What Drives People to Use Grocery Apps? The Moderating & Mediating Role of Customer Involvement and Trust

Debarun Chakraborty [1]
Shrirang Altekar [2]

Abstract

Grocery apps are gaining popularity day by day, and their benefits were well acknowledged by the consumers, especially during the pandemic or during the lockdown. Despite the growing awareness of grocery applications, little is known about the consumer values that influence the intention to buy. Grocery apps must boost client engagement by offering superior value propositions to overcome this barrier. The current research suggested the consumption value theory to fill this gap, which will better explain consumer behavior toward grocery apps. The proposed model was tested using data from 436 users of grocery apps. The data revealed that all the consumption values positively and significantly influenced the intention to use grocery apps. The moderating effect of customer involvement on intention to use was also verified, as was the mediating role of trust. The outcomes of the study added to our understanding of consumer behavior and practice.

Keywords : **grocery apps, theory of consumption values, trust, customer involvement**

Paper Submission Date : May 30, 2021 ; Paper sent back for Revision : October 15, 2021 ; Paper Acceptance Date : October 30, 2021 ; Paper Published Online : November 15, 2021

Growing reliance on IS and rapid growth of information technology, which encompasses computer and communication technologies and related software, characterize this period. Today's advancements in mobile communication technology have resulted in valuable and fantastic mobile applications as well as a new market arena (Chakraborty, 2018). The goal of mobile applications (apps) on smartphones is to provide users with a meaningful experience that is closely aligned with the eudemonic concept of wellness (Chakraborty, 2021a). Technology's dynamism has bestowed upon us apps that provide us with immediate information and have the potential to free up the user's time with a single tap (Chakraborty & Altekar, 2021). Today's apps make it easier for users to interact with each other. Instant and effective browsing through such apps cultivates enjoyment, and affective computing often facilitates such a search, promoting psychological flourishing.

Today's applications (business, education, lifestyle, travel, shopping, health & fitness, food & drink, news, music, sports, social networking, and so on) cater to a wide range of people, assisting them in completing tasks within a few minutes (Chakraborty, 2021b). Furthermore, the emergence of a complex modern lifestyle, an ever-increasing working population (both male and female), work style, and competitive environment has

[1] *Deputy Director & Associate Professor,* Symbiosis Institute of Business Management, Nagpur (Constituent of Symbiosis International (Deemed University), Pune), Nagpur - 440 008, Maharashtra. (Email : debarun84@gmail.com)
ORCID iD : https://orcid.org/0000-0002-0754-1120
[2] *Director & Professor,* Symbiosis Institute of Business Management, Nagpur (Constituent of Symbiosis International (Deemed University), Pune), Nagpur - 440 008, Maharashtra. (Email : director@sibmnagpur.edu.in)
ORCID iD : https://orcid.org/0000-0002-0762-1681

DOI : https://doi.org/10.17010/ijom/2021/v51/i11/166734

increased individual and family concerns for food and health, resulting in an increase in the use of grocery apps rather than simply ordering fast food! People's reliance on grocery apps for acquiring crucial fresh fruit, green groceries, and other food items has grown over time as they continue to confront substantial obstacles in day-to-day activities (Chakraborty et al., 2019; Kumar et al., 2021). According to a survey published by eMarketer in 2018, the use of grocery apps is expected to expand by about 50% this year, with one out of every five people using grocery apps for ordering food items. According to eMarketer (2018), consumers' willingness to use digital retailing, especially intense product selection options, urge to use mobile coupons and mobile shopping lists, and mobile retail loyalty programs have resulted in the exponential growth of the use of grocery apps (Chakraborty et al., 2021).

It is critical to detect the dynamics of acceptability of such technology as society is steering its route towards smart shopping through grocery applications. Knowing the forces that drive a user's acceptance and adoption of an information system would be beneficial (apps). The acceptance of any new technology for a certain purpose can be predicted using user psychology, the technology's quality, and the design process, all of which can be considered to some extent as trustworthy predictors. There have been a lot of mature studies on user adoption of technology. It has resulted in various theoretical models and views, each with its own set of determinants. This research aims to address a gap in the literature by better understanding the consumption values of grocery apps, trust, and intention to use. We also model these factors using the theory of consumption values (TCV) as a theoretical framework (Sheth et al., 1991). To give a more solid understanding of the use of grocery apps, we also examine the moderating and mediating influences that may impact the strength of these underlying connections. Finally, we intend to respond to three important research questions (RQs):

- **RQ1 :** What is the relationship between consumption values, trust, and intention to use?
- **RQ2 :** Does customer involvement moderate the relationship between consumption values and intention to use?
- **RQ3 :** Does trust mediate the relationship between consumption values and intention to use?

As a result, the current study contributes two new ideas. It is the first study to test the theory of consumption values in grocery app customer decision-making. Second, the study examines the Indian grocery app market, mainly untapped in a developing country. Overall, the study gives an in-depth look into the popularity of grocery apps. It presents a theoretical contribution to the literature on consumer behavior and technology adoption and a practical contribution to the decision-making process for grocery app administration.

