeling

1. Introduction

The increasing urgency of environmental challenges—including climate change, resource depletion, and ecological degradation—has positioned sustainable consumption as a pressing concern for scholars, policymakers, and practitioners alike [1,2]. Among various demographic groups, young adults have emerged as particularly salient actors in advancing sustainability agendas [3]. Their heightened awareness of environmental issues, coupled with their digital nativity, renders them both responsive to and influential within sustainability-related discourses. In parallel, the ubiquity of social media platforms has reconfigured the landscape of consumer engagement by facilitating real-time information sharing, peer influence, and value-based expression. Social media, therefore, represents

a powerful context through which pro-environmental attitudes and behaviors may be shaped [4–6].

While prior research has recognized these dynamics, empirical studies in non-Western or culturally distinct settings, such as Kuwait, remain limited [7]. The extent to which such mechanisms operate in socio-economically and culturally distinct settings remains underexplored. Kuwait presents a unique and underexamined context in this regard. As a high-income, oil-dependent economy undergoing rapid urbanization, Kuwait is characterized by entrenched consumerist norms and significant sustainability challenges [8,9]. Nonetheless, a growing segment of the youth population is demonstrating increased receptivity to environmentally responsible practices, often mediated through digital platforms [9,10]. The extent to which this shift translates into attitudinal change and behavioral intention, particularly in response to sustainability-related content encountered online, warrants systematic investigation.

Moreover, there is limited empirical evidence on the mechanisms through which social media exposure influences sustainable attitudes and intentions. Social influence, environmental responsibility, and consumer evaluations of product attributes are potential mediators that merit closer theoretical and empirical scrutiny. Understanding the interplay among these constructs is essential for advancing a more refined account of how digital communication influences pro-environmental behavior.

This study addresses these gaps by investigating the impact of social media exposure on young adults' attitudes toward sustainable products in Kuwait. Drawing upon the Theory of Planned Behavior [11] and the Elaboration Likelihood Model [12,13], the study examines how key psychological constructs mediate the relationship between digital engagement and sustainable purchase intentions. Contextualizing these dynamics within a Gulf state setting, the research contributes to the broader literature on sustainability communication, extending its applicability to non-Western, digitally integrated societies. The findings aim to offer theoretically grounded and context-sensitive insights with implications for both academic inquiry and sustainability-oriented marketing strategies.

2. Literature Review and Hypotheses Development

2.1. Theoretical Foundation: Integrating the Theory of Planned Behavior and the Elaboration Likelihood Model

To understand how young adults in Kuwait form attitudes toward sustainable products through social media, this study integrates two complementary theoretical frameworks: the Theory of Planned Behavior (TPB) [11] and the Elaboration Likelihood Model (ELM) [13].

The TPB has been extensively applied to predict environmentally relevant behaviors. It posits that an individual's behavioral intention is influenced by three constructs: attitude toward the behavior, subjective norms, and perceived behavioral control. This model provides a robust framework to examine how favorable attitudes, normative pressure, and personal efficacy collectively influence the decision to engage in sustainable consumption [14]. In this study, TPB helps explain the motivational underpinnings of sustainable purchase intention, particularly by examining how social influence, attitudes, and internal responsibility drive intention.

However, the TPB alone does not fully capture the informational dynamics of social media environments, where users are exposed to vast streams of content varying in quality, depth, and credibility. Here, the ELM adds conceptual richness. According to ELM, individuals process persuasive information via two routes: the central route, where they engage in thoughtful consideration of arguments, and the peripheral route, where superficial cues like source attractiveness or message repetition shape attitudes [13]. Social media content

may activate both routes, depending on the consumer's involvement, perceived credibility of the source, and relevance of the message [15,16].

The integration of TPB and ELM thus provides a comprehensive framework: TPB accounts for motivational and normative components of behavior, while ELM addresses how digital content influences cognition and attitude formation. This combination is particularly relevant for young adults in Kuwait, who are simultaneously influenced by peer norms and saturated with persuasive environmental content through social media [17,18]. Linking these perspectives, this study aims to illuminate how social media influences sustainable purchase intention.

2.2. Social Media Usage

Social media offers interactive environments where users engage with sustainability-related content, observe peer behaviors, and form beliefs through digital storytelling, influencer endorsements, and visual campaigns [19,20]. Such platforms play an important role in translating environmental awareness into behavioral intention by shaping values and offering models for sustainable consumption. Prior studies demonstrate that exposure to green messages on social media can increase environmental concern and willingness to purchase eco-friendly products [4,21].

Nonetheless, the direct influence of social media usage on sustainable purchase intention has been debated. While some argue that exposure alone may not result in behavioral change unless accompanied by motivation or social pressure [22], others highlight the role of emotional resonance and repeated exposure in strengthening commitment [23]. In this study, social media usage is conceptualized as a combination of active engagement (e.g., sharing content) and passive exposure (e.g., viewing posts), both of which can shape behavioral intention. Thus, we propose the following hypothesis:

H1: *Social media usage positively influences sustainable purchase intention.*

Social media not only informs but also amplifies social norms. Through likes, shares, and influencer advocacy, these platforms signal what behaviors are socially desirable. The "social proof" embedded in these signals fosters normative pressure, especially among young adults who are sensitive to peer approval [24]. In collectivist-leaning societies like Kuwait, such cues may exert stronger influence, creating environments in which sustainable behaviors are more likely to be internalized and enacted [25,26].

Moreover, the convergence of digital identity and peer influence creates a context where individuals model their values in line with perceived group expectations. Thus, social media usage contributes to the construction and reinforcement of social influence around sustainability. Therefore, the following hypothesis emerges:

H2: *Social media usage positively influences social influence.*

Social media enables both cognitive and affective processing of information—ideal conditions for attitude formation. Through the central route, users may scrutinize sustainability-related claims, such as a product's environmental impact or supply chain transparency. Through the peripheral route, attitudes may form based on visually appealing content, trusted influencers, or repeated exposure [13,27].

Studies have shown that exposure to environmentally themed content online leads to more favorable evaluations of green products, particularly when messages are personally relevant and credible [28,29]. Accordingly, regular social media engagement with sustainability narratives is likely to strengthen pro-sustainability attitudes. Thus, we hypothesize:

H3: *Social media usage positively influences consumer sustainable purchase attitude.*

2.3. Drive for Environmental Responsibility

Environmental responsibility reflects a person's internalized sense of obligation to act in ways that protect and preserve the natural environment. It is shaped by emotional affinity toward nature [30], biospheric values [31], and self-identity alignment with pro-environmental roles [32]. Individuals who perceive themselves as morally accountable for environmental outcomes are more likely to engage in behaviors that are consistent with this self-concept, such as supporting sustainable products [33].

In emerging economies like Kuwait, where regulatory mechanisms around sustainability remain limited, environmental responsibility may operate as a critical internal driver of sustainable consumption [34]. It serves not only to guide individual attitudes but also to legitimize sustainability practices within one's social circles. That is, individuals with strong environmental responsibility are more likely to express and promote these values, potentially influencing the behaviors and expectations of those around them. This aligns with research suggesting that moral conviction often translates into advocacy, thereby reinforcing perceived social norms [35].

