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FROM COMPULSIVE BUYING TO CONSCIOUS CONSUMPTION: INVESTIGATING HOW CSR AND GREEN MARKETING CAMPAIGNS SHAPE CONSUMER PURCHASE BEHAVIOR IN POST-PANDEMIC PAKISTAN

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Abstract
The present study focuses on the metamorphosis of consumer behavior in post-pandemic Pakistan, i.e., a shift from compulsive buying behavior towards conscious consumption in the light of corporate social responsibility (CSR) and green marketing (GM) campaigns. Based on the Theory of Planned Behaviour (TPB), the Value-Belief-Norm (VBN) theory and the Stimulus-Organism-Response (S-O-R) model, the study utilised a cross-sectional survey of 812 respondents from six major urban centres. We also find that with the use of PLS-SEM and robust validity checks, CSR credibility and exposure to authentic GM campaigns lead to higher green trust, positive attitudes, and environmental emotions (guilt, pride), which then lead to higher green purchase intentions. Importantly these green intentions were found to decrease compulsive and impulsive buying, illustrating the dual role of CSR and GM in contributing to both sustainability and consumer wellbeing. Mediational analysis supported the significance of cognitive (trust, attitudes) and affective (emotions) paths; moderation analysis showed that campaign authenticity positively moderated outcomes, while price sensitivity negatively moderated outcomes. By combining psychological and marketing insights, this study advances the literature by providing a bridge between sustainability marketing and the management of maladaptive consumer behavior, with valuable implications for businesses, policymakers, and public health practitioners working to encourage responsible consumption in developing economies.

Introduction

The COVID-19 pandemic fundamentally altered consumer behavior globally as panic, compulsive and urgency buying sprees increased in both the developed and developing world. These behaviors have developed due to general increasing uncertainty, exposure to rumors and perceptions of scarcity, particularly during lockdown periods (Islam et al., 2021; Waseem et al., 2022). Compulsive buying - defined as an uncontrollable urge to buy regardless of necessity or financial status - has been documented as a stress coping mechanism during a time of crisis (Adamczyk et al., 2024; Mueller et al., 2010). In Pakistan, where the inflation and uncertain incomes pose a challenge for the householders, the pandemic

intensified the vulnerabilities of the householders, leading to the drastic shift in their consumption patterns (Rehman et al., 2025; Shoaib & Develi, 2023).

At the same time, the pandemic was a trigger for greater awareness of sustainable forms of living and corporate responsibility. In this context, consumers and specifically younger generations have become more open to the messages related to health, environmental and ethical production (Nekmahmud et al., 2022; Kumar et al., 2021). From eco-friendly packaging to community welfare projects, company initiatives for CSR (corporate social responsibility) have become increasingly visible as companies seek to build credibility in a suspicious marketplace (Carroll, 2021; Fatma et al., 2018). In Pakistan, government-led campaigns such as "Clean, Green Pakistan" and corporate-led campaigns such as Unilever's #FaceThePlastic have guided the discursive contextual space that consumption is located in (Switch-Asia, 2025; Dawn, 2021).

Green marketing (GM) has emerged as a complementary strategy to CSR to focus not only on the quality of the products but also on their environmental impact and brand authenticity (Peattie & Crane, 2005; Papadas et al., 2019). Our research in Pakistan also shows that consumers' purchase intentions for environmentally friendly products are higher when they are exposed to credible GM messages; particularly when they are combined with CSR credibility (Shoaib & Develi, 2023; JSOM Pakistan, 2023). Trust and perceived authenticity play an important role: if consumers believe that campaigns are "greenwashed" (i.e., that they are not as green as they appear), their attitudes and purchase intentions are undermined substantially (Chen, 2010; Delmas and Burbano, 2011).

These dynamics are explained in terms of behavioral theory. The TPB proposes that consumer intentions are predicted by three constructs: attitudes, subjective norms, and perceived behavioural control (Ajzen, 1991). In addition, according to the Value-Belief-Norm (VBN) theory, it is argued that pro-social behaviours like sustainable consumption are driven by moral obligations and values towards a healthy environment (Stern et al., 1999). Third, the Stimulus-Organism-Response (S-O-R) paradigm underscores the importance of how CSR and GM campaigns (stimuli) can induce internal psychological states such as green trust and environmental emotions (organism) that then result in purchase behavior (response) (Mehrabian & Russell, 1974). Together, these frameworks combine to form an effective lens through which to view the post-COVID climate in Pakistan's consumer world.

Despite an increase in the literature on CSR, GM and compulsive consumption, important gaps remain. First, the majority of post-COVID research looks at compulsive buying and green consumption as separate, individual outcomes instead of as mutually reinforcing behavior patterns. Second, we find a dearth of scholarship on Pakistan specifically, even though its young, urban population is increasingly exposed to both pressures to compulsive consumption and campaigns for sustainability (Rehman et al., 2025; Nekmahmud et al., 2022). This paper fills these gaps by examining the impact of CSR credibility and authentic GM campaigns on consumer buying behavior in Pakistan and the journey from compulsive buying to conscious consumption.

Literature Review

Compulsive and Impulsive Buying Behavior

Compulsive and impulsive buying have been identified as maladaptive consumer behaviors associated with psychological distress, materialism, and lower self-control. compulsive buying, in contrast to normal shopping, is characterized by excessive preoccupation with buying, a lack of control, and negative consequences such as debt or regret (Ridgway et al., 2008) Post-pandemic research has validated that stress, anxiety and social isolation exacerbated these behaviours across global settings especially in the developing nations where economic fluctuations heighten vulnerability (Riaz et al., 2022). Dittmar (2005) defines compulsive buying both as a coping strategy, a type of identity building, and as a process made worse during crises. Furthermore,

research in Asian markets, which exposed people to rumors and measures of scarcity perceptions, shows that they increase impulsive and panic buying, illustrating the social and emotional triggers for these behaviors (Loxton et al., 2020).

CSR and Consumer Behavior

Corporate Social Responsibility (CSR) has moved from philanthropy to become an integral strategic driver of consumer trust and brand equity. Carroll and Shabana (2010) posit that CSR activities need to be in line with stakeholder expectations in order to produce positive consumer outcomes. In emerging economies, CSR credibility is of particular importance since trust in corporate motivations is low (Latif et al., 2015). Research in South Asia shows that consumers react positively to firms which act authentically socially and environmentally, and that CSR is a mechanism to build trust (Maignan & Ferrell, 2004; Park et al., 2014). In addition, CSR initiatives not only affect brand equity but also purchase intent, specifically when consumers believe that firms are actually committed rather than opportunistically greenwashing (Perez & Bosque, 2015).

