

Effect of Extrinsic Social Religiosity on Collaborative Consumption Behaviour: Mediating Role of Altruistic Environmental Concern

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Abstract

This paper is a pioneer in investigating the effect of extrinsic social religiosity on collaborative consumption behaviour through mediation by altruistic environmental concerns through survey-based research on Muslim consumers. The study framework is based on the value-attitude-behaviour model. The data is collected from Muslim consumers in Pakistan. Four hundred fifty-eight usable structured survey responses were collected using purposive sampling and the data was analysed by employing PLS-SEM through SmartPLS4 software. The results demonstrate a significantly positive impact of extrinsic social religiosity on Muslim consumers' altruistic environmental concerns and collaborative consumption behaviour. Altruistic environmental concerns were also found to mediate this association positively. The study presents novel findings and extends the emerging literature on collaborative consumption and religiosity. Policymakers and marketers should integrate Islamic extrinsic social religiosity values of communal welfare and collaboration while creating sustainability and marketing appeals to the Muslim population and markets.

Keywords: *Extrinsic social religiosity; altruistic environmental concerns; collaborative consumption; value-attitude-behaviour model; Muslims; PLS-SEM*

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Introduction

The international community emphasises the adoption of sustainable production and consumption practices in developed and emerging economies (Lim, 2017). Human activities have put immense pressure on natural resources because current consumption practices are not sustainable, and a dire need exists to enhance sustainability, specifically in the consumption domain (European Commission 2013; Manoochehri et al. 2001). Considerable changes are necessary in consumer behaviour to improve sustainability and long-term existence (Manoochehri et al., 2001). For humans, the satisfaction of economic desires is inadequate because they cannot neglect society and the environment since both are mutually dependent on one another (Felix, Hinsch, Rauschnabel, & Schlegelmilch, 2018).

The academic community in the marketing field has primarily been involved in enhancing the understanding of factors and attributes that drive green or environmental purchase behaviour to achieve ecological sustainability (Black & Cherrier, 2010). However, emphasising one-dimensional, i.e., ecological sustainability, specifically through “green consumption” or “purchase” behaviour, cannot reap the desired levels of sustainability and secure the future for the present and coming generations. It has become essential to recognise the importance and impacts of sustainability-oriented ideas of consumption behaviour in eco-friendly as well as anti-consumption (Lim, 2017; Makri, Schlegelmilch, Mai, & Dinhof, 2020).

Concerning this agenda, religion is a crucial sociocultural factor for determining ethical and sustainable consumer behaviour (Eom, Saad, & Kim, 2021). Religion plays a strong role in framing culture and consumption behaviours in religion-specific countries and societies, such as in Islamic countries. Studies show that various motivators, including family, friends, peers, religion, culture, emotions, personality traits (Hunt & Vitell, 2006; Lim, 2017; Makri et al., 2020), and even contextual factors such as COVID-19 as well (Batoool, Shabbir, Abrar, & Bilal, 2022), inspire consumers to adopt sustainable behaviours and lifestyles. Among these, an individual’s beliefs and values are the prominent motivators for involvement in sustainable consumption behaviour (SCB) (Stern & Dietz, 1994).

Religion intersects with the sustainable anti-consumption behaviour (SAB) concept of collaborative consumption in meaningful ways. Various major world religions’ beliefs and teachings often advocate for principles that align with the ethos of the sharing economy, such as generosity, community support, and stewardship of resources. For example, Christian doctrines emphasise the significance of sharing with and caring for the less privileged, which encourages participation in collaborative consumption practices. Similarly, Islamic principles of zakat (charitable giving) and waqf (endowment) reflect a long-standing tradition of resource sharing and communal support. These religious frameworks can enhance the social legitimacy and moral appeal of collaborative consumption, promoting its adoption among adherents.