Background Literature

Grocery Apps

Due to the rapid growth of the worldwide mobile app business, a slew of new mobile apps has emerged in the market. Grocery apps are one of these applications that have become a convenient option for shoppers than going to a physical grocery store. Grocery apps are used in this study to refer to an interactive platform that may be used on devices such as phones and tablets to order groceries (fresh produce; meat; seafood; dairy products; baked, canned, and packaged items) online according to one's needs. With their simple registration process, product listings, rapid shopping lists, real-time order tracking, and a variety of filters, the grocery apps meet customers' needs and provide a pleasant shopping experience. In India, grocery apps are gaining a significant share of the market. Some of India's most popular grocery applications are Bigbasket, Grofers, Spencer's, Dmart, BigBazaar, and Reliance Fresh. Grocery applications have made a possible debut with the growing popularity of online shopping and widespread internet penetration in every household. Research studies revealed that Indians spend

50% of their monthly income on groceries. As a result, the introduction of grocery applications that highlight and guarantee competitive costs, quality, a wide range of products, a well-established supply chain, and on-time delivery has enticed most families to use these frequently.

Theory of Consumption Values (TCV)

The theory of consumption values (TCV) provides a framework for explaining a consumer's decision-making process regarding services or products (Sheth et al., 1991). TCV explains why a consumer uses a product or service based on the five perceived consumption values. The perceived value is the consumer's perception of the cost and benefit differential between two or more competing solutions. The subject of perceived values has been approached from two perspectives: the first emphasizes utility and economic theory, while the second emphasizes utility and the numerous dimensions of hedonic senses. Multiple research studies employed the second approach to explain customer choice of products and services based on the five values : a) functional value, b) social value, c) emotional value, d) epistemic value, and e) conditional value. Previous literature research based on the TCV has shown TCV's relevance to the use of online services. As a result, the TCV is utilized in this study to look at the intention to use grocery apps.

Research Model and Development of Hypothesis

The study is based on a proposed model (Figure 1) that combines the TCV and applies it to grocery apps. Prior research has shown that trust suggests consumption values in a product or service at the time of purchase, and trust is studied as a mediating variable in this study. Age, gender, educational background, household size, and monthly household income are used as control variables, with consumer involvement as a moderating variable.

Epistemic Value

The product or service that can generate interest and satisfy a consumer's demand for novelty and knowledge is said to have epistemic value (Sheth et al., 1991). Trust has been investigated in the context of multiple consumption values, and it has been discovered that trust influences consumption values (Biswas, & Chakraborty, 2019 ; Kim et al., 2009 ; Sheth et al., 1991). From perceived values, the relationship between trust and epistemic value has been investigated (Hur et al., 2012). The epistemic value of grocery apps is conveyed through the new and exciting products that these platforms supply (Sikka Kainth & Verma, 2011). Consumers are increasingly turning to grocery apps to learn new skills and acquire new knowledge. Hence, we posit that :

- **H1 :** Epistemic value positively influences trust.
- **H2 :** Epistemic value positively influences intention to use.

Social Value

Consumers may purchase things and services that influence their social image and provide them with prestige and social position (Sheth et al.,1991). The perceived improvement in one's social image due to using a product or service is referred to as social value (Sikka Kainth & Verma, 2011). Several studies in online transactions have discovered that the consumer's social value can instill trust in such online platforms (Chakraborty, 2019a). The word “social value” is linked to the social norm and aids in the decision to buy or accept a product or service (Sweeney & Soutar, 2001). Their social value influences an individual's intention to continue using a particular app. Hence, we propose that :

- **H3 :** Social value positively influences trust.
- **H4 :** Social value positively influences intention to use.

Conditional Value

Conditional value has been discovered to aid in the development of trust in the setting of services. The conditional value is calculated under particular events and scenarios (Sheth et al., 1991). Price sensitivity and offers have been explored in several research studies (Asti et al., 2021; Dash & Chakraborty, 2021). Discounts and promotions can reduce consumers' price sensitivity, resulting in a higher perceived consumption value (Chakraborty, 2019b). The continuation of specific services is contingent on the amount charged for such services, suggesting that the fee or charges become a criterion for deciding whether or not to purchase (Sheth et al., 1991). The circumstances might either entice or dissuade a customer from making a purchase. Hence, we hypothesize :

- **H5 :** Conditional value positively influences trust.
- **H6 :** Conditional value positively influences intention to use.

Trust & Intention to Use

Trust is defined as the result of a seller's ability to keep a promise made to a customer (Asti et al., 2021). In the context of a distant transaction, where the buyer and seller do not meet, trust is based on the buyer's belief in the vendor's ability to keep promises made to the customer. The trust between the parties involved in a transaction is built up over time (Asti et al., 2021). The expectation-confirmation model explains why purchasers intend to keep using or repurchase a product (Kim et al., 2009). It has been discovered that trust in the vendor has a beneficial impact on repurchase intent. Hence, we posit that :

- **H7 :** Trust positively influences intention to use.

Trust as a Mediator

The role of trust as a mediator between various notions and buying intent has been examined extensively in the past (Asti et al., 2021). There is a positive correlation between client retention and trust. In subscription-based services, trust is extremely important (Chakraborty, 2019c). We assume that trust will thus act as a mediator between the influencing forces of repurchase intention, which in our case are consumption values (Kim et al., 2009). The study's relevant consumption values and the dimensionality these values attempt to examine are now discussed (Sweeney & Soutar, 2001). Perceived integrity and perceived risk are the two primary factors that drive trust in online services, and ability, benevolence, and integrity are the three dimensions of trust in the context of online services (Park et al., 2012). Hence, we propose that :

- **H8a :** Trust mediates the relationship of social value and intention to use grocery apps.
- **H8b :** Trust mediates the relationship of epistemic value and intention to use grocery apps.
- **H8c :** Trust mediates the relationship of conditional value and intention to use grocery apps.