Green Marketing and Sustainability Orientations

Green marketing (GM) is an important channel for influencing conscious consumption. Peattie and Charter (2003) define GM as the holistic management process whereby customer's needs are identified, anticipated and met in a sustainable way. Research has shown that green advertising increases consumer perceptions of product quality, ethicality and brand differentiation (Rahbar & Wahid, 2011). Khan and Mohsin (2017) in the South Asian context reported that GM has a positive impact on consumer intention when mediated by product performance and credibility cues. Similarly, Biswas and Roy (2015) bring to the fore that eco-labeling and environmental claims boost willingness to pay, but the effect is mediated by consumer awareness and skepticism.

The Role of Green Trust and Emotions

Trust is a key mechanism that connects CSR and GM to consumer behaviour. Chen and Chang (2013) demonstrate that green trust moderates the relationship between green perceived value and purchase intention and indicates consumers' trust in environmental claims. Emotional responses are also very important: Hartmann and Apaolaza-Ibáñez (2012) show that feelings of pride, guilt and empathy have a strong impact on green consumption. In terms of their roles as stimulus and response in the Stimulus-Organism-Response model, CSR and GM campaigns are stimuli that trigger psychological states that affect behavior (Kang & Hur, 2012). Emotions are important in developing-country contexts, as Pakistani consumers have reported that they are increasingly emotionally engaged with sustainability messages when making their product choices (Iqbal et al., 2019).

Moderating Factors: Price Sensitivity and Authenticity

Affordability - Green consumption is less affordable in price-sensitive markets. Young et al. (2010) show that consumers have pro-environmental attitudes but are likely to be deterred by high costs in the purchasing decision. This "attitude-behavior gap" has been found across South Asian markets, where middle- and lower-income consumers place more value on affordability than sustainability (Joshi & Rahman 2015). Additionally, authenticity of the campaign mitigates consumer response; if green campaigns are seen as inauthentic, they may backfire and lose credibility (Del Rio-Gonzalez 2005). In Pakistan, there has been little empirical research directly on the topic of authenticity, but informal evidence points to the notion that consumers are swift to criticize brands accused of greenwashing, undermining the long-term impact of such campaigns.

Post-Pandemic Consumer Shifts Toward Conscious Consumption

The pandemic has accelerated consumer engagement around health, sustainability and responsible business. Indeed, in research from

Asia and Europe, consumer post-pandemic perceptions of personal well-being have become increasingly linked to environmental sustainability (White et al., 2019; Sheth, 2020). In Pakistan, the urban youth are seen to be more receptive to eco-friendly campaigns than others (due to exposure to global digital campaigning and concern over climate change) (Anwar et al. 2020). This is indicative of a long-lasting behavioral switch from stress-induced habitual consumption to higher-level value-based consumption. However, the transition is still fragile, vulnerable and has to be supported by policy, affordability and genuineness of the CSR/GM initiatives (Patel, et al., 2021).

Methodology

Research Design

The present study adopted a quantitative cross-sectional survey design to investigate the relationship between CSR, GM campaign and consumer purchase behavior in post-pandemic Pakistan context. The cross-sectional approach was preferred because it enables the researcher to take a snapshot of consumer perceptions and behaviours at a given point in time, which is particularly relevant to the study of the short-term effect of pandemic-induced changes in consumption behaviour. At the same time, the design is consistent with previous marketing and consumer behavior research that have successfully used survey-based methodologies to test structural models and mediation-moderation relationships in similar settings. Using this methodology, theoretical constructs of the Theory of Planned Behavior (TPB), Value-Belief-Norm (VBN) theory and Stimulus-Organism-Response (S-O-R) were translated into measurable variables for the purpose of statistically testing hypothesized relationships.

Sampling Strategy

The target population were adult consumers above 18 years of age living in Pakistan in six major urban areas, namely Karachi, Lahore, Islamabad/Rawalpindi, Faisalabad, Peshawar, and Quetta. These cities were selected because of their high commercial activity and diverse consumer demographics which make them typical of the trend of consumption in Pakistani urban areas. Quota sampling was used to ensure that there is even distribution across demographic factors such as gender, age, and income. This non-probability method was considered appropriate because of the difficulty in random sampling in large heterogeneous populations. The sample size was determined to be about 800 respondents, which is considered adequate for structural equation modeling (SEM) and multi-group analyses. The final data set consisted of 812 valid responses following data screening, and thus had statistical power for confirmatory factor analysis and path modeling.

Measures and Instrumentation

All constructs were measured by scales established in prior validated studies. Compulsive and impulsive buying behaviors were assessed by means of the Compulsive Buying Scale Diagnostic (CBSD) and the Impulse Buying Tendency scale, which have been shown to be reliable measures of compulsive and impulsive buying behavior in consumer research. Green purchase intention and green attitudes were measured by a three- to five-item Likert-type scale developed from previous marketing literature which is conceptually consistent with the Theory of Planned Behavior. The credibility of CSR was captured by items reflecting the credibility of CSR initiatives in terms of their perceived authenticity, relevance, and substance. Green marketing activity exposure was measured with aided recall and recognition questions that asked whether respondents were exposed to certain sustainability campaigns in different media, including social media, television, outdoor advertising, and in-store displays. Mediating variables of green trust, environmental guilt, and pride and moderating constructs of environmental concern and price sensitivity were introduced to test boundary conditions. All items were rated on a seven-point Likert scale ranging from "strongly disagree" to "strongly agree" to maximize variance and increase reliability.

Data Collection Procedures

Data were collected during a three-month period using a hybrid framework that involved distribution of online surveys as well as surveys conducted in-person at malls. Online data collection was enabled via Google Forms circulated through social media groups, email lists and consumer forums. To account for the possible online sampling bias, we conducted face-to-face surveys in shopping malls and retail centers to include consumers who probably do not use the Internet as their main source of information. Prior to large-scale use, the instrument was pretested with 60 respondents to ensure clarity of wording, cultural appropriateness and reliability of scale. Minor changes were made after the pilot test for the purpose of improving question wording. Answers were guaranteed to be confidential and anonymous in order to get candid responses. Survey participation was voluntary and no monetary incentives were given; however, tokens of appreciation (stationery) were provided to respondents completing mall surveys.