Collaborative consumption, frequently denoted as a concept of the sharing economy, is a form of SAB that has gained significant scholarly attention (Seegebarth, Peyer, Balderjahn, & Wiedmann, 2016). Collaborative consumption is defined as the “peer-to-peer-based activity of obtaining, giving, or sharing access to goods and services, coordinated through community-based online services” (Hamari, Sjöklint, & Ukkonen, 2016). It is an emerging notion that needs literary investigations through various lenses, including economic, social, and cultural perspectives, providing insights into how it intersects with and is influenced by broader societal values, cultural norms, and religious beliefs (Abutaleb, El-Bassiouny, & Hamed, 2021; Makri et al., 2020; Seegebarth et al., 2016).

From an economic perspective, collaborative consumption challenges traditional market transactions by promoting access over ownership, thus creating value through the efficient use of resources. Studies have shown that this model can increase economic efficiency and sustainability by reducing waste and optimising resource utilisation (Hamari et al., 2016). The perceived value in collaborative consumption is multi-faceted for sustainability, with participants often motivated by the desire to build community ties and reduce their ecological footprint.

Recent studies reveal that such empirical investigation is scarce that examines the impact of religiosity on SAB (Makri et al., 2020). Abutaleb, El-Bassiouny, and Hamed (2021) also suggested a need for research because such studies are deficient which associate religiosity as a societal and cultural value with the anti-consumption manifestation of collaborative consumption behaviour. Furthermore, a dearth of survey-based research in the subject area needs scholarly attention (Abutaleb et al., 2021; Makri et al., 2020). Primary data-based survey research presenting the potential impact of religiosity on new sustainability concepts, such as environmental concerns, is also very limited (Felix & Braunsberger, 2016; Felix et al., 2018). Islam and Muslim consumers of developing nations are also the less-researched populations. This is because sustainability is viewed as a concept of the developed and modern world, and most of the studies in the subject area are either focused on Western countries or based on mixed samples mainly consisting of religious people from other religions with a minor representation of Muslim consumers (Minton, Johnson, Vizcaino, & Wharton, 2020). The present study tries to fill these significant voids in the literature by providing quantitative research on Muslim consumers about the impact of extrinsic social religiosity on collaborative consumption through mediation by altruistic environmental concerns following the value-attitude-behavior (VAB) psychological model.

According to World Population Review (2023), more than 80% of the world population associates with one or the other religion. Islam comes next after Christianity in terms of its followers around the world, with more than 2 billion Muslims (World Population Review, 2023). Islamic scriptures and sources of knowledge contain overt and detailed directions, preachings, and values that guide Muslims about their code of life and desirable behavioural patterns, such as community welfare, sharing, charity, collectivism, environmental stewardship, moderation, and simplicity. Based on the theoretical underpinnings from philosophers of human behaviour, the present research hypothesises that in Muslims, religiosity is at the base of the pyramid, which forms and influences environmental attitudes and collaborative consumption behaviours. Communal values and practices stemming from Islamic religiosity influence Muslims' consumption behaviours and patterns towards the sustainable market mix.

Literature Review

According to Hunt and Vitell's (2006) model (HV model) of ethical decision-making, religiosity is among the fundamental drivers of consumer perceptions and attitudes, assisting consumers in their ethical decision-making or prosocial and sustainable behaviours. Thus, the critical role of religious factors cannot be ignored while understanding Muslim consumers' environmental attitudes and SAB because they exhibit a dominant influence of Islamic norms in their behaviours. The Hunt–Vitell theory (Hunt & Vitell, 2006) which is also called the “General theory of marketing ethics” has propositioned various precursors of ethical consumer behaviour that they have divided into five broad consumer environments, i.e. cultural, professional, organisational, industrial and personal. All these environments contain specific factors that can affect a person's decision-making mechanism (Hunt & Vitell, 2006). However, only personal and cultural environments consist of the antecedents that can relate to and influence every consumer. According to Hunt and Vitell (2006), the H-V theory is not a causal model, and the antecedents may not be related in a specific flow as presented in the original model. The authors clarified that the proposed precursors of individual decision-making could impact each other