Customer Involvement as a Moderator

Customers' attitudes are discovered to be shaped through consumer involvement, which varies depending on the level of involvement (Park & Lee, 2008). In essence, customer engagement is the perceived importance a consumer places on a product or service based on personal beliefs, preferences, interests, and needs (Chakraborty, 2019d). Existing research also shows that increased consumer interaction can boost a customer's initial trust (Chakraborty, 2020). The amount to which a consumer will use cognitive capacities to evaluate services is determined by their level of involvement (Kumar et al., 2013). Product participation includes three sorts: product involvement, purchase involvement, and advertising involvement (Suh & Youjae, 2006). This research looks at product engagement, where customers' values impact their adoption intention (Park & Lee, 2008). In this setting, we claim that consumer participation will attenuate the effect of perceived consumption values on adoption intention (Suh & Youjae, 2006). Hence, we hypothesize that :

- **H9a :** Customer involvement moderates the association between social value and intention to use grocery apps.
- **H9b :** Customer involvement moderates the association between epistemic value and intention to use grocery apps.
- **H9c :** Customer involvement moderates the association between conditional value and intention to use grocery apps.

Demographic Variables as Controls

This study employs demographic parameters such as age, education, gender, income, and household size as control variables. Several previous studies found a strong link between customer behavior and demographic variables (Diamantopoulos et al., 2003). The current literature shows that demographic characteristics can successfully explain differences in individual consumer behavior when used as controls (Henrique & De Matos, 2015). Researchers have also investigated the moderating impact of demographic characteristics such as age, education, gender, income, and household size (Josiassen et al., 2011). The hypothesized research model is presented in Figure 1.

Figure 1. ***Hypothesized Research Model***

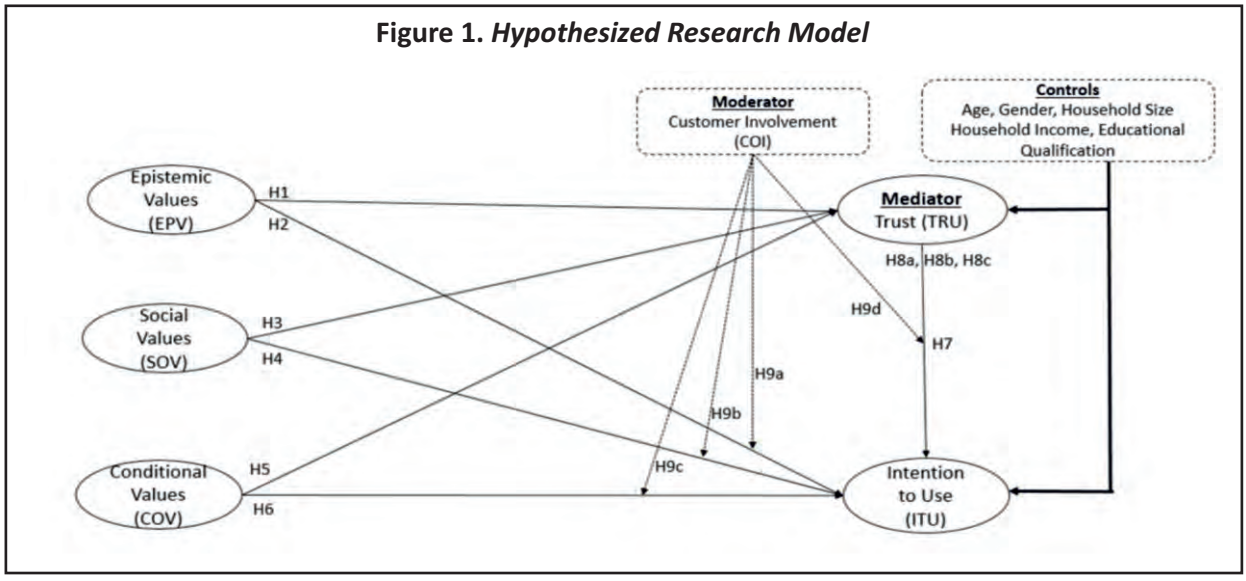


Table 1. ***Demographic Profile of the Respondents***

Demographic Measures	Category	Frequency	Percentage
Age	Less than 25 years	53	12.16%
	25 – 35 years	65	14.91%
	35 – 45 years	112	25.69%
	45 – 55 years	98	22.48%
	55 years & above	108	24.77%
Household Size	Only one member	48	11.01%
	Two members	63	14.45%
	Three members	89	20.41%
	Four members	139	31.88%
	Five members and more	97	22.25%
Gender	Male	250	57.34%
	Female	186	42.66%
Educational Qualification	Completed high school	33	7.57%
	Pursuing/ completed professional degree/ vocational school	73	16.74%
	Pursuing/completed bachelor's degree	123	28.21%
	Pursuing/completed master's degree	126	28.90%
	Pursuing/completed doctorate (PhD or equivalent)	81	18.58%
Monthly Income	Less than 40,000 INR	38	8.72%
	40,001 – 60,000 INR	73	16.74%
	60,001 – 80,000 INR	130	29.82%
	80,001 – 1,00,000 INR	134	30.73%
	1,00,001 and more INR	61	13.99%

Methodology

An online survey containing a structured questionnaire was sent out via email. The survey included several items based on validated metrics from the current research on grocery apps (Table 1). The constructs come from different sources, which are mentioned in Table 2. From February – April 2021, the survey was sent to 884 persons. At first, 457 responses were received, with 436 being selected as having no missing values. The demographic characteristics of the respondents are shown in Table 1. On a 5 - point Likert scale, responses ranged from *strongly agree* to *strongly disagree,* with 5 indicating *strong agreement* and 1 indicating *strong dissent.* Users of grocery apps provided their feedback and suggestions utilizing this questionnaire.