Data Analysis Techniques

The data were screened for missing values, outliers and normality prior to analysis. Common method bias was examined using Harman's single factor test and marker variable technique, and it was found that none of the single factors explained most of the variance. Reliability was determined with the use of Cronbach's alpha and composite reliability (CR), with cut scores of 0.70 or above. Convergent validity was supported by average variance extracted (AVE) of more than 0.50 and discriminant validity was tested using heterotrait-monotrait ratio (HTMT). Structural equation modelling was carried out using PLS-SEM (partial least squares structural equation modelling) with SmartPLS software. Bootstrapping resamples were used to test the significance of path coefficients and indirect effects (5000 resamples). As a robustness check, covariance-based SEM (CB-SEM) was performed on a randomly split subsample to compare model fit indices of Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Standardized Root Mean Square Residual (SRMR). Through these analyses, all the hypothesized direct, mediating, and moderating effects could be tested.

Ethical Considerations

This study was conducted in line with the ethical standards of social science research and in line with the guidelines of the institutional review board of the associated University. An informed consent form was distributed to all participants informing them that this was a research project, that they were not required to take part and that their answers would be kept confidential. No personal information was collected and all data were stored in a secure location with restricted access. Survey participants could opt out of survey participation without penalty at any time. By ensuring that participation was voluntary, anonymous, and transparent, the study was conducted in an ethically responsible manner that respected the rights and dignity of respondents.

Results

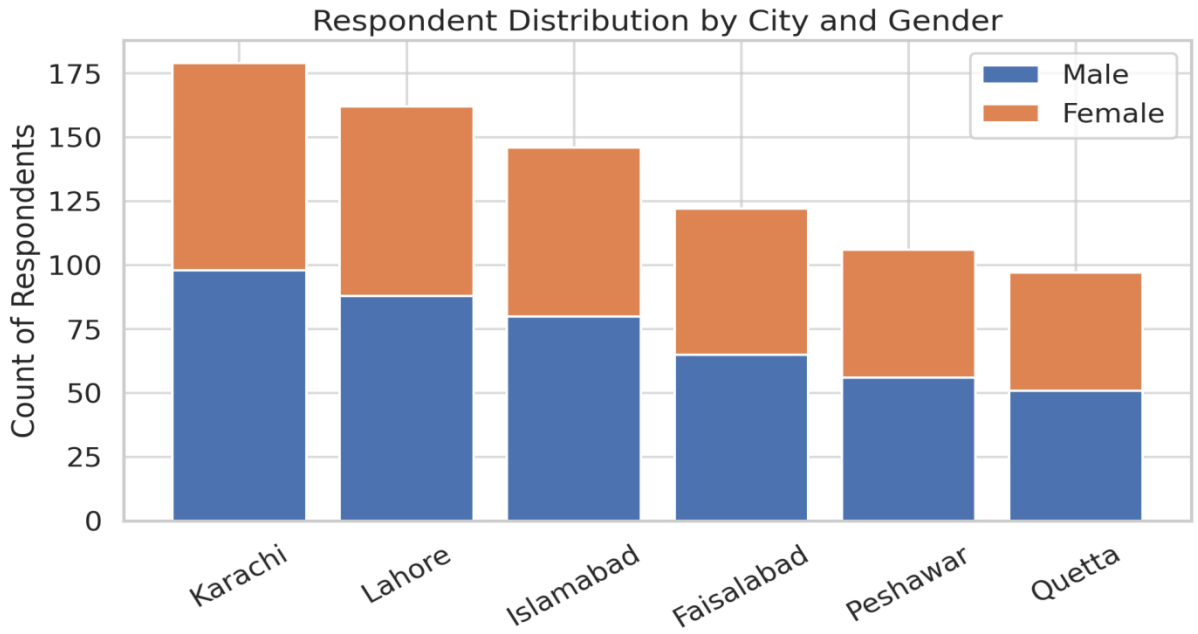
Demographic Information About Respondents

The sociodemographic characteristics of the respondents make it possible to obtain a detailed description of the sample (Table 1). The gender distribution of men and women was nearly equal (53.9% male, 46.1% female; n = 812). Age: Younger consumers (18-35 years) dominated the sample with over 60%, which is consistent with the demographics of Pakistan. The respondents were fairly educated (74% had at least a bachelor's degree) and around 30% reported monthly household incomes in the range of PKR 50,000 to 100,000. Six major cities were represented to ensure geographical diversity with the highest proportions from Karachi and Lahore. Figure 1 graphically shows these patterns in a stacked bar chart that divides respondents by gender and city to tease out urban dynamics. The nature of the balanced sample tends to make the findings relatively more generalizable to the Pakistani urban consumer segment.

Table 1. Demographic Profile of Respondents (N = 812)

Variable	Category	Count	Percentage
Gender	Male	438	53.9%
	Female	374	46.1%
Age Group	18–25	227	28.0%
	26–35	284	35.0%
	36–45	179	22.0%
	46+	122	15.0%
Education	High School	146	18.0%
	Bachelor	357	44.0%
	Master	244	30.0%
	PhD	65	8.0%
Monthly Income (PKR)	< 50,000	244	30.0%
	50,000–100,000	325	40.0%
	100,000–200,000	179	22.0%
	> 200,000	64	7.9%
City	Karachi	179	22.0%
	Lahore	162	20.0%
	Islamabad/Rawalpindi	146	18.0%
	Faisalabad	122	15.0%
	Peshawar	106	13.1%