Furthermore, those with a strong drive for environmental responsibility are more receptive to sustainability messaging and tend to evaluate sustainable products more favorably. Such individuals are also more likely to act on their attitudes, as their intention is underpinned by value congruence and emotional commitment. Based on this reasoning, we propose the following hypotheses:

H4: *Drive for environmental responsibility positively influences consumer sustainable purchase attitude.*

H5: *Drive for environmental responsibility positively influences sustainable purchase intention.*

H6: *Drive for environmental responsibility positively influences social influence.*

2.4. Consumer Attitudes and Sustainable Purchase Intention

Attitudes toward sustainable products reflect consumers' evaluative judgments about the desirability and utility of green alternatives. According to TPB, favorable attitudes increase the likelihood of intention formation [11]. These attitudes are shaped by beliefs about product quality, ethical value, and personal relevance [36–38].

While past studies have identified a gap between attitude and behavior, it is argued that in value-congruent situations, such as when consumers identify as environmentally responsible, attitudes are more predictive of intention [39,40]. This suggests that pro-sustainability attitudes, when reinforced by internal responsibility or normative pressure, can significantly influence intentions. Therefore, we are investigating the following hypothesis:

H7: *Consumer sustainable purchase attitude positively influences sustainable purchase intention.*

2.5. Social Influence and Sustainable Purchase Intention

Subjective norms, as conceptualized in TPB, refer to the perceived expectations of significant others. In social media environments, these expectations are hyper-visible and often shaped by influential figures, peers, and online communities [14]. When sustainability is portrayed as a normative behavior, individuals are more likely to align their intentions accordingly [41]. This effect may be particularly strong in transitional societies like Kuwait, where traditional norms coexist with modern, digitally mediated influences. As such, the perceived social acceptability of sustainable consumption may act as a critical bridge between exposure and behavior. Thus, we seek to explore the following hypothesis:

H8: *Social influence positively influences sustainable purchase intention.*

Figure 1 presents the hypothesized model.
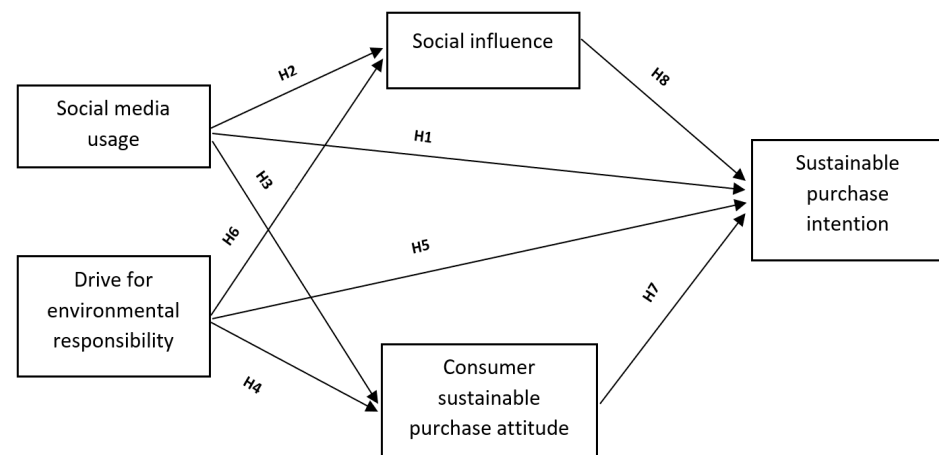
Figure 1. Hypothesized model.

3. Methodology

3.1. Research Design

This study adopted a cross-sectional quantitative research design, which is appropriate for examining relationships among constructs at a single point in time [42,43]. While this approach does not allow for establishing causal inferences, it is widely accepted for identifying associative relationships and explaining behavioral patterns across population segments [44]. Given the aim of this research—to investigate how social media usage influences young adults' attitudes and intentions toward sustainable products in Kuwait—this design offers both feasibility and analytical robustness.

A survey method was selected due to its efficiency in collecting standardized data from a relatively large and demographically diverse sample, which is essential for enabling generalizability and valid statistical inference [45]. The survey instrument was structured to capture multiple latent constructs central to the theoretical framework.

3.2. Sampling Strategy

The target population comprised young adults aged 18 to 30 years living in Kuwait, a segment identified as both highly active on social media and increasingly responsive to environmental concerns [24,46]. According to national demographic estimates, this group represents approximately 900,000 individuals [47]. The required sample size was determined using Cochran's formula for large populations:

$$n = \frac{Z^2 \times p \times (1-p)}{e^2}$$

Assuming a 95% confidence level (Z = 1.96), an estimated population proportion of 0.5, and a margin of error (e) of 3.7%, the target sample size was calculated to be 702 respondents, which is well above the 200–400 minimum recommended for structural equation modelling [48]. Due to the absence of a comprehensive sampling frame, a non-probability sampling strategy was employed, combining convenience and snowball sampling methods [49]. Initial respondents were drawn from academic institutions, youth networks, and professional circles, after which they were encouraged to share the survey within their social networks. While this approach introduces potential limitations in terms of representativeness, it is widely accepted in behavioral studies where the sampling frame

is diffuse. Efforts were made to ensure a degree of demographic variation to support analytical generalizability. Given the non-probabilistic nature of our sampling, this study is exploratory and seeks to identify emerging relationships among psychological and behavioral constructs related to sustainable consumption among young Kuwaiti adults, rather than making claims of generalizability to the national population.

3.3. Data Collection

Data were collected through an online survey distributed via Google Forms, targeting popular social media channels in Kuwait, namely Instagram, Twitter (X), and WhatsApp. This mode of distribution was selected to reflect the digital media consumption habits of the target demographic and to support efficient data capture [50]. Participants were provided with an information sheet and consent form at the beginning of the survey. The form outlined the study's purpose, data confidentiality procedures, and the voluntary nature of participation. Only individuals who explicitly agreed to these terms were able to proceed, in accordance with ethical guidelines for social research [42].

The instrument comprised 23 items measuring five core constructs: social media usage, social influence, drive for environmental responsibility, consumer sustainable purchase attitude, and sustainable purchase intention.

To ensure clarity and relevance in the Kuwaiti context, the instrument underwent translation and back-translation between English and Arabic by two independent bilingual experts [51]. An expert panel review was also conducted with five academics in marketing, sustainability, and cross-cultural consumer behavior to confirm content validity. A pilot study was carried out with 50 participants to evaluate reliability and item performance. All subscales achieved Cronbach's alpha values above 0.70, demonstrating acceptable internal consistency. Specifically, social media usage (0.77), social influence (0.83), drive for environmental responsibility (0.79), consumer sustainable purchase attitude (0.88), and sustainable purchase intention (0.85).