This section shows how data were collected and analyzed using a questionnaire and structural equation modeling (SEM). For data analysis, we have used SPSS version 26, AMOS version 26, and Process Macro version 3.5.3.

Data Analysis and Results

The measurement model is examined using confirmatory factor analysis followed by structural equation modeling. Missing and invalid data and skewness, kurtosis, and multicollinearity were cleaned, checked, and

corrected in the data. The approach yielded a 436-response dataset, which was forwarded for more in-depth analysis and inquiry. According to the findings, the skewness and kurtosis items utilized in the scale were well within the specified ranges, and the data were distributed regularly.

Confirmatory factor analysis (CFA) is performed to establish the fit indices, validity, and reliability after

Table 2. ***Constructs, Items, Sources, and Factor Loadings***

Constructs	Item No.	Items	Sources	EFA	CFA	SEM	Cronbach's Alpha
Social Value *(SOV)*	*SOV1*	I feel more acceptable when I use grocery apps.	(Sikka Kainth & Verma, 2011; Sweeney & Soutar, 2001)	.759	.819	.819	.904
	SOV2	I feel it makes a good impression on others when I use grocery apps.		.850	.894	.894	
	SOV3	I feel that using grocery apps will give me social approval.		.853	.903	.903	
Epistemic Value *(EPV)*	*EPV1*	Using grocery apps makes me curious.	(Hur et al., 2012 ; Sikka Kainth & Verma, 2011)	.788	.871	.871	.907
	EPV2	Using grocery apps provides me with an amazing experience.		.807	.860	.860	
	EPV3	I experience something unique while using grocery apps.		.808	.841	.841	
	EPV4	Grocery apps offer extraordinary services.		.763	.791	.791	
Conditional Value *(COV)*	*COV1*	I believe I will use grocery apps when I have to buy grocery items.	(Sheth et al., 1991)	.870	.898	.898	.884
	COV2	I believe I will use grocery apps when I don't want to go to grocery stores.		.827	.874	.874	
	COV3	I believe I will use grocery apps for cashless transactions.		.740	.770	.770	
Trust *(TRU)*	*TRU1*	Grocery apps are trustworthy.	(Kim et al., 2009)	.899	.935	.935	.954
	TRU2	Grocery apps provide good quality services.		.874	.923	.923	
	TRU3	Grocery apps care for their customers.		.870	.909	.909	
	TRU4	I feel the grocery apps are honest & they keep their promises.		.860	.900	.900	
Intention to Use *(ITU)*	*ITU1*	I now use grocery apps for buying grocery items.	(Kim et al., 2009)	.815	.936	.936	.854
	ITU2	If I have access to grocery apps, I intend to use them.		.708	.727	.727	
	ITU3	I intend to use the grocery apps in the next six months.		.751	.765	.765	

testing for common method bias. Table 2 shows that the factor loadings for each item are more than 0.7, indicating that each item's factor loading is eligible for further examination (Fornell & Larcker, 1981). The factor loadings of EFA, CFA, and SEM as well as Cronbach's alpha values have been reported in Table 2. CFA is used to guarantee that all measurements are consistent both internally and externally. The internal consistency of the components within each construct is tested using composite reliability. All constructs have composite reliability of better than 0.70, which is the required figure (Table 3). The measuring model's output also supports the constructs' convergent validity as well as reliability. The extracted average variance (AVE) is larger than 0.50, and the composite reliability (CR) is greater than 0.70, which are both well within acceptable ranges (Fornell & Larcker, 1981). The square roots of the AVEs are all greater than the correlation coefficients between constructs, implying discriminant validity (Fornell & Larcker, 1981). Later, discriminant validity is assessed using the heterotrait-monotrait (HTMT) technique. Table 4 shows the anticipated HTMT values, lower than the 0.85 threshold value (Henseler et al., 2015). As a result, the discriminant validity is further confirmed. Furthermore, although the correlations between the research measures are good, they are not as high as 0.80, which is required. Finally, to see how well the model fits, we calculate the goodness of fit criteria values (χ^2/ degrees of freedom = 1.303; TLI = 0.993, CFI = 0.994, and RMSEA = 0.026).

Table 3. *Validity and Reliability Analysis*

	CR	AVE	MSV	Max R (H)	*TRU*	*SOV*	*EPV*	*COV*	*ITU*
TRU	0.955	0.841	0.222	0.956	**0.917**				
SOV	0.905	0.762	0.222	0.913	0.471	**0.873**			
EPV	0.906	0.708	0.236	0.910	0.366	0.329	**0.841**		
COV	0.885	0.721	0.222	0.899	0.209	0.191	0.471	**0.849**	
ITU	0.854	0.663	0.236	0.906	0.377	0.454	0.486	0.354	**0.814**