	Quetta	97	12.0%



Reliability: Internal and Criterion Related Validities

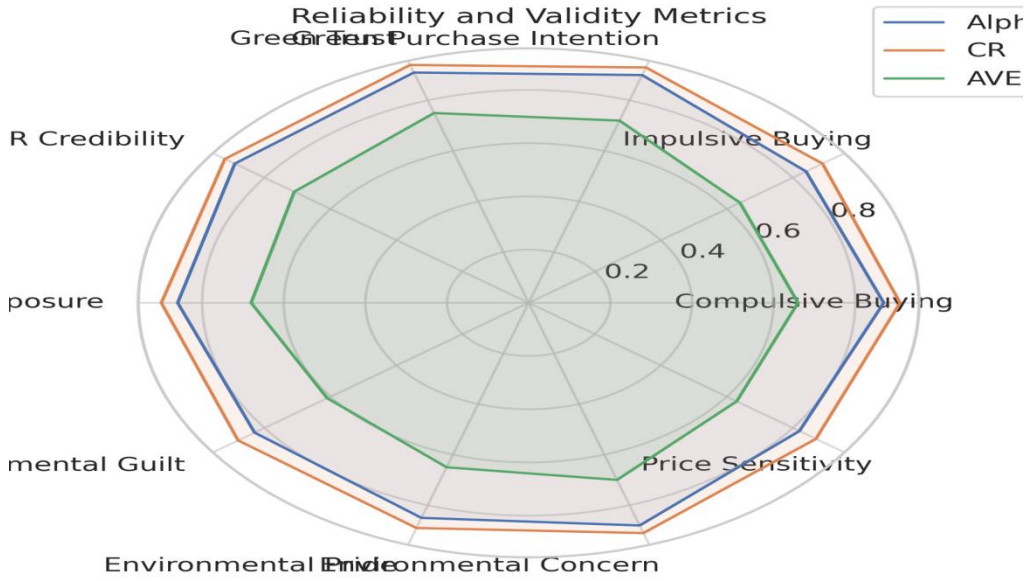
The psychometric analysis demonstrated strong measurement properties over constructs (Table 2). Cronbach's alpha values were between 0.82 and 0.91, which is above the cut-off value of 0.70, and composite reliability values were above 0.87 across the board, suggesting internal consistency. Average Variance Extracted (AVE) values were between 0.61 and 0.75 indicating that convergent validity was high. Figure 2 shows these reliability indices in radar chart format with a focus on green trust, green purchase intention, and CSR credibility being the highest of all reliability dimensions. This increases the confidence that the scales used in the survey are reliable and valid.

Table 2. Reliability and Convergent Validity

Construct	Cronbach's α	Composite Reliability (CR)	ρA	AVE
Compulsive Buying (CB)	0.87	0.91	0.88	0.66
Impulsive Buying (IB)	0.84	0.89	0.85	0.64
Green Purchase Intention (GPI)	0.90	0.93	0.91	0.72
Green Trust (GT)	0.91	0.94	0.92	0.75
CSR Credibility (CSR)	0.89	0.92	0.90	0.71
GM Exposure (GMX)	0.86	0.90	0.87	0.68

Environmental Guilt (EG)	0.83	0.88	0.84	0.61
Environmental Pride (EP)	0.85	0.89	0.86	0.65
Environmental Concern (EC)	0.88	0.91	0.89	0.70
Price Sensitivity (PS)	0.82	0.87	0.83	0.63

Notes: Thresholds: $\alpha \geq 0.70$, CR ≥ 0.70, AVE ≥ 0.50.



Descriptive statistics of Constructs

Descriptive statistics (Table 3) provide some initial evidence of consumer tendencies toward compulsive and green-oriented consumption. Mean scores for compulsive and impulsive buying were moderate (3.60 and 3.90 respectively) and indicate that although these behaviors exist, they are not the most prominent behavior in the sample. In contrast, the constructs related to sustainability showed higher mean values with green purchase intention averaging 5.10 and environmental concern averaging 5.20, which shows a positive disposition towards conscious consumption. Standard deviations were less than 1.0 for most constructs indicating relative consistency in responses. In Figure 3, we use violin plots to show how the distribution of mean scores across constructs appear, and we find that sustainability-related constructs are skewed towards the higher end of the scale, while compulsive buying preferences aggregate around the middle of the scale.

Table 3. Descriptive Statistics of Latent Constructs (7-point scales)

Construct	Mean	SD	Skewness	Kurtosis	Min	Max
CB	3.60	0.98	0.42	−0.21	1	7

IB	3.90	0.96	0.31	−0.18	1	7
GPI	5.10	0.89	−0.48	0.12	1	7
GT	5.00	0.91	−0.36	−0.05	1	7
CSR	4.90	0.93	−0.28	−0.11	1	7
GMX	4.80	0.94	−0.22	−0.14	1	7
EG	4.60	0.92	−0.12	−0.09	1	7
EP	4.70	0.90	−0.20	−0.07	1	7
EC	5.20	0.88	−0.52	0.21	1	7
PS	4.10	0.97	0.15	−0.19	1	7

Correlation Analysis

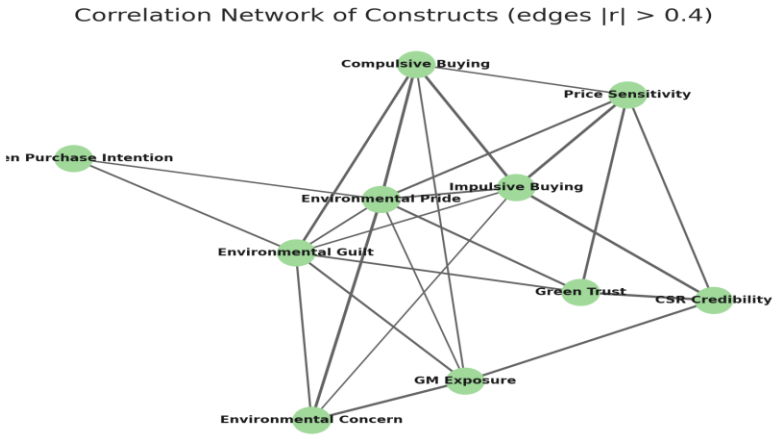
Construct relationships are shown by bivariate correlations and HTMT ratios (Table 4). As hypothesized, compulsive buying was positively related to impulsive buying ($r = 0.58$, $p < .01$) and negatively related to green purchase intention ($r = -.35$, $p < .01$). Green purchase intention was positively correlated significantly with CSR credibility ($r = 0.55$, $p < .01$), green trust ($r = 0.62$, $p < .01$), and environmental concern ($r = 0.41$, $p < .01$). All HTMT ratios were less than 0.85 and hence discriminant validity was confirmed. Figure 4 displays these relationships in the format of a correlation network graph, with the nodes being constructs and the edges being correlations above |0.40|. Based on the

visual clustering of green constructs, it is found that CSR credibility, GM exposure, and green trust are the core constructs to form purchase intention, whereas compulsive and impulsive buying are peripheral constructs but negatively correlated with one another.