3.4. Measures

The study employed validated measurement scales adapted from established literature to assess key constructs, with all items measured on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. Social media usage items were adapted from Arora, Rana, and Prashar [46] and Hajli [19], capturing the role of online engagement in influencing sustainable behavior. Subjective norms, as outlined in the Theory of Planned Behavior, were operationalized through the social influence construct. This was measured using items adapted from [11] and supported by empirical studies [14,46], which assess perceptions of peer expectations, conformity pressures, and influence from significant others regarding sustainable purchasing. Drive for environmental responsibility items were adapted from works focusing on environmental self-identity and emotional involvement with nature [30–33,52]. Attitude was operationalized as consumer sustainable purchase attitude, measured using items adapted from Chan [36], Griskevicius, Griskevicius, Tybur and Van den Bergh [37], Mostafa Mostafa [39], and Roberts Roberts [53]. These items capture respondents' evaluative judgments regarding the environmental value, effectiveness, and personal significance of sustainable products. Lastly, sustainable purchase intention items were adapted from Chan [36], D'souza, et al. [54], Kumar Kumar and Ghodeswar [55], and Nguyen Nguyen, et al. [56], reflecting deliberate and informed choices toward environmentally friendly products. All measures are available in Appendix A.

3.5. Data Analysis

Data analysis was conducted in two stages. First, confirmatory factor analysis (CFA) was employed to assess the measurement model. The goal was to verify convergent and

discriminant validity among the latent constructs. Key fit indices, such as the comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean square residual (SRMR), were evaluated using recommended thresholds [48].

Second, structural equation modeling (SEM) was used to test the hypothesized relationships between constructs [57,58]. SEM is particularly well-suited for complex behavioral models as it simultaneously accounts for measurement error and estimates direct and indirect relationships among variables [59]. All analyses were conducted using SPSS 28 for preliminary statistics and AMOS 26 for model estimation and path analysis.

4. Results and Analysis

Table 1 represents the demographic characteristics of the respondents, highlighting key attributes such as gender, age, occupation, and nationality. The sample consists of 702 respondents, with a slight majority being male (56.7%) and the rest female (43.3%). The largest age group falls within the 24–26 years range (43%), followed by 18–20 years (29.8%) and 21–23 years (27.2%), reflecting a predominantly young adult population. Occupation-wise, more than half of the respondents are employees (57.8%), while 42.2% are students, suggesting diversity in professional engagement. In the context of nationality, Kuwaiti nationals make up the majority (59%), with non-Kuwaitis comprising 41%. This demographic composition is critical for understanding the context of the study, as variations in gender, age, occupation, or nationality may influence responses and the generalizability of our findings.

Table 1. Demographic characteristics of respondents.

Characteristics		Frequency (*n*)	Percentage (*n*%)
	Male	398	56.7
Gender	Female	304	43.3
	Total	702	100
	18–20 years	209	29.8
	21–23 years	191	27.2
Age	24–26 years	302	43.0
	Total	702	100
	Employee	406	57.8
Occupation	Student	296	42.2
	Total	702	100
	Kuwaiti	414	59.0
Nationality	Non-Kuwaiti	288	41.0
	Total	702	100

The most common social media channels used by the participants, as indicated on the survey: Instagram was the most commonly used platform, well ahead of Snapchat, and Twitter. Facebook and LinkedIn were less popular. By doing so, we utilize the platform-specific understanding to better understand the effects of exposure to social media on attitudes towards sustainable products.

Table 2 displays the descriptive analysis for five factors, such as social media usage (SMU), social influence (SI), drive for environmental responsibility (DFER), consumer sustainable purchase attitude (CSPA), and sustainable purchase intention (SPI), segmented by gender, occupation, and nationality, which were obtained by the statistical package for social science (SPSS). Composite scores for each construct were calculated by averaging the responses across their respective Likert-scale items. These composite values were used for the descriptive analysis and reporting of means and standard deviations in

Table 2. Across all factors, variations are observed based on these demographic groups. Female employees (both Kuwaiti and Non-Kuwaiti) tend to score slightly higher on social media usage (mean ± SD: 3.16 ± 0.69 and 3.03 ± 0.54, respectively) compared to male employees, while male employees show slightly higher scores for SPI among Non-Kuwaitis (mean ± SD: 3.05 ± 0.73). Female students, especially Kuwaiti, display higher means for SMU (3.13 ± 0.66) and SI (3.16 ± 0.70). Interestingly, male students (Non-Kuwaiti) show a higher DFER (3.14 ± 0.70) and consumer sustainable purchase attitude (3.17 ± 0.73). These findings highlight differences in sustainable behavior and attitudes influenced by gender, occupation, and nationality, offering valuable insights for targeted strategies in sustainability-related interventions.

Table 2. Descriptive statistics of five factors by gender, occupation, and nationality.

Factors	Social Media Usage Mean ± SD	Social Influence Mean ± SD	Drive for Environmental Responsibility Mean ± SD	Consumer Sustainable Purchase Attitude Mean ± SD	Sustainable Purchase Intention Mean ± SD
Female Employee					
Kuwaiti	3.16 ± 0.69	3.07 ± 0.67	3.06 ± 0.76	3.07 ± 0.8	3.12 ± 0.70
Non-Kuwaiti	3.03 ± 0.54	3.00 ± 0.78	3.09 ± 0.59	2.88 ± 0.71	3.01 ± 0.65
Female Student					
Kuwait	3.13 ± 0.66	3.03 ± 0.80	3.16 ± 0.70	3.07 ± 0.90	3.06 ± 0.75
Non-Kuwaiti	2.89 ± 0.57	3.07 ± 0.63	3.09 ± 0.57	3.03 ± 0.7	2.99 ± 0.67
Male Employee					
Kuwaiti	3.01 ± 0.79	2.98 ± 0.82	3.05 ± 0.81	3.04 ± 0.82	3.01 ± 0.82
Non-Kuwaiti	3.12 ± 0.61	3.08 ± 0.69	3.03 ± 0.66	3.05 ± 0.73	2.96 ± 0.70
Male Student					
Kuwaiti	3.02 ± 0.66	2.91 ± 0.73	2.91 ± 0.67	3.02 ± 0.73	2.98 ± 0.84
Non-Kuwaiti	2.92 ± 0.60	3.14 ± 0.70	3.05 ± 0.57	3.17 ± 0.73	2.90 ± 0.81

Preliminary diagnostics were conducted in SPSS prior to SEM estimation. Skewness and kurtosis values were within ±2, indicating acceptable univariate normality, and the large sample size supports approximate normality based on the Central Limit Theorem. VIF values were below 3, suggesting no multicollinearity concerns. Mahalanobis distance revealed no significant multivariate outliers.

In order to obtain the relationship between factors, we performed the Pearson's correlation analysis between five factors: social media usage, social influence, drive for environmental responsibility, consumer sustainable purchase attitude, and sustainable purchase intention, as shown in Table 3. All correlations are statistically significant at the 0.01 level, indicating meaningful relationships among the factors. The strongest correlation is observed between social media usage and drive for environmental responsibility (r = 0.297), suggesting that increased engagement with social media is closely associated with a higher drive for environmental responsibility. Social influence also shows moderate correlations with drive for environmental responsibility (r = 0.224) and consumer sustainable purchase attitude (r = 0.259). Meanwhile, sustainable purchase intention is moderately correlated with social media usage (r = 0.232) and Drive for environmental responsibility (r = 0.220), emphasizing their role in shaping sustainable purchasing behavior. Overall, the data confirm the interconnectedness of these factors in promoting sustainable practices and attitudes.

Table 3. Cross-correlation between five factors.