(Hunt & Vitell, 2006). Therefore, to specify the causal association between the personal and cultural environment antecedents and SAB, the theoretical model for the present research is influenced by the VAB model of Homer and Kahle (1988). The VAB structural hierarchy posits that values are a fundamental source that forms attitudes, which then inculcate specific human behaviours. Following the Hunt-Vitell theory, The present research studies religiosity as a personal value. Furthermore, environmental concerns are studied as the teleological attitude of the individual, which influences consumers to engage in SAB of collaborative consumption.

Collaborative Consumption

Collaborative consumption is defined by Botsman and Rogers (2010) as the “systems of organised sharing, bartering, lending, trading, renting, gifting, and swapping across communities of peers”. It is a consumption practice that encourages people to share their resources with others, increasing the efficient use of resources rather than keeping to themselves only. It is also elaborated as the societal and economic framework that is advanced with the help of technology. This sustainable model of resource sharing lets people collaboratively consume the resources and share the financial burden of owning and maintaining those resources (Botsman & Rogers, 2010; Hamari et al., 2016). The motivation to engage in collaborative consumption is multifaceted and involves financial benefit as well as societal objectives of building relations and interactions (Hamari et al., 2016).

Islam and Collaborative Consumption

In Islam, collaborative consumption values are part of the religious value set, such as the concept of Ummah (Islamic community), Zakat (charity), Sadaqah (donation), Qarz (lending), Akhuwat (communal sharing), all these ideologies are based on the spirit of sharing economy. Furthermore, in Islam, collaborative consumption is the fundamental source to spread religious preachings in the form of societal communication referred to as “Da’wah”. There are obvious verses available in Islamic scripture, the Qur’an, that provide clear directions about societal and economic collaborative consumption. Thus, in Islam, collaborative consumption is not only an economic and social model but it is also a part of religious practices for communal relations and belongings, which benefits do not confine to the Muslim community only but extend to non-Muslims as well. For instance, as directed in the Qur’an:

“Worship God; join nothing with Him. Be good to your parents, to relatives, to orphans, to the needy, to neighbours near and far, to travellers in need, and to your slaves. God does not like arrogant, boastful people.” (The Qur’an, 4:36, translation by Haleem, 2005)

Although there is a vivid presence of the ideologies of collaborative consumption behaviours in Islam, however, little research is present that has investigated the association between religiosity and the present concepts of collaborative consumption, specifically through survey-based quantitative research about Islamic religiosity and Muslim consumers (Abutaleb et al., 2021).

Abutaleb et al. (2021) proposed a conceptual model based on norm-activation-theory depicting that religiosity influences collaborative consumption in consumers. Religious values represent significant sociocultural drivers that can affect consumption and sustainable consumer behaviours (Minton et al., 2020). Collaborative consumption involves a decrease in resource

purchase and consumption by promoting the shared use of already owned products and services. In this way it helps optimal use of resources while providing economic benefits of savings through reduced spending. Similarly, in Islam, Israf is a consumer behaviour concept that forbids Muslims from spending excessively and consuming more than needed. Belk (1985) argues that religion is an essential player in shaping individual behaviour regarding materialism because all the major religions oppose the overconsumption of resources.