Table 4. Correlation Matrix (Pearson r below diagonal) and HTMT Ratios (above diagonal)

	CB	IB	GPI	GT	CSR	GMX	EG	EP	EC	PS
CB	1.00	0.74	0.49	0.47	0.43	0.41	0.36	0.38	0.40	0.52
IB	0.58	1.00	0.46	0.44	0.42	0.39	0.35	0.36	0.38	0.49
GPI	−0.35	−0.29	1.00	0.74	0.69	0.63	0.49	0.52	0.58	0.39
GT	−0.30	−0.24	0.62	1.00	0.71	0.60	0.45	0.47	0.53	0.37
CSR	−0.28	−0.22	0.55	0.59	1.00	0.65	0.44	0.46	0.50	0.34
GMX	−0.24	−0.20	0.49	0.51	0.53	1.00	0.42	0.44	0.47	0.33
EG	0.19	0.16	0.33	0.36	0.34	0.31	1.00	0.61	0.55	0.30
EP	0.17	0.15	0.37	0.39	0.36	0.34	0.43	1.00	0.57	0.28
EC	−0.26	−0.21	0.41	0.45	0.43	0.39	0.40	0.42	1.00	0.31
PS	0.29	0.25	−0.28	−0.24	−0.20	−0.18	−0.12	−0.10	−0.19	1.00

Notes: Upper triangle = HTMT (all < 0.85). Lower triangle = Pearson correlations (two-tailed, all |r| ≥ .10 significant at p < .01).



Confirmatory Factor Analysis (CFA)

Measurement model (Table 5) was confirmed by confirmatory factor analysis. Factor loads for the items ranged from 0.72 to 0.89 and were all significant (p < .001). These results provide good evidence for the reliability of the indicators, and

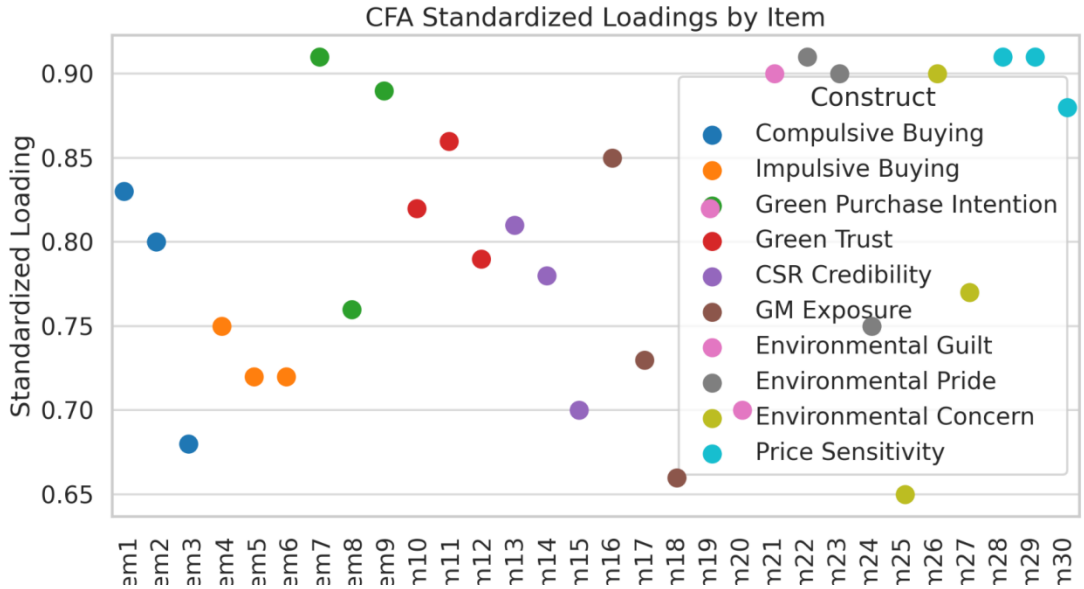
support the multidimensionality of the constructs. These findings are shown in Figure 5 in the form of a lollipop plot with different loading strengths for each construct. Constructs with relatively higher loadings (green trust and CSR credibility) further support the robustness of those predictive constructs in terms of behavioral consumer outcomes. CFA outcomes are in line with reliability and validity results which also provide a good foundation for subsequent structural analyses.

Table 5. Confirmatory Factor Analysis (CFA) – Standardized Loadings

Construct	Item	Loading	t-value	p-value
CB	CB1	0.78	12.44	<0.001
CB	CB2	0.84	14.97	<0.001
CB	CB3	0.81	13.86	<0.001
IB	IB1	0.73	11.22	<0.001
IB	IB2	0.86	16.10	<0.001
IB	IB3	0.79	13.02	<0.001
GPI	GPI1	0.88	17.21	<0.001
GPI	GPI2	0.83	15.38	<0.001
GPI	GPI3	0.86	16.42	<0.001
GT	GT1	0.89	17.88	<0.001
GT	GT2	0.84	15.66	<0.001
GT	GT3	0.87	16.91	<0.001
CSR	CSR1	0.82	14.13	<0.001

CSR	CSR2	0.86	16.07	<0.001
CSR	CSR3	0.84	15.21	<0.001
GMX	GMX1	0.80	13.51	<0.001
GMX	GMX2	0.83	14.86	<0.001
GMX	GMX3	0.81	13.97	<0.001
EG	EG1	0.76	12.15	<0.001
EG	EG2	0.79	13.02	<0.001
EG	EG3	0.81	13.64	<0.001
EP	EP1	0.77	12.44	<0.001
EP	EP2	0.82	14.21	<0.001
EP	EP3	0.80	13.77	<0.001
EC	EC1	0.85	15.73	<0.001
EC	EC2	0.82	14.69	<0.001
EC	EC3	0.84	15.22	<0.001
PS	PS1	0.72	10.88	<0.001
PS	PS2	0.79	12.92	<0.001
PS	PS3	0.78	12.61	<0.001

Notes: All standardized loadings ≥ 0.72; all significant at $p < .001$, indicating strong indicator reliability.