Pearson's Correlation Between Factors	1	2	3	4	5
1-Social media usage	1	0.205 **	0.297 **	0.206 **	0.232 **
2-Social influence	0.205 **	1	0.224 **	0.259 **	0.191 **
3-Drive for environmental responsibility	0.297 **	0.224 **	1	0.251 **	0.220 **
4-Consumer sustainable purchase attitude	0.206 **	0.259 **	0.251 **	1	0.157 **
5-Sustainable purchase intention	0.232 **	0.191 **	0.220 **	0.157 **	1

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

### 4.1. Confirmatory Factor Analysis

The confirmatory factor analysis (CFA) model obtained using AMOS was employed to validate the relationships between the observed variables (indicators) and their respective latent factors: social influence, drive for environmental responsibility, sustainable purchase intention, consumer sustainable purchase attitude, and social media usage. CFA is a critical step in estimating the measurement model in order to test a priori hypotheses regarding the relations between observed and latent variables. Large values of the *t*-test confirm that factor loadings in the CFA model are significant ($p < 0.001$). These high loadings indicate that the relationship between each observed indicator and its respective factor is both strong and positive. Table 4 represents the factor loadings from the estimated CFA model for five key factors. The estimated CFA model network is also shown in Figure 2.

Table 4. Loading of the estimated CFA model.

Factors	Indicators	Estimate	S.E.	*t*-Test	*p*-Value
Social influence	SI4	0.807	0.200	4.031	***
	SI3	0.746	0.193	3.876	***
	SI2	1.000			
	SI1	0.711	0.195	3.651	***
Drive for environmental responsibility	DFER5	0.827	0.212	3.900	***
	DFER4	0.942	0.227	4.144	***
	DFER3	1.000			
	DFER2	0.815	0.214	3.813	***
	DFER1	0.850	0.216	3.944	***
Sustainable purchase intention	SPI1	1.000			
	SPI2	0.851	0.241	3.533	***
	SPI3	0.781	0.233	3.352	***
	SPI4	0.908	0.244	3.717	***
Consumer sustainable purchase attitude	CSPR1	0.856	0.211	4.056	***
	CSPR2	0.957	0.222	4.314	***
	CSPR3	1.000			
	CSPR4	0.705	0.197	3.580	***
Social media usage	SMU6	0.896	0.228	3.933	***
	SMU5	0.738	0.209	3.534	***
	SMU4	0.780	0.244	4.195	***
	SMU3	1.000			
	SMU2	0.940	0.234	4.020	***
	SMU1	1.012	0.243	4.165	***

*** Correlation is significant at the 0.1 level (two-tailed).
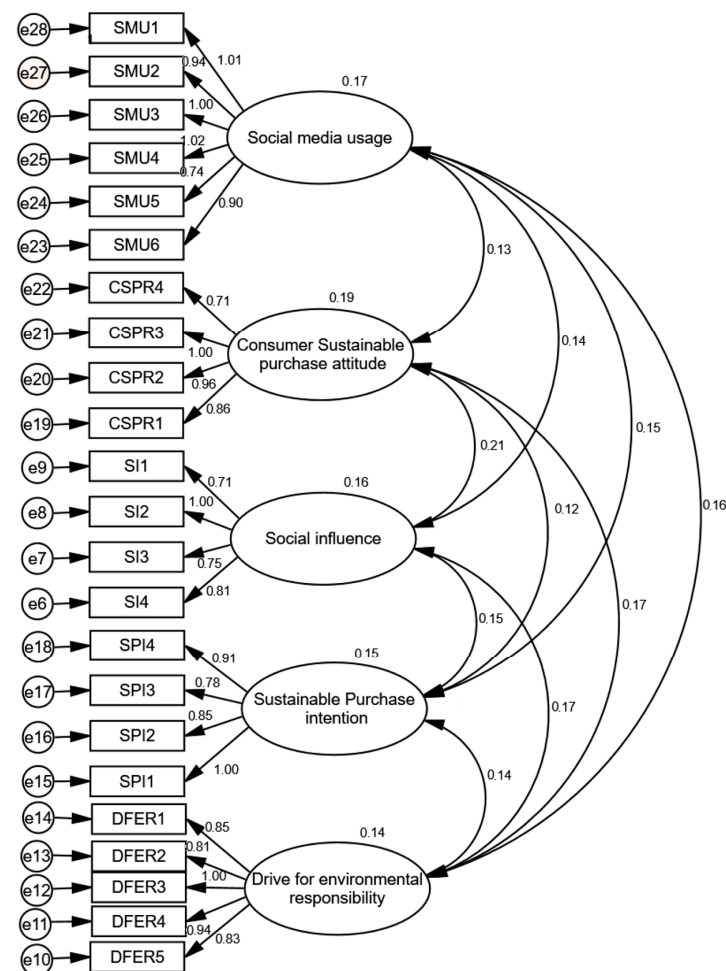
Figure 2. CFA estimated model of five factors.

Table 5 displays the fit indices for the CFA fitted model, offering a comprehensive evaluation of how well the model represents the data. The CMIN value of 260.432, along with DF (219), reflects the overall fit, although the chi-square statistic is generally interpreted alongside other indices. The $\chi^2/\mathrm{df} = 1.189$, which is within the excellent range of 1 to 3, suggests a strong model fit. The comparative fit index (CFI), at 0.902, is deemed acceptable since it is above the threshold of 0.95, though a value greater than 0.95 would indicate an even better fit. The standardized root mean square residual (SRMR) value of 0.035 and root mean square error of approximation (RMSEA) of 0.016 both fall well below their respective thresholds (0.08 and 0.06), indicating an excellent fit of the model to the data. Lastly, the PClose value of 1.000 is ideal, indicating that the model's fit is highly probable. Overall, these indices collectively suggest that the CFA model fits the data well, with most measures indicating an excellent or acceptable fit [48].

Table 5. CFA model fit measures.

Measure	Estimate	Threshold	Interpretation
CMIN	260.432	--	--
DF	219.000	--	--
CMIN/DF	1.189	Between 1 and 3	Excellent
CFI	0.902	>0.95	Acceptable
SRMR	0.035	<0.08	Excellent
RMSEA	0.016	<0.06	Excellent
PClose	1.000	>0.05	Excellent

4.2. Hypotheses Test Results

To examine the relationships proposed in the conceptual model, SEM was conducted. Table 6 summarizes the estimated path coefficients, standard errors, *t*-values, and significance levels for each hypothesized relationship.

Table 6. Estimated paths of the SEM model.

Outcome Variables	Predictor Variables	Estimate	S.E.	*t*-Test	*p*-Value	Hypotheses	Outcome
Social influence	Social media usage	0.114	0.027	4.184	***	H2	Supported
	Drive for environmental responsibility	0.186	0.032	5.748	***	H6	Supported
Consumer sustainable purchase attitude	Drive for environmental responsibility	0.111	0.028	3.986	***	H4	Supported
	Social media usage	0.154	0.031	4.906	***	H3	Supported
	Social influence	0.114	0.038	3.035	0.002	H8	Supported
Sustainable purchase intention	Consumer sustainable purchase attitude	0.061	0.037	1.659	0.097	H7	Rejected
	Social media usage	0.117	0.028	4.247	***	H1	Supported
	Drive for environmental responsibility	0.114	0.027	4.184	***	H5	Supported

Note: Level of significance *** $p < 0.001$.