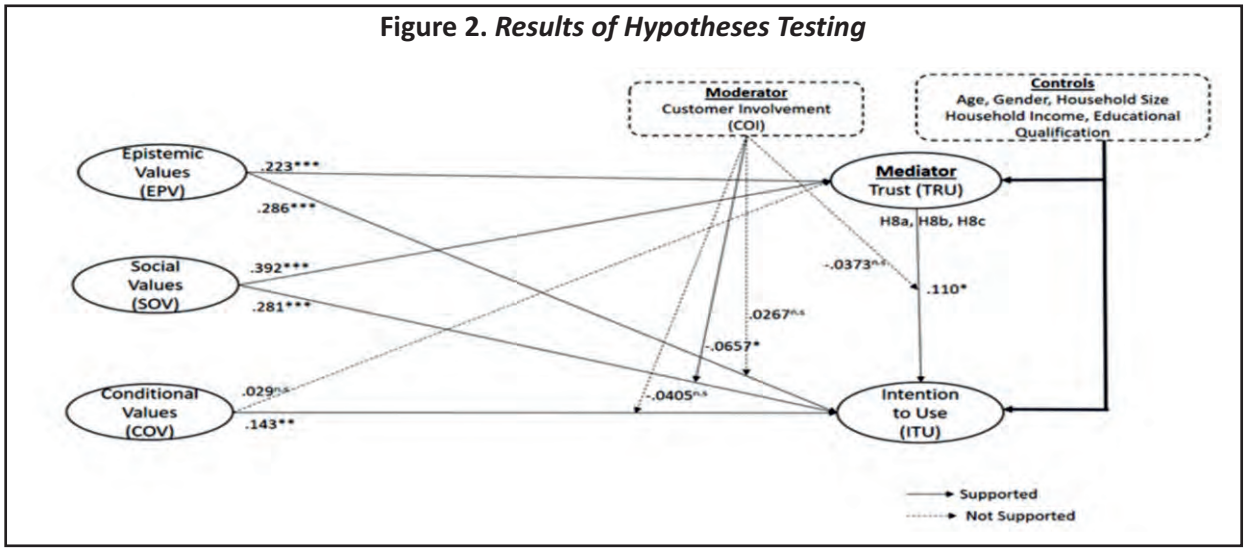
Table 4. *HTMT Analysis*

	SOV	*EPV*	*COV*	*TRU*	*ITU*
SOV					
EPV	0.320				
COV	0.190	0.466			
TRU	0.474	0.366	0.212		
ITU	0.438	0.451	0.354	0.369	

Table 5. *Results of Hypotheses Testing*

Indirect Hypothesis		Path		Estimate	*p*-value	Support
H1	*TRU*	<---	*EPV*	0.223	<0.001	Yes
H2	*TRU*	<---	*SOV*	0.392	<0.001	Yes
H3	*TRU*	<---	*COV*	0.029	>0.05	No
H4	*ITU*	<---	*EPV*	0.286	<0.001	Yes
H5	*ITU*	<---	*SOV*	0.281	<0.001	Yes
H6	*ITU*	<---	*COV*	0.143	<0.01	Yes
H7	*ITU*	<---	*TRU*	0.110	<0.05	Yes

Figure 2. ***Results of Hypotheses Testing***



The hypotheses are tested using a structural model analysis, which reveals excellent model fit indices (χ^2/degrees of freedom = 1.303; TLI = 0.993, CFI = 0.994, and RMSEA = 0.026). The results (Table 5, Figure 2) show that epistemic value (H1: $\beta = 0.223$, $p < .001$) and social value (H2: $\beta = 0.392$, $p < .001$) have a significant association with trust ; whereas, conditional value (H3: $\beta = 0.229$, $p > .05$) has a non-significant association with trust. On the other hand, epistemic value (H4: $\beta = 0.286$, $p < .001$), social value (H5: $\beta = 0.281$, $p < .001$), conditional value (H6: $\beta = 0.143$, $p < .01$) and trust (H7: $\beta = 0.110$, $p < .05$) have a significant association with intention to use (Table 5, Figure 2).

Model 4 in SPSS's PROCESS macro is used to perform the mediation analysis on the constructs. Trust is found

Table 6. ***Results of Mediation Analysis***

			EPV → TRU → ITU			
	β	**SE**	***t***	***p***	**LLCI**	**ULCI**
EPV → TRU	.4139	.0548	7.5554	.0000	.3062	.5215
TRU → ITU	.1908	.0388	4.9128	.0000	.1144	.2671
EPV → ITU (Direct Effect)	.3332	.0471	7.0692	.0000	.2406	.4259
EPV → ITU (Total Effect)	.4122	.0455	9.0631	.0000	.3228	.5015
			SOV → TRU → ITU			
SOV → TRU	.4913	.0480	10.2336	.0000	.3970	.5857
TRU → ITU	.1734	.0412	4.2069	.0000	.0924	.2544
SOV → ITU (Direct Effect)	.2805	.0459	6.1067	.0000	.1902	.3707
SOV → ITU (Total Effect)	.3657	.0420	8.7044	.0000	.2831	.4482
			COV → TRU → ITU			
COV → TRU	.2262	.0547	4.1348	.0000	.1187	.3338
TRU → ITU	.2424	.0379	6.3937	.0000	.1679	.3170
COV → ITU (Direct Effect)	.2502	.0441	5.6782	.0000	.1636	.3368
COV → ITU (Total Effect)	.3050	.0452	6.7545	.0000	.2163	.3938