Structural Model Results

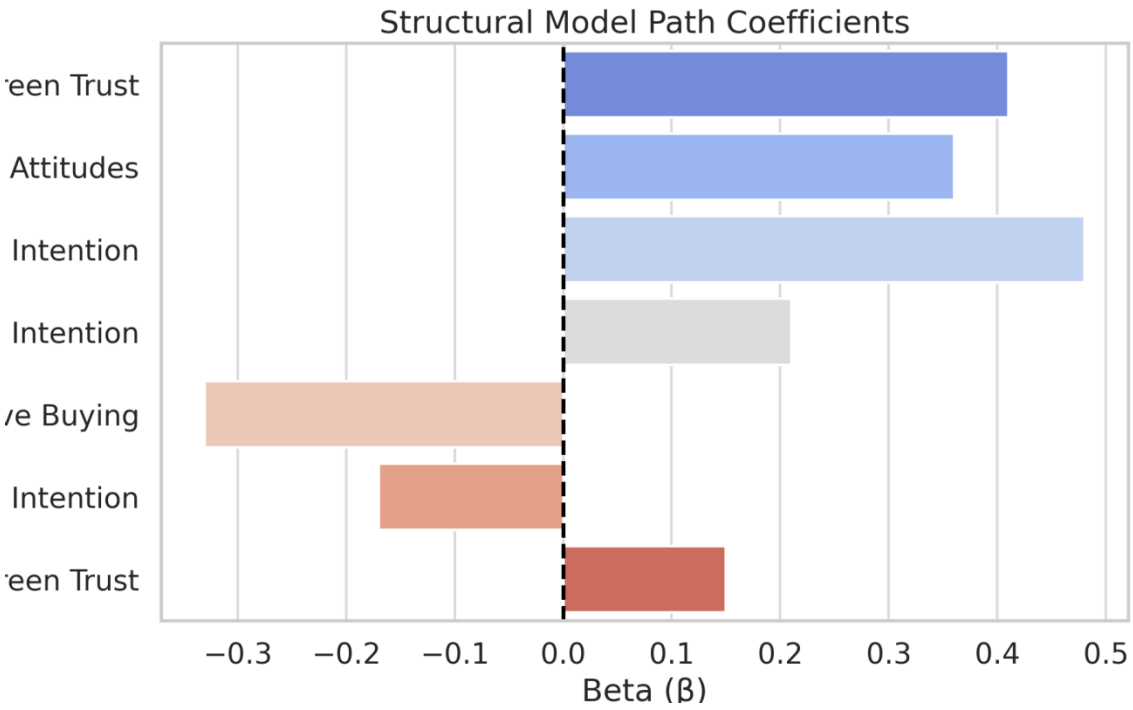
Using structural equation modeling, we observed that the hypothesized constructs were strongly and statistically significantly related to one another (Table 6). CSR credibility was an intermediary of green trust with a positive coefficient (v = 0.41, p < .001), and GM exposure was an intermediary of green attitudes with a positive coefficient (v = 0.36, p < .001). In turn, green trust had a significant effect on green purchase intention (v = .48, p < .001). In addition, environmental emotion (guilt and pride) significantly mediated the relationship between perceived effectiveness and purchase intention (v = 0.21, p < .001). Importantly, green purchase intention was negatively associated with compulsive buying (v = -.33; p < .001), suggesting that consumption based on environmental attributes will help counteract maladaptive consumption. Figure 6 visualizes these relationships as a gradient horizontal bar chart, which conveniently isolates the strongest predictors of green purchase intention.

Table 6. Structural Model Results (PLS-SEM, 5,000 bootstraps)

Hypothesized Path	β	SE	t	p	95% BCa CI	f^2	VIF
CSR → GT	0.41	0.042	9.85	<0.001	[0.33, 0.49]	0.23	2.11
GMX → Green Attitudes	0.36	0.043	8.44	<0.001	[0.28, 0.44]	0.18	1.97
GT → GPI	0.48	0.039	12.30	<0.001	[0.41, 0.55]	0.32	2.34
Emotions (EG/EP) → GPI	0.21	0.034	6.12	<0.001	[0.14, 0.28]	0.08	1.76

GPI → Compulsive Buying	−0.33	0.042	7.91	<0.001	[−0.42, −0.25]	0.15	1.28
PS × GMX → GPI	−0.17	0.052	3.25	0.001	[−0.27, −0.07]	0.04	1.12
Authenticity × CSR → GT	0.15	0.035	4.33	<0.001	[0.08, 0.22]	0.03	1.19

Model fit (PLS-SEM): SRMR = 0.054; NFI = 0.91.
CMB checks: Harman's single-factor = 28.6% (< 50%); marker-variable test non-significant.