H1: Social media usage was found to significantly influence sustainable purchase intention (β = 0.117, *t* = 4.247, *p* < 0.001), supporting the hypothesis.

H2: Social influence had a significant positive effect on social media usage (β = 0.114, *t* = 4.184, *p* < 0.001), providing support for H2.

H3: Social media usage positively influenced consumer sustainable purchase attitude (β = 0.154, *t* = 4.906, *p* < 0.001), supporting H3.

H4: Drive for environmental responsibility significantly influenced consumer sustainable purchase attitude (β = 0.111, *t* = 3.986, *p* < 0.001), thus H4 is supported.

H5: Drive for environmental responsibility also had a significant effect on sustainable purchase intention (β = 0.114, *t* = 4.184, *p* < 0.001), confirming H5.

H6: A strong positive relationship was observed between social influence and drive for environmental responsibility (β = 0.186, *t* = 5.748, *p* < 0.001), supporting H6.

H7: The relationship between consumer sustainable purchase attitude and sustainable purchase intention was not statistically significant (β = 0.061, *t* = 1.659, *p* = 0.097), hence H7 is not supported.

H8: Social influence significantly predicted sustainable purchase intention (β = 0.114, *t* = 3.035, *p* = 0.002), supporting H8.

5. Discussion

The results confirm that social media usage has a direct and significant impact on sustainable purchase intention (H1). This supports prior literature suggesting that digital exposure to sustainability messaging, whether processed through central (analytical) or peripheral (emotional or heuristic) routes, can drive behavioral intention [4,13,23]. Social media thus serves as a key informational and motivational environment for young consumers navigating environmental choices.

In addition, the study provides robust support for H2, showing that social media usage positively influences social influence. This finding highlights how online interactions not only inform individual values but also amplify perceived social norms through peer content, influencer engagement, and visible endorsement behaviors, such as likes and

shares [22,24]. The result is particularly salient in collectivist-oriented societies like Kuwait, where youth are often attuned to peer approval and community expectations [26].

Moreover, H3 is also supported, indicating that social media usage significantly enhances consumer sustainable purchase attitude. This aligns with the ELM's proposition that both deep cognitive elaboration (e.g., analyzing sustainability messages) and peripheral cues (e.g., source credibility, repetition, and aesthetic appeal) can influence attitude formation [16,27]. As young adults in Kuwait increasingly engage with sustainability content online, these findings affirm the potential of digital platforms to shape pro-environmental evaluations even in traditionally consumerist contexts.

The construct drive for environmental responsibility was found to significantly influence consumer sustainable purchase attitude (H4), sustainable purchase intention (H5), and social influence (H6). These findings highlight the argument that internalized moral responsibility, rooted in biospheric values and environmental self-identity, plays a crucial role in fostering both personal and social outcomes [31–33]. The results are especially relevant in Kuwait, where external sustainability incentives are limited, and internal motivations must compensate for structural deficiencies in environmental policy and infrastructure [34].

Importantly, the significant relationship between environmental responsibility and social influence (H6) highlights how personal values do not remain isolated but instead extend into social systems. Environmentally responsible individuals may act as opinion leaders, diffusing sustainability norms through digital platforms and interpersonal networks. This social spillover effect offers important implications for sustainability advocacy and campaign design in Kuwait and similar transitional economies.

Contrary to TPB predictions, consumer sustainable purchase attitude did not significantly predict purchase intention (H7). This non-significant finding draws attention to the widely discussed attitude–behavior gap in sustainable consumption literature [39,40]. While young adults may evaluate green products favorably, several contextual factors—such as product availability, perceived cost, or lack of institutional reinforcement—may hinder the translation of attitude into behavioral intent. This outcome also signals that in the Kuwaiti context, attitudinal approval alone is insufficient to generate action, especially when the behavior requires additional effort, cost, or deviation from social norms. Instead, internal responsibility and perceived social influence appear to be stronger predictors of intention, calling for more nuanced modeling of mediating and moderating factors in future studies.

The final supported hypothesis, H8, confirms that social influence significantly predicts sustainable purchase intention. This is consistent with TPB's emphasis on subjective norms as a key determinant of behavioral intention [11] and is further magnified in the context of digital platforms where social cues are highly visible and rapidly diffused [14,41].

Given the collectivist leanings and high social media penetration among Kuwaiti youth, this finding suggests that digital social environments serve not only as channels for personal expression but also as platforms for value alignment and behavioral conformity. The implication is that sustainability campaigns in such settings may be more effective when they leverage social endorsement strategies, such as influencer partnerships or peer advocacy mechanisms, rather than relying solely on informational appeals.

6. Theoretical Contribution

This study offers several key theoretical contributions to the fields of sustainable consumption, digital persuasion, and behavioral theory, particularly by integrating the Theory of Planned Behavior (TPB) and the Elaboration Likelihood Model (ELM) in a culturally specific, digitally active context—young adults in Kuwait.

First, this study extends the application of the TPB [11] to a non-Western, oil-reliant context where pro-environmental policy enforcement is relatively weak. While TPB has

been widely validated across Western and Asian economies [14], its relevance in the Gulf region remains empirically underexplored. The finding that social influence and environmental responsibility significantly predict sustainable purchase intention confirms the model's robustness across cultures. Notably, the stronger predictive power of subjective norms over attitudes in this study suggests that normative pressures may be particularly influential in collectivist or transitional societies [41], supporting cross-cultural adaptations of TPB.

Second, this study advances theoretical understanding of the persistent attitude–behavior gap [60,61]. Although TPB assumes that favorable attitudes toward a behavior will predict intention, this study found no significant relationship between consumer sustainable purchase attitude and purchase intention. This contradiction highlights the importance of incorporating contextual moderators, such as cost, availability, or policy support, when applying TPB in emerging economies [40]. The findings emphasize the need to move beyond linear models and adopt context-sensitive frameworks that account for structural and motivational constraints.

Third, this study contributes to theory by integrating the Elaboration Likelihood Model [13] to explain how social media influences pro-environmental attitudes and intentions. The ELM's central and peripheral processing routes [12,15] offer a more understanding of how individuals process persuasive sustainability messages online. The finding that social media usage significantly influences both attitudes and normative perceptions highlights the power of digital content to engage both analytical (central) and emotional/social (peripheral) pathways in shaping consumer intentions [16,27]. This dual-route perspective enriches the literature on digital environmental communication, where theoretical integration has been limited.

Fourth, the study enhances conceptualizations of environmental responsibility by positioning it as a dual-path construct: it affects individual-level cognition (attitudes) and also reinforces group-level perceptions (social norms). Prior research has treated environmental responsibility as a personal value or internalized moral norm [31,32]. However, this study demonstrates that individuals with stronger environmental convictions can influence peer perceptions and thus indirectly shape broader behavioral intentions [35]. This dual influence complements the TPB by introducing a social diffusion mechanism for value-driven behavior.

Finally, the study contributes to the intersection of sustainability and digital engagement by proposing a theoretically integrated model that explains how social media exposure shapes sustainable behavioral intentions. While prior research has addressed the informational role of social media [19,22], this study explicitly models the psychological processes (e.g., attitudes, norms, responsibility) through which digital exposure leads to pro-environmental intentions. The integration of ELM and TPB, supported by empirical evidence from a Gulf state, offers a comprehensive framework for future studies aiming to explore sustainability behavior in digitally saturated, culturally distinct environments.