Reliosity is defined as the belief in God and the devotion to adhere to the principles believed to be set by God (McDaniel & Burnett, 1990). Allport and Ross (1967) established religiosity in a two facted orientation scale consisting of extrinsic and intrinsic religiosity. Extrinsic religiosity is the aspect of being religious for oneself to find social and utilitarian motives. Extrinsic religiosity is further segregated into personal and social dimensions (Tiliopoulos, Bikker, Coxon, & Hawkin, 2007). People with extrinsic social religiosity are influenced by the extrinsic motives and benefits associated with religious practices, such as visiting religious places to make friends and social connections to achieve a sense of belonging and acceptability. Extrinsic religiosity is a multi-dimensional orientation scale, but limited research has investigated the separate influence of extrinsic social and extrinsic personal religiosity (Scott John Vitell et al., 2009). Most of the studies have treated ER as a single-dimensional construct which has yielded mixed positive, negative, or no association in the context of sustainable consumption behaviour (Arli, Septianto, & Chowdhury, 2021; Scott J. Vitell, Paolillo, & Singh, 2005). While there is rare evidence about the impact of ER on collaborative consumption, the present study uses only the extrinsic social dimension of ER for its investigation because collaborative consumption involves communal practices and interaction for extrinsic motives of social relations and economic benefit, which aligns with the motives of extrinsic social religiosity. Thus, it is proposed that,

H1: Extrinsic social religiosity positively impacts collaborative consumption behaviour in Muslim consumers

Extrinsic social religiosity and altruistic environmental concerns

Every religion, including Islam, Christianity, and Buddhism, stresses the values of humankind and inculcates followers to accord with nature (Sherkat & Ellison, 2007). Values, beliefs and norms contribute to determining people's environmental concerns (Stern & Dietz, 1994). In Islam, the Qur'an and the sayings, actions, or teachings of the Holy Prophet (PBUH) highlight the altruistic values and social and environmental responsibility of humankind for achieving sustainable development. Such as, planting a tree is considered an altruistic deed and a "continuous charity" in Islam. According to one Hadith, "there is none amongst the Muslims who plants a tree or sows seeds, and then a bird, or a person or an animal eats from it, but is regarded as a charitable gift from him." {Sahih Bukhari, Volume 3, Book 39. Number 513, (Khan, 1986)}. Altruistic environmental concerns are the attitudes of adapting environmental care to avoid the undesired consequences for society and others, representing societal and communal values. Thus, due to the social aspect of extrinsic social religiosity and altruistic environmental concerns, it is hypothesised that;

H2: Extrinsic social religiosity positively impacts altruistic environmental concerns in Muslim consumers

Altruistic concerns are found to positively affect the SCB (Tan, Abd Aziz, & Ngah, 2020). Abutaleb et al. (2021) also conceptualised that religiosity positively impacts consumer awareness of their actions' consequences on the environment and society. This awareness contributes to the responsible SAB through collaborative consumption (Abutaleb et al., 2021). As altruistic environmental concerns are also related to caring for the environment for extrinsic social motives and well-being, thus, in line with the earlier value orientation of extrinsic social religiosity, collaborative consumption behaviour, and the VAB model, it is proposed that;

H3: Altruistic environmental concern will positively mediate the association between extrinsic social religiosity and collaborative consumption behaviour