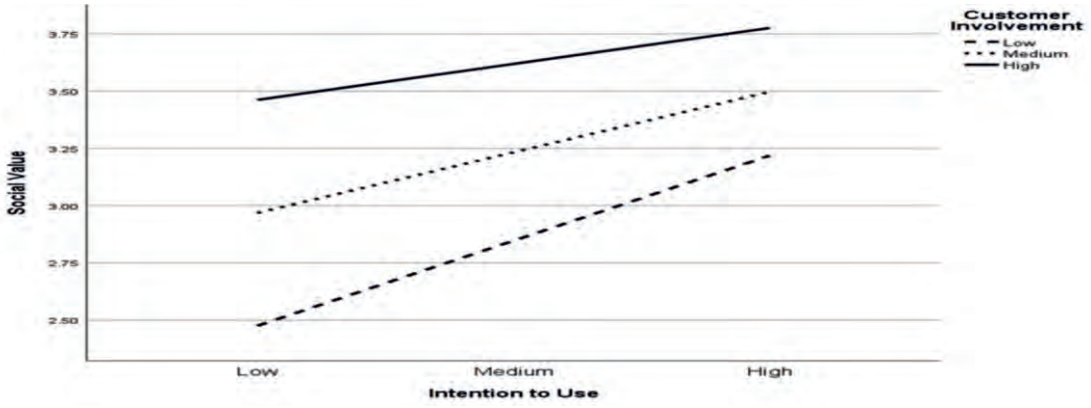
Table 7. ***Indirect Effects Between Dependent and Independent Variables***

Indirect Effects	Hypothesis	β	SE	LLCI	ULCI	Mediation?
EPV → TRU → ITU	H8a	.0790	.0207	.0427	.1228	Partial
SOV → TRU → ITU	H8b	.0852	.0236	.0395	.1331	Partial
COV → TRU → ITU	H8c	.0548	.0169	.0249	.0909	Partial

Table 8. ***Results of Moderation Analysis with Customer Involvement as a Moderator***

Customer Involvement (COI) as a Moderator										
Hypothesis	**Path**			**β**	**SE**	***t***	***p***	**LLCI**	**ULCI**	**Moderation?**
H9a	*EPV*	→	*ITU*	.0267	.0253	1.0525	.2931	–.0231	.0764	No
H9b	*SOV*	→	*ITU*	–.0657	.0270	–2.4295	.0155	–.1188	–.0125	Yes
H9c	*COV*	→	*ITU*	–.0405	.0288	–1.4085	.1597	–.0971	.0160	No
H9d	*TRU*	→	*ITU*	–.0373	.0270	–1.3835	.1672	–.0904	.0157	No

Figure 3. ***The Moderating Influence of Customer Involvement on the Association Between Social Value and Intention to Use***



to partially mediate the relationship between consumption values and intention to use. The total, direct, and indirect correlations between the study's constructs are shown in Table 6 and Table 7. H8a, H8b, and H8c are all shown to be significant hypotheses.

The moderating influence of customer involvement on the association between consumption values and intention to use is investigated using Model 1 in the PROCESS macro of SPSS. The results show that customer involvement successfully moderates the relationship between social values and intention to use. Table 8 and Figure 3 demonstrate the same. We also discover that customer involvement does not influence the association between epistemic value, conditional value, and trust with the intention to use. Table 8 shows the findings of this discovery.

The results show that socio-demographic characteristics like age, gender, household size, income, and educational qualification do not have a statistically significant confounding influence on the dependent variables: trust & intention to use. So, here, it means that the control variable does not have any confounding effect on trust and intention to use.

Discussion

The primary goal of this research is to apply the consumption values to identify the elements that influence the intention to use grocery apps. We investigate the role of trust in mediating the connection between consumption values and intention to use. Our research widens its scope to examine the moderating effects of customer involvement on consumption values and intention to use. We discover that the hypotheses H1, H2, H4, H5, and H6 establish the relationship between the consumption values, trust and intention to use, which are all significant. This means that the customers' consumption values lead to the establishment of trust except for conditional value. All of the linked aspects of consumption values, such as pricing, quality of services, interesting product displays, and an appealing promotional program — all contribute to establishing trust in grocery apps, except the conditional value affordance. The intention to use grocery apps is primarily triggered by a combination of social value (prestige), epistemic value (novelty and curiosity), and conditional value (discounts offers). Epistemic values provide the highest positive value towards intention to use, which is a reasonable conclusion. Using H7, we project that trust would influence grocery apps' intention to use. The study results that establish a relationship between trust and intention to use back up this claim. This conclusion is well supported in the literature on the subject. Grocery apps are propelled by disruptive technology, which includes increased security and privacy features.

Furthermore, the presence of trust increases a consumer's willingness to pay a premium for grocery apps. This, it appears, can lead to an increase in grocery apps' intention to use. Trust partially mediates the relationship between consumption values and intention to use. The perceived consumption values for improving the intention to use are logically plausible, as shown by these hypotheses, and trust will improve through mediation. Customer involvement moderates the relationship between social value and intention to use. Here, it has been identified that an increase in social values and a high level of customer involvement will increase the intention to use grocery apps.

Implications

Theoretical Implications

Based on the recommendations in recent literature on grocery apps, we expand our research to include different cultures, demographic characteristics, and an analysis of the moderating effect of customer involvement. The study contributes to the theory on four levels after identifying the research gaps. First, the study employs a novel model that incorporates trust and customer involvement as novel elements yet to be investigated in prior grocery apps models. Second, the study evaluates the mediating influence of trust on intention to use, which aids in determining the interplay between consumption values and intention to use through trust mediation. Third, the study analyzes the influence of consumption values on intention to use a larger and more demographically diverse group of respondents, testing the moderation effect of customer involvement. Fourth, the current study adds to the body of knowledge on consumption value theory by applying it to the highly relevant setting of grocery apps. Other subscription-based consumer services could benefit from this addition.