Moreover, the applicability of this integrated TPB–ELM framework extends beyond Kuwait. The model offers a theoretically grounded lens through which to understand sustainable consumption dynamics in other non-Western or transitional economies where social influence, moral responsibility, and digital exposure are similarly salient. In contexts marked by collectivist cultural orientations and increasing digital connectivity—such as other Gulf states, Southeast Asian nations, or emerging African economies—the strong influence of normative and internalized motivational constructs observed in this study may be particularly pronounced [62–64]. This highlights the potential for broader cross-cultural adaptation of the model and contributes to the development of context-sensitive approaches to sustainability behavior research [65].

7. Managerial Implications

The findings of this study offer valuable insights for marketing professionals, sustainability managers, and policymakers seeking to encourage pro-environmental behavior among digitally active youth segments. Given that social media usage significantly influences both sustainable purchase intention and attitudes toward sustainable products, marketers should position social media platforms not merely as promotional tools, but as strategic vehicles for sustainability communication. Brands targeting younger consumers in Kuwait and similar contexts should prioritize content formats that encourage both central and peripheral processing, such as short-form educational videos, influencer-led narratives, interactive polls, and visually engaging infographics. These formats can stimulate both rational evaluation and emotional resonance, leading to stronger attitudinal and behavioral responses.

The significant effects of social media usage on social influence and social influence on sustainable purchase intention highlight the importance of peer endorsement and community norms. Organizations should identify and collaborate with local micro-influencers and digitally active sustainability advocates who are trusted within youth networks. User-generated content, social proof (e.g., testimonials, reviews, "X people like this product"), and cause-driven hashtags can reinforce subjective norms and create an impression of widespread adoption of green products.

The results indicate that environmental responsibility drives both attitudes and social influence. Brands and non-profits should actively engage consumers who demonstrate strong environmental values and empower them to act as peer educators and community role models. Initiatives such as referral campaigns, sustainability ambassador programs, and co-created storytelling can convert these environmentally responsible individuals into effective word-of-mouth channels, thereby expanding the reach and credibility of green messaging.

The study finds that attitude alone does not significantly predict intention, highlighting a well-documented attitude–behavior gap. To overcome this, companies must go beyond awareness campaigns and lower behavioral barriers by ensuring that sustainable products are accessible, competitively priced, and easy to identify. Retailers can highlight green products using distinct shelf labels or app filters, while e-commerce platforms can offer filters or incentives (e.g., eco points or discounts) that simplify sustainable choices.

The findings reaffirm the salience of social influence in behavior formation within Kuwait, a society where peer norms, family expectations, and reputation considerations hold cultural weight. Sustainability campaigns must be culturally congruent, emphasizing shared responsibility, community benefit, and Islamic environmental ethics where appropriate. Rather than framing green behavior solely in terms of global impact, marketers should also emphasize its local relevance, such as preserving Kuwait's future, protecting its water resources, or reducing household waste.

Policymakers can use these insights to design more digitally integrated awareness campaigns and engage in public–private partnerships that promote sustainable consumption. Ministries of Youth, Environment, and Commerce can co-create content with private brands, support green influencer training programs, and integrate sustainability into national educational platforms. Further, supporting digital literacy and media credibility assessments may improve how citizens interpret sustainability messages on social platforms.

8. Limitations

While this study provides valuable theoretical and practical insights into the role of social media in shaping sustainable consumption among young adults in Kuwait, several limitations must be acknowledged. These limitations also open avenues for further research.

The study employed a cross-sectional survey design, which limits the ability to infer causality among variables. While structural equation modeling (SEM) allowed for testing directional relationships within the hypothesized model, the temporal sequencing of effects, such as whether exposure to sustainability content leads to intention formation over time, cannot be confirmed. Longitudinal designs in future studies would offer a more robust framework to examine causal pathways and behavioral change over time [43].

The use of non-probability sampling methods (convenience and snowball sampling) limits the generalizability of the findings beyond the study sample. Although efforts were made to include diverse participants in terms of gender, nationality, and occupation, the sample may not fully represent the broader young adult population in Kuwait. Future studies should consider stratified or random sampling techniques to enhance external validity and include underrepresented demographic segments such as rural populations or those with limited internet access.

The reliance on self-reported measures introduces potential biases, including social desirability bias and recall inaccuracies. Respondents may overstate their pro-environmental attitudes or intentions due to the perceived social approval associated with sustainable behavior. Incorporating behavioral tracking data, such as online engagement metrics or actual purchasing patterns, could enhance the validity of future findings.

Although the study integrates core constructs from the Theory of Planned Behavior, it omits one key variable—perceived behavioral control (PBC)—which has been shown to play a crucial role in bridging the intention–behavior gap [11]. Including PBC in future models could help capture barriers (e.g., cost, accessibility, time constraints) that influence whether a favorable attitude or normative belief results in action. Similarly, emotional variables such as pride, guilt, or eco-anxiety may offer additional explanatory power.

This study was conducted within the specific cultural and socioeconomic context of Kuwait, a high-income, oil-based economy with a rapidly modernizing youth demographic. While this context presents unique insights, caution must be exercised in generalizing the findings to other regions. Comparative cross-national studies across Gulf states, or between Arab and non-Arab markets, could illuminate how cultural values and digital behaviors interact to influence sustainable consumption.

Author Contributions: Conceptualization, K.A.-K., A.A. and D.A.-E.; Methodology, K.A.-K., A.A. and D.A.-E.; Software, K.A.-K.; Validation, K.A.-K. and A.A.; Formal analysis, K.A.-K., D.A.-E. and A.A.-M.; Investigation, K.A.-K.; Resources, K.A.-K. and A.A.; Data curation, D.A.-E. and A.A.; Writing—original draft, K.A.-K.; Writing—review & editing, A.A., N.A. and F.A.; Visualization, K.A.-K. and A.A.; Supervision, A.A. and K.A.-K. All authors have read and agreed to the published version of the manuscript.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: The original contributions presented in this study are included in the article. Further inquiries can be directed to the corresponding author.

Conflicts of Interest: Author Awrad Al-Matrouk was employed by the National Bank of Kuwait. The remaining authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Appendix A

Scale items used in the study

1. Social media usage, adapted from [19,46].

- My engagement on social media influences my green products purchase behaviour;
- I see social media to search for information about green products;
- Expressing my opinion about green products that I am thinking about buying is very easy via social media;
- Contents about green products on social media are trustworthy;
- Contents about green products on social media are credible;
- I gain feedback on green production through environmental information on social media.

2. Social influence, adapted from [11,14,46].

- Most of the people who are important to me support my purchases of green products;
- Those who, I think, are valuable to me would prefer me to buy green products;
- If I purchase green products, people who are important to me will also do so;
- I would like to share information from social media about green products with my friends.

3. Drive for environmental responsibility, adapted from [30–33,52].

- Supporting environmental protection makes me feel like an environmentally responsible person;
- I should be responsible for protecting our environment;
- Environmental protection starts with me;
- I would say I am emotionally involved in environmental protection issues;
- Supporting environmental protection makes me special.