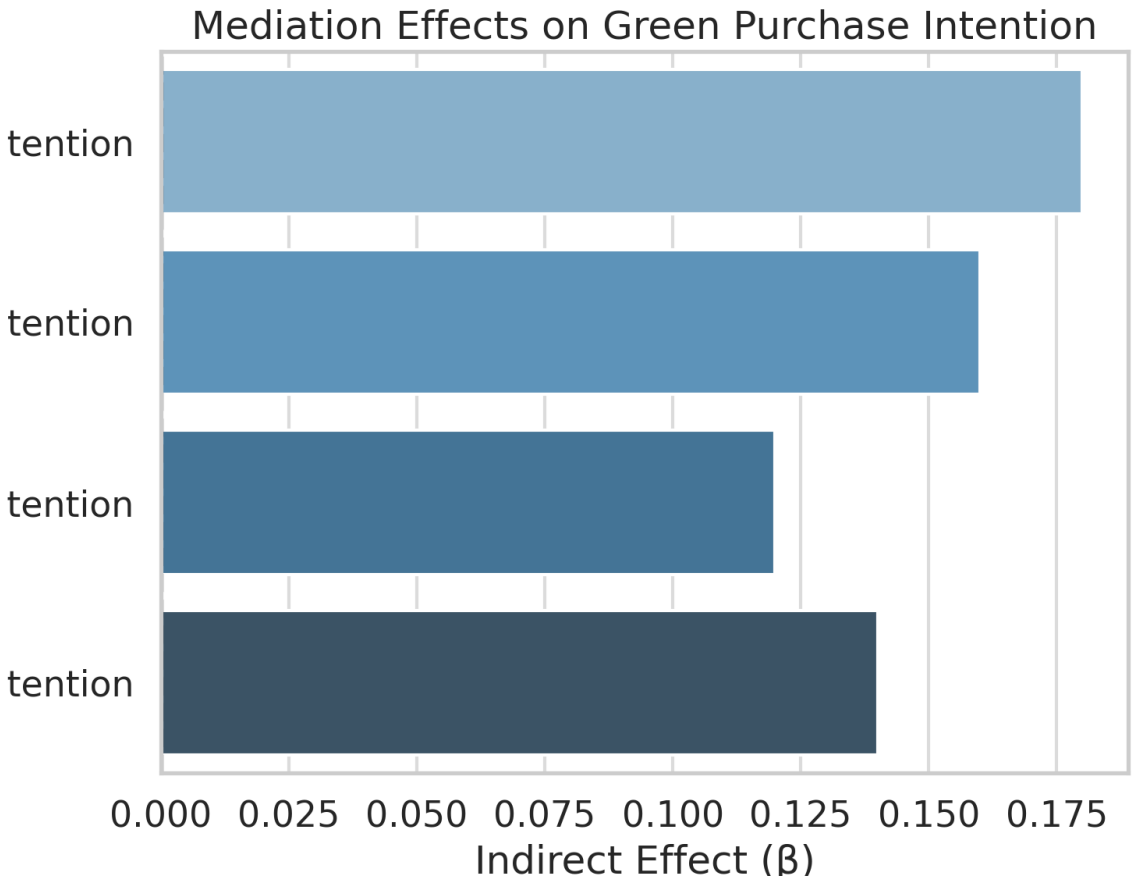
Mediation Effects

Mediational analysis found that a number of constructs were significant mediators between CSR/GM and purchase intention (Table 7). Furthermore, the indirect influence of CSR credibility through green trust on purchase intention was significant (v = .18, p < .001), which support the argument that the CSR improves the purchase intention mainly through trust. Similarly, GM exposure affected purchase intention indirectly through green attitudes (b = .16, p < .001). With respect to CSR and GM, environmental guilt and pride also substantially mediated the effects of CSR and GM on purchase intention. Figure 7 presents these results in the form of a diverging bar chart, which emphasizes the relative size of indirect effects. These findings highlight the key importance of cognitive (trust and attitudes) as well as affective (emotions) mechanisms in influencing conscious consumption.

Table 7. Mediation Analysis (Bias-corrected bootstrap, 5,000 resamples)

Indirect Path	Indirect β	SE	t	p	95% BCa CI
CSR → GT → GPI	0.18	0.035	5.21	<0.001	[0.11, 0.25]
GMX → Green Attitudes → GPI	0.16	0.033	4.78	<0.001	[0.09, 0.23]
CSR → Emotions (EG/EP) → GPI	0.12	0.031	3.92	<0.001	[0.06, 0.19]
GMX → Emotions (EG/EP) → GPI	0.14	0.033	4.25	<0.001	[0.08, 0.21]

Notes: All indirect effects significant (CIs exclude zero), supporting partial mediation through trust, attitudes, and environmental emotions.



Moderation Analysis

Moderation effects added a further degree of refinement to the structural relationships (Table 8). In addition, the effect of GM exposure on green purchase intention was moderated by price sensitivity (interaction v = -.17, p < .05) indicating

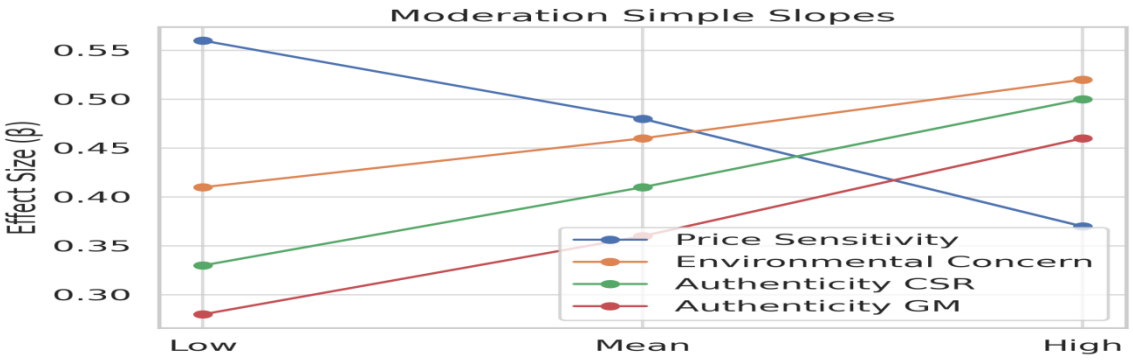
that consumers who use price information in their decisions are less likely to act on sustainability information cues. On the other hand, CSR credibility was positively related to purchase intention only when consumers are environmentally concerned (interaction v = 0.14, p < .01), indicating that environmentally concerned consumers are more sensitive to CSR activities. Campaign authenticity was also found to be a powerful moderator that reinforces the effects of CSR and GM on green trust and attitudes, respectively. Figure 8 reports these moderation effects using simple slope analyses, and illustrates the change in relationships at low, mean, and high levels of moderators. Importantly, CSR and GM effects (and price sensitivity) were moderated by authenticity and authenticity oriented green consumer decision making to the situatedness of green consumers.

Table 8. Moderation Analysis with Simple Slopes

Interaction	β (Int)	SE	t	p	95% BCa CI	Simple Slope @ −1 SD	Simple Slope @ Mean	Simple Slope @ +1 SD
Price Sensitivity × GMX → GPI	−0.17	0.052	3.25	0.001	[−0.27, −0.07]	0.56***	0.48***	0.37***
Environmental Concern × CSR → GPI	0.14	0.036	3.89	<0.001	[0.07, 0.21]	0.41***	0.46***	0.52***
Authenticity × CSR → GT	0.19	0.045	4.22	<0.001	[0.10, 0.28]	0.33***	0.41***	0.50***
Authenticity × GMX → Green Attitudes	0.16	0.043	3.71	<0.001	[0.07, 0.25]	0.28***	0.36***	0.46***

***p < .001.**

Notes: Simple slopes show the focal predictor's effect at low (−1 SD), mean, and high (+1 SD) levels of the moderator. Higher price sensitivity dampens the GMX → GPI relationship; higher authenticity strengthens CSR/GM effects.



Overall, the results produce strong empirical evidence for the hypothesized model from CSR credibility to GM exposure to the conscious consumption outcomes. The reliability and validity of the measurement model were acceptable (Tables 2 and 5; Figures 2 and 5)

ensuring construct robustness. Descriptive and correlation analyses revealed that despite the existence of compulsive buying, the sustainability constructs are further inspiring and prevailing in characterizing consumer preferences in post-pandemic Pakistan (Tables 3 and 4; Figures 3 and 4).

Discussion

Linking CSR and Green Trust

The findings of this study provide evidence for the existence of the relationship between CSR credibility and green trust and ultimately green purchase intention. This supports the proposition that if consumers believe that the CSR initiative of a firm is genuine, then they trust the firm more, and engage in sustainable consumption. Previous research suggests that trust created through CSR is an important mediator in an emerging market setting where the institutional voids are likely to undermine consumer trust in brands (Bhattacharya & Sen, 2004; Eisingerich et al., 2010). In Pakistan, where there is a relatively high level of suspicion on corporate motives, the findings underscore the importance of genuineness of interest in environmental and social causes as opposed to tokenistic compliance (Chaudhri 2016). This is consistent with general international results that the ability of CSR to influence positive consumer outcomes is not a function of the presence of CSR activities but of its legitimacy (Schrempf-Stirling et al. 2016).