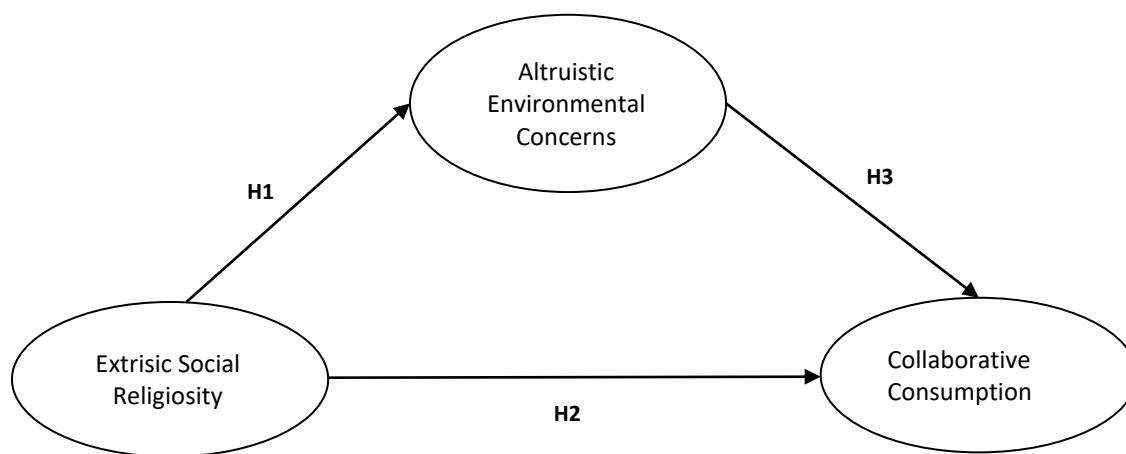


Figure 1: Theoretical Framework

Methodology

The present research work is based on the positivism paradigm. The study aims to enhance knowledge about the relationship between variables through empirical investigation based on previously developed research theories. Hence, the objective of this study is mainly hypothesis testing. The quantitative research method is used to collect and analyse consumer data numerically through a structured survey approach. The study population comprises Muslim consumers from Pakistan. In view of the constraints related to time, cost, and population frame, a nonprobability sampling design was adopted with a purposive sampling technique. Muslim consumers, who were literate enough to fill in the questionnaire and aged 18 years or above, were approached to collect the desired information. According to the present study's aim, structured questionnaires instrument was used in the survey to collect data from Muslim consumers. The questionnaire comprised two sections. The questionnaire included five items regarding demographic information such as gender, age, education, profession, and religion, while the main section consisted of items of the study constructs. Table-1 presents the names of variables, adapted scales, number of items, source, and the Likert scale used for the study.

Statistical Package for Social Sciences (SPSS) was used to analyse the descriptive statistics. The conceptual model is tested employing Partial-least-square structural-equation-modelling (PLS-SEM) using SEM-SmartPLS4 software. The data's quality criteria is assessed using a measurement model. The path estimates are analysed using a structural model using the bootstrap method.

Table 1: Adapted Scales

Sr. No	Construct	No. of Items	Source	Likert-Scale
1	Extrinsic social religiosity	03	(Allport & Ross, 1967)	Five-point
3	Altruistic environmental concerns	04	(Wesley Schultz, 2001)	Five-point
5	Collaborative consumption	03	(Balderjahn et al., 2013)	Five-point

Results

Four hundred fifty-eight usable responses were analysed using SPSS. The respondents' profile in Table-2 shows that an appropriate representation of males and females was available in the studied sample responses. 46% of the respondents were students, and almost 48% were self-employed or employed. Most of the responses were from young consumers, and 72% of the respondents were qualified as bachelors.

Table 2. Demographics (n=458)

	Number	Percent (%)		Number	Percent (%)
Gender			Birth Year		
Male	247	53.93	Born before 1965	0	0.00
Female	211	46.07	From 1965 to 1980	5	1.10
Profession			From 1981 to 1996	44	9.6
Employed	57	12.45	From 1997 to 2012	409	89.3
Household	9	1.97	Education		
Self-employed	163	35.58	Bachelors	330	72.05
Student	211	46.07	Intermediate	75	16.38
Unemployed	18	3.93	Masters & above	53	11.57

Source: Authors' research

Table-3 contains the reliability and validity statistics analysed using SmartPLS4 software (Ringle, Wende, & Becker, 2022). Indicator loadings ranged from 0.642 to 0.852, among which two were less than 0.707. However, all the latent factors had Cronbach's Alpha scores above 0.60 (Churchill, 1979), composite reliability scores were greater than 0.70 (Joseph F. Hair, Hult, Ringle, & Sarstedt, 2017), and average-variance-extracted (AVE) values were greater than 0.50 (Joe F. Hair, Ringle, & Sarstedt, 2011). Thus, the quality criteria were met according to the reliability and convergent validity thresholds.