4. Consumer Sustainable purchase attitude, adapted from [36,37,39,53].

- I believe that sustainable purchasing by me will help in reducing pollution and help in improving the environment;
- I believe that sustainable purchasing by me will help in reducing wasteful use of natural resources;
- I believe that sustainable purchasing by me will help in conserving natural resources;
- I feel good about myself when I am involved in sustainable purchasing.

5. Sustainable Purchase intention, adapted from [36,54–56].

- When shopping, I deliberately check products for environmentally harmful ingredients;
- When shopping, I deliberately choose products with environmentally friendly packaging;
- I'll prefer to buy sustainable products even if they are expansive than others;
- While purchasing, I see environmental and fair-trade labels before buying the products.

References

1. Aji, H.M.; Sutikno, B. The extended consequence of greenwashing: Perceived consumer skepticism. *Int. J. Bus. Inf.* **2015**, *10*, 433.
2. Moharrak, M.; AlReshaid, F.; Park, K.M.; Alsaber, A.R. International hidden entrepreneurs: Concealed partnerships in new venture formation in an emerging markets context. *J. Innov. Knowl.* **2025**, *10*, 100669. [CrossRef]
3. Marian, A.-L.; Chiriac, L.-E.; Ciofu, V.; Apostol, M.M. Understanding Risky Behavior in Sustainable Driving among Young Adults: Exploring Social Norms, Emotional Regulation, Perceived Behavioral Control, and Mindfulness. *Sustainability* **2024**, *16*, 6620. [CrossRef]
4. Nguyen, T.T.H.; Yang, Z.; Nguyen, N.; Johnson, L.W.; Cao, T.K. Greenwash and green purchase intention: The mediating role of green skepticism. *Sustainability* **2019**, *11*, 2653. [CrossRef]
5. AlNajem, M.N. Factors influencing customer choice in selection of banks in Kuwait. *Qual. Manag. J.* **2018**, *25*, 142–153. [CrossRef]
6. Jackson, N.; Cockrill, A.; Almoraish, A. A framework for the dissemination of research on depression via social media. *Br. J. Healthc. Manag.* **2024**, *30*, 1–15. [CrossRef]

7. Williams, L. Indigenous intergenerational resilience and lifelong learning: Critical leverage points for deep sustainability transformation in turbulent times. *Sustainability* **2024**, *16*, 4494. [CrossRef]

8. Al-Kenane, K.; Boy, F.; Alsaber, A.; Nafea, R.; AlMutairi, S. Digital epidemiology of high-frequency search listening trends for the surveillance of subjective well-being during COVID-19 pandemic. *Front. Psychol.* **2024**, *15*, 1442303. [CrossRef]

9. Albuloushi, N.; Algharaballi, E. Examining the influence of the cultural aspect of uncertainty avoidance on supply chain coordination. *J. Appl. Bus. Res.* **2014**, *30*, 847–862. [CrossRef]

10. Al-Raqeb, H.; Ghaffar, S.H. 3D Concrete Printing in Kuwait: Stakeholder Insights for Sustainable Waste Management Solutions. *Sustainability* **2025**, *17*, 200. [CrossRef]

11. Ajzen, I. The theory of planned behavior. *Organ. Behav. Hum. Decis. Process.* **1991**, *50*, 179–211. [CrossRef]

12. Kitchen, P.J.; Kerr, G.; Schultz, D.E.; McColl, R.; Pals, H. The elaboration likelihood model: Review, critique and research agenda. *Eur. J. Mark.* **2014**, *48*, 2033–2050. [CrossRef]

13. Petty, R.E.; Cacioppo, J.T.; Petty, R.E.; Cacioppo, J.T. *The Elaboration Likelihood Model of Persuasion*; Springer: Berlin/Heidelberg, Germany, 1986.

14. Yadav, R.; Pathak, G.S. Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *J. Clean. Prod.* **2016**, *135*, 732–739. [CrossRef]

15. Wang, P.; Liu, Q.; Qi, Y. Factors influencing sustainable consumption behaviors: A survey of the rural residents in China. *J. Clean. Prod.* **2014**, *63*, 152–165. [CrossRef]

16. Shah, Z.; Wei, L. Source credibility and the information quality matter in public engagement on social networking sites during the COVID-19 crisis. *Front. Psychol.* **2022**, *13*, 882705. [CrossRef] [PubMed]

17. Kaposi, I. The culture and politics of Internet use among young people in Kuwait. *Cyberpsychol. J. Psychosoc. Res. Cyberspace* **2014**, *8*, 9. [CrossRef]

18. Alqahs, K.; Al-Kandari, Y.Y.; Albuloushi, M.S. Social media users' attitudes toward pervasiveness of fake news in Arab countries and its negative effects: Kuwait as a case study. *J. Inf. Commun. Ethics Soc.* **2023**, *21*, 322–341. [CrossRef]

19. Hajli, M.N. A study of the impact of social media on consumers. *Int. J. Mark. Res.* **2014**, *56*, 387–404. [CrossRef]

20. Almoraish, A. Brand and influencer partnerships—Not just for one campaign. In *Influencer Marketing: Building Brand Communities and Engagement*, 2nd ed.; Costello, J., Yesiloglu, S., Eds.; Routledge: London, UK, 2025.

21. Nabivi, E. The Role of Social Media in Green Marketing: How Eco-Friendly Content Influences Brand Attitude and Consumer Engagement. *Sustainability* **2025**, *17*, 1965. [CrossRef]

22. Confetto, M.G.; Covucci, C.; Addeo, F.; Normando, M. Sustainability advocacy antecedents: How social media content influences sustainable behaviours among Generation Z. *J. Consum. Mark.* **2023**, *40*, 758–774. [CrossRef]

23. White, K.; Habib, R.; Hardisty, D.J. How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *J. Mark.* **2019**, *83*, 22–49. [CrossRef]

24. Schivinski, B.; Dabrowski, D. The effect of social media communication on consumer perceptions of brands. *J. Mark. Commun.* **2016**, *22*, 189–214. [CrossRef]

25. Chabay, I.; Koch, L.; Martinez, G.; Scholz, G. Influence of narratives of vision and identity on collective behavior change. *Sustainability* **2019**, *11*, 5680. [CrossRef]

26. Ulug, C.; Horlings, L.; Trell, E.-M. Collective identity supporting sustainability transformations in ecovillage communities. *Sustainability* **2021**, *13*, 8148. [CrossRef]

27. Ktisti, E.; Hatzithomas, L.; Boutsouki, C. Green advertising on social media: A systematic literature review. *Sustainability* **2022**, *14*, 14424. [CrossRef]

28. Luchs, M.G.; Naylor, R.W.; Irwin, J.R.; Raghunathan, R. The sustainability liability: Potential negative effects of ethicality on product preference. *J. Mark.* **2010**, *74*, 18–31. [CrossRef]

29. Delcea, C.; Cotfas, L.-A.; Trică, C.L.; Crăciun, L.; Molanescu, A.G. Modeling the consumers opinion influence in online social media in the case of eco-friendly products. *Sustainability* **2019**, *11*, 1796. [CrossRef]