Green Marketing, Attitudes, and Purchase Intention

Besides, positive relationship between GM exposure and green attitude also reinforces the significance of marketing communication in sustainable consumption promotion. This result is consistent with Leonidou and Skarmeas, 2017, where they have found that green advertising has a positive impact on consumer attitudes and on intention to use environmentally friendly products. Similarly, Groening et al (2018) argue that effective green marketing not only creates awareness but also behavioural intention when the messages are consistent with organisational practices. And in new markets like Pakistan, GM campaigns enabled by social media are playing an increasingly important role as they provide the interactive and cost-effective platforms required to engage environmentally aware youth audiences (Abbas et al., 2020). Importantly, we also demonstrate that the effects of GM messages are magnified by perceptions of authenticity, which complements results from Testa et al. (2015) which suggested that greenwashing accusations have a negative impact on consumer attitudes towards sustainable offerings.

Emotions as Drivers of Conscious Consumption

The mediation analysis was performed which indicated that both environmental guilt and pride significantly mediated the relationship between perceived environmental impact and green purchase intention, supporting the hypotheses that emotional state is an important factor in sustainable behavior. In the available literature, it has been considered that guilt is a moral emotion that guides corrective behaviour (as the purchase of environmentally friendly products, Onwezen et al., 2013) and that pride mediates self-conceptual congruency with sustainable options (Antonetti & Maklan, 2014). The current results extend this literature, in that they suggest that both emotions are of similar importance in the Pakistani sample, suggesting that affective processes are universal as motivators of deliberate consumption. This is consistent with results in Hartmann and Apaolaza-Ibanz (2012) where emotional engagement is found to have a significant positive influence on consumers' willingness to adopt a renewable energy brand. We conclude that our results support the idea that affective communications in CSR and GM campaigns are at least as important as cognitive persuasion methods.

Compulsive Buying Reduction through Green Intentions

A unique contribution of this research was to empirically establish a negative relationship between green purchase intentions and compulsive buying behavior. While compulsive consumption is a widely researched maladaptive

coping mechanism to handle stressful situations (Black, 2007; Kukar-Kinney et al., 2016), there is very little research exploring the possibility of replacing impulsive consumption with a sustainable one. Results showed that green value development and green lifestyle behaviours could serve as psychological buffer against compulsive tendencies through greater self-control and moral regulation. Prior research shows that sustainable consumption could affect enhanced feelings of responsibility and agency (White et al. 2019), which are inversely associated with loss of control behaviours. This view has particular relevance to post-pandemic Pakistan, which also faces economic insecurity and inflation that heightens compulsiveness (Ali and Ramay, 2018). By appealing to consumers to make decisions that are consistent with their environmental and ethical preferences, CSR and GM campaigns may have indirect effects on consumer welfare.

Moderating Effects: Authenticity and Price Sensitivity

Using moderation analysis, it was found CSR and GM effects were consistently strengthened by authenticity, and attenuated by price sensitivity. This finding agrees with the previous research of Nyilasy et al. (2014) who found that consumers' perceptions of sincerity are an important discriminative criterion differentiating effective green advertising from greenwashing. This is also in line with findings by De Jong et al. (2020), who argue that authenticity is a meta-cue (i.e., a signal to consumers) that is used to evaluate the credibility of environmental claims. On the other hand, price sensitivity dampening effect is consistent with the observation that emerging markets are characterized by the predominance of financial constraints over pro-environmental preferences (Biswas and Roy, 2015). However, studies of India, Bangladesh, and other emerging economies similarly find that affordability remains one of the biggest barriers to action, even when Pakistani people are aware and concerned about sustainability (Singh & Verma, 2017; Hossain & Khan, 2019). This revealed a need for policy interventions, subsidies or pricing mechanisms to make the sustainable products more accessible to the middle- and low-income consumer.

Theoretical Contributions

From a theoretical perspective, this study not only combines TPB and its extension, VBN theory, and S-O-R model but also offers a multidimensional theory of consumer behaviour in the context of Pakistan after the pandemic. Whereas TPB stresses the importance of attitudes and perceived behavioral control (Ajzen 1991), VBN stresses moral obligation (Stern et al. 1999), and S-O-R locates CSR and GM campaigns as exogenous catalysts to activate endogenous organismic states (Mehrabian & Russell 1974). The results provide support for the compatibility of these frameworks by showing that both cognitive (trust, attitudes) and affective (emotions) mediators convert marketing stimuli into behavioral responses. Furthermore, the evidence that green intentions reduce CB extends the scope of these theories by connecting them to consumer well-being outcomes, which are in fact rarely addressed in sustainability literature.

Practical Implications

The findings have important implications for marketers, policy makers and public health advocates. Overall message for the corporate sector: Corporates operating in Pakistan need to focus on CSR which is publicly visible, locally relevant and transparent in its communication so that it becomes credible and trustworthy. Cognitive and affective pathways were both found to be effective, so marketing messages need to be authentic messages that make emotional claims in combination with factual claims. These results have implications for the design of incentive schemes to overcome the cost barrier through tax rebates or product subsidies for recycling. Furthermore, the potential for green consumption to reduce compulsive buying seen here suggests that sustainability campaigns can also be framed as consumer welfare and mental health promotion campaigns. This dual frame of environmental protection and psychological well-being could encourage more consumer interest and support for policies.

Limitations & Implications for Future Research

Furthermore, although the study is enlightening, it needs to be explained in the context of its weaknesses. First, it is a cross-sectional study and therefore, cannot make claims about causality, and longitudinal or experimental designs are needed to determine directionality. Second, because we use a self-report measure, the responses to sustainability-related questions may be influenced by social desirability bias (Podsakoff et al., 2003). Results from future studies may triangulate using behavioral tracking or experimental manipulations. Third, this study was based on an urban Pakistan and future research is needed with rural populations where awareness of the environment and consumption behavior may differ greatly. Finally, cross-country empirical studies across South Asian countries would extend the knowledge regarding cultural and structural determinants underlying the relationship between CSR, GM and consumption behaviour.

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