Table 3: Quality Criteria

Construct	Indicators	Outer Loadings	Cronbach's Alpha	Composite Reliability	AVE
Altruistic Environmental Concern	AEC1	0.713	0.702	0.818	0.531
	AEC2	0.792			
	AEC3	0.758			
	AEC4	0.642			
Extrinsic Social Religiosity	SER1	0.840	0.785	0.875	0.700
	SER2	0.817			
	SER3	0.852			
Collaborative Consumption	CC1	0.821	0.616	0.798	0.570
	CC2	0.654			
	CC3	0.780			

Note: SER-extrinsic social religiosity; AEC-altruistic environmental concerns; CC-collaborative consumption

Source: Authors' research

The discriminant validity measures are provided in Table-4. It depicts that according to the Fornell and Larcker (1981) standard, the correlation values (in italics font) of every latent construct with other constructs was lower than the square root of its AVE. Similarly, the underlined figures in columns 2 and 3 represent the similarity index per hetero-trait–mono-trait (HTMT) ratio and all those HTMT estimates are below 0.90 (Henseler, Ringle, & Sarstedt, 2015). Hence, the discriminant validity as per both the criteria in SmartPLS is satisfied.

Table 4: Discriminant Validity

	$\sqrt{\text{AVE}}$	1	2	3	R^2	F^2 (AEC)	F^2 (CC)
1. Altruistic Environmental Concern	0.729	-	<u>0.406</u>	<u>0.760</u>	0.092	-	0.228
2. Extrinsic Social Religiosity	0.837	0.304	-	<u>0.572</u>	-	0.102	0.099
3. Collaborative Consumption	0.755	0.498	0.399	-	0.312	-	

Note: AEC-altruistic environmental concerns; CC-collaborative consumption

Source: Authors' research.

Hypotheses were tested by employing the structured model and bootstrap method in SmartPLS4. Table-5 expresses that all the hypotheses were significant at a greater than 99% confidence level ($p < 0.01$). Extrinsic social religiosity showed a significantly positive impact on collaborative consumption with a beta value of .270 and a t value of 6.457, resulting in the acceptance of hypothesis H1. The H2 hypothesis was also accepted with a highly significant positive beta value of 0.304 at $p < 0.01$. Altruistic environmental concerns positively impacted collaborative consumption ($\beta = 0.418$, $t = 10.875$, $p < 0.01$), and the specific indirect effects indicated that

extrinsic social religiosity indirectly impacts collaborative consumption through positive mediation by altruistic environmental concerns. Hence, hypothesis H3 was also significant and accepted ($\beta=0.127$, $t=5.839$, $p<0.01$).

Table 5: Hypotheses Testing

Hypothesis	β	Standard deviation	T-value	P-values	Remarks
Direct Effects					
H1 SER -> CC	0.270	0.042	6.457	0.000	Accepted
H2 SER -> AEC	0.304	0.042	7.197	0.000	Accepted
AEC -> CC	0.418	0.038	10.875	0.000	Significant
Specific Indirect Effects					
H3 SER -> AEC -> CC	0.127	0.022	5.839	0.000	Accepted
Total Effects					
SER -> AEC	0.304	0.042	7.197	0.000	Significant
SER -> CC	0.397	0.041	9.767	0.000	Significant
AEC -> CC	0.418	0.038	10.875	0.000	Significant

Note: SER-extrinsic social religiosity; AEC-altruistic environmental concerns; CC-collaborative consumption

Source: Authors' research.