30. Kals, E.; Schumacher, D.; Montada, L. Emotional affinity toward nature as a motivational basis to protect nature. *Environ. Behav.* **1999**, *31*, 178–202. [CrossRef]

31. Stern, P.C. New environmental theories: Toward a coherent theory of environmentally significant behavior. *J. Soc. Issues* **2000**, *56*, 407–424. [CrossRef]

32. Van der Werff, E.; Steg, L.; Keizer, K. The value of environmental self-identity: The relationship between biospheric values, environmental self-identity and environmental preferences, intentions and behaviour. *J. Environ. Psychol.* **2013**, *34*, 55–63. [CrossRef]

33. Whitmarsh, L.; O'Neill, S. Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *J. Environ. Psychol.* **2010**, *30*, 305–314. [CrossRef]

34. Ottesen, A.; Thom, D.; Bhagat, R.; Mourdaa, R. Learning from the future of Kuwait: Scenarios as a learning tool to build consensus for actions needed to realize vision 2035. *Sustainability* **2023**, *15*, 7054. [CrossRef]

35. Jang, Y.-J.; Kim, E. Social and Personal Norms in Shaping Customers' Environmentally Sustainable Behavior in Restaurants' Social Media Communities. *Sustainability* **2023**, *15*, 6410. [CrossRef]

36. Chan, R.Y. Determinants of Chinese consumers' green purchase behavior. *Psychol. Mark.* **2001**, *18*, 389–413. [CrossRef]

37. Griskevicius, V.; Tybur, J.M.; Van den Bergh, B. Going green to be seen: Status, reputation, and conspicuous conservation. *J. Personal. Soc. Psychol.* **2010**, *98*, 392. [CrossRef] [PubMed]

38. Hoque, M.N.; Rahman, M.K.; Said, J.; Begum, F.; Hossain, M.M. What factors influence customer attitudes and mindsets towards the use of services and products of Islamic banks in Bangladesh? *Sustainability* **2022**, *14*, 4703. [CrossRef]

39. Mostafa, M.M. Gender differences in Egyptian consumers' green purchase behaviour: The effects of environmental knowledge, concern and attitude. *Int. J. Consum. Stud.* **2007**, *31*, 220–229. [CrossRef]

40. Ahmad, W.; Kim, W.G.; Anwer, Z.; Zhuang, W. Schwartz personal values, theory of planned behavior and environmental consciousness: How tourists' visiting intentions towards eco-friendly destinations are shaped? *J. Bus. Res.* **2020**, *110*, 228–236. [CrossRef]

41. Silberer, J.; Müller, P.; Bäumer, T.; Huber, S. Target-oriented promotion of the intention for sustainable behavior with social norms. *Sustainability* **2020**, *12*, 6193. [CrossRef]

42. Creswell, J.W.; Creswell, J.D. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*; Sage Publications: NewYork, NY, USA, 2017.

43. Bryman, A. *Social Research Methods*; Oxford University Press: Oxford, UK, 2016.

44. Palys, T.S.; Atchison, C. *Research Decisions: Quantitative, Qualitative, and Mixed Method Approaches*; Nelson Education: Toronto, ON, Canada, 2014.

45. Malhotra, N.K.; Nunan, D.; Birks, D.F. *Marketing Research*; Pearson: London, UK, 2020.

46. Arora, N.; Rana, M.; Prashar, S. How Does Social Media Impact Consumers' Sustainable Purchase Intention? *Rev. Mark. Sci.* **2023**, *21*, 143–168. [CrossRef]

47. WorldPopulationReview. Kuwait Population 2024. Available online: https://worldpopulationreview.com/countries/kuwait (accessed on 17 April 2025).

48. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*; Cengage Learning EMEA: Boston, MA, USA, 2019.

49. Etikan, I.; Musa, S.A.; Alkassim, R.S. Comparison of convenience sampling and purposive sampling. *Am. J. Theor. Appl. Stat.* **2016**, *5*, 1–4. [CrossRef]

50. Kemp, S. *Reports—Datareportal—Global Digital Insights*; DataReportal: Singapore, 2023.

51. Brislin, R.W. Back-translation for cross-cultural research. *J. Cross-Cult. Psychol.* **1970**, *1*, 185–216. [CrossRef]

52. Schultz, P.W. New environmental theories: Empathizing with nature: The effects ofPerspective taking on concern for environmental issues. *J. Soc. Issues* **2000**, *56*, 391–406. [CrossRef]

53. Roberts, J.A. Green consumers in the 1990s: Profile and implications for advertising. *J. Bus. Res.* **1996**, *36*, 217–231. [CrossRef]

54. D'souza, C.; Taghian, M.; Lamb, P. An empirical study on the influence of environmental labels on consumers. *Corp. Commun. Int. J.* **2006**, *11*, 162–173. [CrossRef]

55. Kumar, P.; Ghodeswar, B.M. Factors affecting consumers' green product purchase decisions. *Mark. Intell. Plan.* **2015**, *33*, 330–347. [CrossRef]

56. Nguyen, T.N.; Lobo, A.; Greenland, S. The influence of cultural values on green purchase behaviour. *Mark. Intell. Plan.* **2017**, *35*, 377–396. [CrossRef]

57. Gounaris, S.; Almoraish, A. A dynamic, relational approach to B2B customer experience: A customer-centric perspective from a longitudinal investigation. *J. Bus. Res.* **2024**, *177*, 114606. [CrossRef]

58. Agag, G.; Shehawy, Y.M.; Almoraish, A.; Eid, R.; Lababdi, H.C.; Labben, T.G.; Abdo, S.S. Understanding the relationship between marketing analytics, customer agility, and customer satisfaction: A longitudinal perspective. *J. Retail. Consum. Serv.* **2024**, *77*, 103663. [CrossRef]

59. Hair, J.F. *Multivariate Data Analysis*, 7th ed.; Prentice Hall: Harlow, UK, 2014.

60. Vermeir, I.; Verbeke, W. Sustainable food consumption: Exploring the consumer "attitude–behavioral intention" gap. *J. Agric. Environ. Ethics* **2006**, *19*, 169–194. [CrossRef]

61. Joshi, Y.; Rahman, Z. Factors affecting green purchase behaviour and future research directions. *Int. Strateg. Manag. Rev.* **2015**, *3*, 128–143. [CrossRef]

62. Hofstede, G. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*, 2nd ed.; Sage Publications: Thousand Oaks, CA, USA, 2001.

63. Sagiv, L.; Schwartz, S.H. Personal values across cultures. *Annu. Rev. Psychol.* **2022**, *73*, 517–546. [CrossRef] [PubMed]

64. Ibrahim, I.; Sukkar, A.W.; Yahia, M.W.; Aly, M. Cultural dimensions of sustainability in the Arab region: Comparative investigation of advancing smart cities. *Smart Sustain. Built Environ.* **2025**. *ahead pf print*. [CrossRef]

65. Andersson, E.; Borgström, S.; Haase, D.; Lanemeyer, J.; Mascarenhas, A.; McPhearson, T.; Wolff, M.; Laszkiewicz, E.; Kronenberg, J.; Barton, D. A context-sensitive systems approach for understanding and enabling ecosystem service realization in cities. *Ecol. Soc.* **2021**, *26*, 35. [CrossRef]