Practical Implications

For practitioners, it is vital to gain a better grasp of how to attract new clients and keep existing ones. Grocery apps have a greater growth trajectory in the technology-driven consumer services arena, and other subscription-based services are increasing. This research contributes to a better understanding of consumption values, essential in

establishing trust and encouraging customer intention to use. Grocery apps can build their solutions around the most important values for users and improve their current services by incorporating consumption value-related benefits. The findings regarding the importance of trust in improving purchase intention can assist marketers in focusing their efforts on trust-building initiatives so that existing subscribers can continue to use the company's services. Based on demographics, there is a variation in consumer perceived value and repurchase intention, according to the study. This means that subscription-based service providers can tailor their products to different age groups and family sizes to deliver better customer value. On the policy front, the government's grocery apps related policies can be based on our research findings. The policy for boosting the acceptance and penetration of grocery apps might be based on the consumption values gathered by companies.

Conclusion

This research contributes to consumer behavior theory in the context of grocery apps. This study is significant for the grocery app-related sector as a whole because of its connection to technology-based services. The TCV is utilized to evaluate the intention to use grocery apps, and trust is used to mediate consumption values and intention to use in the study. We examined the relevant literature to identify the associated consumption values with grocery apps to answer our first study question. We evaluated the mediating effect of trust on the connection between consumption values and intention to answer the second study question. We find a partially mediated effect of trust on all consumption values and intention to use. The third research question is to see if customer involvement has a moderating impact on the association between consumption value and intention to use. With the advancement of technology, India has seen a shift in grocery shopping preferences in recent years. Grocery applications have become a significant part of today's grocery landscape. In this study, we attempted to investigate and identify the characteristics that can predict consumer behavior in the adoption and use of grocery applications.

Limitations of the Study and Scope for Future Research

While this study's theoretical and practical contributions have been highlighted, there are certain limitations to the study that we want to point out. First, the study was done during the COVID-19 pandemic, which caused the respondents to stay inside their homes and order more and more through grocery apps. The remarkable increase seen by grocery apps during the lockdown situation is unlikely to be sustained in the future. More investigations under normal conditions to corroborate the veracity of the conclusions of this study can overcome this restriction. Second, because the study is conducted in India; hence, it may not be appropriate to generalize the findings, and we recommend that the model be tested in other areas and cultures to build perspectives and investigate the support or distinction of our findings.

Authors' Contribution

Dr. Debarun Chakraborty conceived the idea and developed qualitative and quantitative designs to undertake the empirical study. Dr. Shrirang Altekar extracted highly reputed research papers, filtered these based on keywords, and generated concepts and codes relevant to the study design. Dr. Debarun Chakraborty verified the analytical methods and supervised the study. The interviews were conducted by Dr. Debarun Chakraborty and Dr. Shrirang Altekar. The numerical computations were done by Dr. Debarun Chakraborty using SPSS v 26, AMOS v 26, and Process Macro v 3.5.3. Dr. Debarun Chakraborty wrote the manuscript in consultation with Dr. Shrirang Altekar.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

Funding Acknowledgment

The authors received no financial support for the research, authorship, and/or for the publication of this article.

References

Asti, W. P., Handayani, P. W., & Azzahro, F. (2021). Influence of trust, perceived value, and attitude on customers' repurchase intention for e-grocery. *Journal of Food Products Marketing, 27*(3), 157–171. https://doi.org/10.1080/10454446.2021.1922325

Biswas, W., & Chakraborty, D. (2019). Impact of organizational values, compassion, and well-being on industrial disputes: An empirical study. *Prabandhan: Indian Journal of Management, 12*(1), 36–51. https://doi.org/10.17010/pijom/2019/v12i1/141427

Chakraborty, D. (2018). Impact of celebrity endorsed advertisements on rural consumers' purchase intention towards mobile SIM cards: A study conducted in West Bengal. *Indian Journal of Marketing, 48*(10), 52 – 63. https://doi.org/10.17010/ijom/2018/v48/i10/132335

Chakraborty, D. (2019a). Adoption of M-banking service apps for rural consumers: An empirical analysis. *NMIMS Management Review, 37*(3), 34 – 52.

Chakraborty, D. (2019b). Components affecting intention to use online dating apps in India: A study conducted on smartphone users. *Asia-Pacific Journal of Management Research and Innovation, 15*(3), 87 – 96. https://doi.org/10.1177/2319510X19872596

Chakraborty, D. (2019c). Factors responsible for making young urban consumers brand loyal: A study on mobile network operators. *Journal of Management Development, 38*(7), 616–636. https://doi.org/10.1108/JMD-01-2019-0029

Chakraborty, D. (2019d). Indian shoppers' attitude towards grocery shopping apps: A survey conducted on smartphone users. *Metamorphosis, 18*(2), 83 – 91. https://doi.org/10.1177/0972622519885502

Chakraborty, D. (2020). Elements impacting the utilization expectation of various health-care apps in India: A study conducted on smartphone users. *Foresight, 22*(3), 385 – 400. https://doi.org/10.1108/FS-11-2019-0098

Chakraborty, D. (2021a). Elements impacting the adoption of m-app among the travel companies in India. *International Journal of Business Excellence, 24*(1), 68 – 83. https://doi.org/10.1504/IJBEX.2021.115369