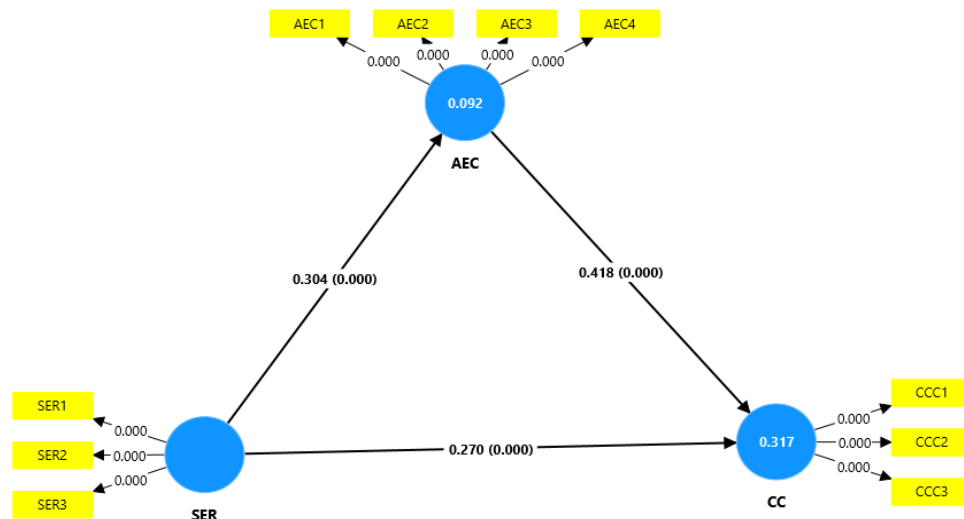


Figure 2: Structural Model

Conclusion

The study fulfils its objective by analysing the relatively unexplored relationships between extrinsic social religiosity, altruistic environmental concerns, and collaborative consumption. The findings present that Muslims with extrinsic social religiosity are engaged in

collaborative consumption behaviour, which aligns with the previous studies about the impact of religiosity on SCB (Belk, 1985; Minton et al., 2020). It also associates with the Islamic values of Zakat, Qarz, and Akhuwat for a collaborative and sustainable society. Extrinsic social religiosity is about attending socially inclusive religious practices and collaborating with others for the sake of God and social objectives of belongingness and building relations. This phenomenon can also be observed during the holy month of Ramadan when Muslims share their resources, including money and food, with others in the form of Zakat, Sadaqah, Wasiya, Infaq and Ihsan for communal well-being. Thus, in Muslims, borrowing, renting, and sharing are not considered alien concepts but part of their religious social practices.

Furthermore, the positive impact of extrinsic social religiosity on altruistic environmental concerns is also in line with the environmental stewardship advised by Islam and highlighted by the researchers (Sherkat & Ellison, 2007; Stern & Dietz, 1994). Moreover, the study exhibited that extrinsic social religiosity drives altruistic environmental concerns in Muslims, which mediate collaborative consumption behaviour. Due to the aforementioned altruistic motives of communal welfare, Muslims are involved in environmental care and, consequently, collaborative consumption practices as a part of their extrinsic social religiosity values.

The findings of the paper are novel, as no study could be found that has empirically investigated these associations. Thus, the study has extended the literature on SAB, collaborative consumption, religiosity, altruistic environmental concerns, and the VAB model and presented an empirical investigation of survey-based research on Pakistan's rarely studied Muslim population in this regard. In conclusion, collaborative consumption is a multifaceted phenomenon influenced by economic values, cultural norms, and religious beliefs. Its practice and acceptance vary significantly across different contexts, shaped by the interplay of these factors. Understanding these dynamics is crucial for developing policies and platforms that can harness the benefits of the sharing economy while respecting and integrating the diverse religious landscapes in which they operate.

Recommendations

There are very limited studies available that have linked religiosity with collaborative consumption, and the number further diminishes in the methodological context of survey-based research and the Muslim population. Future researchers are encouraged to investigate the impact of intrinsic and extrinsic religiosity orientations and cultural values on collaborative consumption behaviour. It would be beneficial to present religion-specific findings to help businesses and policymakers establish customised sustainability solutions and policies according to the religious values of the target population. Marketers, non-profit organisations, and governments can benefit from the study findings by integrating Islamic extrinsic religious values of social and communal collaboration and welfare through advocacy and promotions. The emerging technological business models of collaborative consumption, such as ride-sharing, can be extended to borrowing, renting, and similar practices by highlighting the Islamic extrinsic religious benefits and associated values to increase acceptance in the Muslim markets.

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