Chakraborty, D. (2021b). Factors influencing passengers' purchase intention towards app-cab services in metro cities of India: A study on smartphone users. *Indian Journal of Marketing, 51*(1), 41–54. https://doi.org/10.17010/10.17010/ijom/2021/v51/i1/156933

Chakraborty, D., & Altekar, S. (2021). Work from home (WFH), COVID-19, and its impact on women. *Prabandhan: Indian Journal of Management, 14*(9), 22 – 29. https://doi.org/10.17010/pijom/2021/v14i9/166294

Chakraborty, D., Santra, A., & Dhara, S. K. (2019). Factors affecting the liquid workforce in different organizations and its effectiveness. *Prabandhan: Indian Journal of Management, 12*(4), 44–60. https://doi.org/10.17010/pijom/2019/v12i4/143348

Chakraborty, D., Siddiqui, A., & Siddiqui, M. (2021). Factors associated with the adoption of health apps: Evidence from emerging economies. *Journal of Electronic Commerce in Organizations, 19*(4), 20–39. https://doi.org/10.4018/JECO.2021100102

Dash, G., & Chakraborty, D. (2021). Transition to e-learning: By choice or by force – A cross-cultural and trans-national assessment. *Prabandhan: Indian Journal of Management, 14*(3), 8–23. https://doi.org/10.17010/pijom/2021/v14i3/158151

Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R., & Bohlen, G. M. (2003). Can socio-demographics still play a role in profiling green consumers ? A review of the evidence and an empirical investigation. *Journal of Business Research, 56*(6), 465 – 480. https://doi.org/10.1016/S0148-2963(01)00241-7

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Henrique, J. L., & De Matos, C. A. (2015). The influence of personal values and demographic variables on customer loyalty in the banking industry. *International Journal of Bank Marketing, 33*(4), 571–587. https://doi.org/10.1108/IJBM-06-2014-0082

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Hur, W. - M., Yoo, J. - J., & Chung, T. - L. (2012). The consumption values and consumer innovativeness on convergence products. *Industrial Management & Data Systems, 112*(5), 688–706. https://doi.org/10.1108/02635571211232271

Josiassen, A., Assaf, A. G., & Karpen, I. O. (2011). Consumer ethnocentrism and willingness to buy: Analyzing the role of three demographic consumer characteristics. *International Marketing Review,28*(6), 627 – 646. https://doi.org/10.1108/02651331111181448

Kim, G., Shin, B., & Lee, H. G. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal, 19*(3), 283–311. https://doi.org/10.1111/j.1365-2575.2007.00269.x

Kumar, S., Dhir, A., Talwar, S., Chakraborty, D., & Kaur, P. (2021). What drives brand love for natural products? The moderating role of household size. *Journal of Retailing and Consumer Services, 58*, 102329. https://doi.org/10.1016/j.jretconser.2020.102329

Kumar, V., Dalla Pozza, I., & Ganesh, J. (2013). Revisiting the satisfaction – loyalty relationship: Empirical generalizations and directions for future research. *Journal of Retailing, 89*(3), 246 – 262.https://doi.org/10.1016/j.jretai.2013.02.001

Park, D. - H., & Lee, J. (2008). eWOM overload and its effect on consumer behavioral intention depending on consumer involvement. *Electronic Commerce Research and Applications, 7*(4), 386–398. https://doi.org/10.1016/j.elerap.2007.11.004

Park, J. K., Gunn, F., & Han, S. - L. (2012). Multidimensional trust building in e-retailing: Cross-cultural differences in trust formation and implications for perceived risk. *Journal of Retailing and Consumer Services, 19*(3), 304 –312. https://doi.org/10.1016/j.jretconser.2012.03.003

Sheth, J.N., Newman, B.I., & Gross, B.L. (1991). Why we buy what we buy: A theory of consumption values. *Journal of Business Research, 22*(2), 159 –170. https://doi.org/10.1016/0148-2963(91)90050-8

Sikka Kainth, J., & Verma, H. V. (2011). Consumption values: Scale development and validation. *Journal of Advances in Management Research, 8*(2), 285 – 300. https://doi.org/10.1108/09727981111175993

Suh, J. - C., & Youjae, Y. (2006). When brand attitudes affect the customer satisfaction-loyalty relation: The moderating role of product involvement. *Journal of Consumer Psychology, 16*(2), 145–155. https://doi.org/10.1207/s15327663jcp1602_5

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing, 77*(2), 203–220. https://doi.org/10.1016/S0022-4359(01)00041-0

About the Authors

Dr. Debarun Chakraborty is working as a Deputy Director & Associate Professor at Symbiosis Institute of Business Management, Nagpur. His areas of interest are consumer behavior, services marketing, rural marketing, and marketing research. He has published six books with different publishing houses in management and written various articles in different international journals indexed with WoS (ESCI & SSCI), Scopus, ABDC, & ABS. He is also the editorial board member of different journals under Taylor & Francis, Sage, Emerald, and IGI Global.

Prof. (Dr.) Shrirang Altekar is working as a Director & Professor at Symbiosis Institute of Business Management, Nagpur. He has extensive knowledge of technical and non-technical areas of business and has been involved in running businesses at the strategic level. He comes with an industry background of 23 years and has academic experience of 15 years as well, with over 10 years of experience as a Director. He has worked in a consulting, advisory, and learning and development capacity with several corporates in the FMCG, insurance, manufacturing, chemical, pharmaceutical, and aviation sectors.