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Influence of online customer reviews on consumers' willingness to purchase through online group buying

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Abstract

Online group purchase (OGB) is a popular e-commerce concept where individuals purchase items at a discounted rate. This approach enhances customer involvement by addressing price sensitivity, social influence, and trust. Therefore, it was crucial to research how online customer review (OCR) affects OGB customers' inclination to buy. Using social exchange theory, a survey of 448 post-graduation management education students (ages 21–25) was conducted. OCR are linked to perceived effectiveness, structural assurance, and familiarity. However, familiarity was positively correlated with perceived effectiveness and structural assurance, while continuous usage was not. The findings shed light on OGB decision-making and guide firms in enhancing price, trust, and social influence to boost participation.

Subject Classification: *M31.*

Keywords: *Online group buying, Online customer review, Perceived effectiveness, Perceived structural assurance, Familiarity, Continuance usage.*

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Introduction

Founded in the 1990s, Online Group Buying (OGB) has evolved but is currently experiencing global growth, particularly in China and the US [8]. In India, OGB saw Birth, death, and resurrection; however, now it is picking up pace with Meesho and Udaan. To increase OGB platform, intermediary, customer trust, and value. Daily discounts from internet intermediaries in OGB attract shoppers [8]. Intermediaries or sellers must lower prices, give volume discounts, evaluate customers' needs, gather comments on or off social media, secure transactions, and more [6]. Online transactions are elevating the relevance and importance of Online Customer Reviews (OCR) [6]. Reviewers discuss their experiences with products and services. They educate consumers and encourage internet purchases [5]. OCR boosts website performance, creates a vendor-appreciating community, and influences others [3]. Therefore, evaluating the purchasing behaviours of OCR and OGB customers is crucial. The study examines the relationship between OCR and mediating variables, including Perceived Effectiveness (PE), Perceived Structural Assurance (PSA), and familiarity with an intermediary (FAM), in relation to the continuance usage (CU) of OGB which study informs utilizing social exchange theory.

Literature Review

Customer reviews represent an important social cue in OGB platforms, influencing users' perceptions towards purchase [3]. Drawing on Social Exchange Theory [6], prior studies suggest that these perceptions act as critical determinants of consumers' CU.

Social exchange theory encompasses psychology, management, and anthropology [1]. The theory helps explain participants' behaviour in online communities through social exchanges such as sharing product-related details. [6]. Social groups can use product information for online group purchase. Social exchange theory tests consumer psychology and use. Shi and Liao [6] examined how online customer reviews and mediating variables, including PE, PSA, and FAM, affect OGB using social exchange theory.

Theoretical Framework

Online Customer Review

OCR, an individual's perception of the goods and/or services' functional, monetary, social, and psychological benefits, influences purchase decisions [6]. Ratings of ordinary to good OCR quality aid purchase decisions [8]. OCR encompasses customers' experiences with the product and/or service, operations, pricing, quality, and other aspects that facilitate the development of structural assurance in group buying [6]. Hence, it minimizes insecurity, worry, anxiety, and risk. Based on existing consumers' familiarity with suppliers or intermediaries, OCR may attract new customers. This study suggests the following hypotheses:

H1: OCR significantly impacts PE for OGB

H2: OCR significantly impacts PSA for OGB

H3: OCR significantly impacts FAM for OGB

Perceived Effectiveness (PE)

Consumer value added and gains from collective buying are referred to as PE. Consumers rate group-bought products/services based on their functional, monetary, psychological, and social use and perceived benefits, leading to usage [6]. The OCR provides a baseline reference for group buying, while PE may offer psychological and social value, including happiness, fulfilment, enjoyment, and surprise. Thus, the study proposes these hypotheses:

H4: PE has a significant impact on continuance use.

Perceived Structural Assurance (PSA)

PSA is consumers' trust in OGB platforms' promises, business policies, legality, and regulations to reduce online shopping risk and protect customers. When structural assurance is high, consumers believe websites have robust operations and mechanisms; as a result, they are more likely to be motivated to use OGB platforms. Thus, the study proposes these hypotheses:

H5: PSA has a significant impact on continuance use.

Familiarity (FAM)

By leveraging existing customers' experiences, interactions, and learnings regarding OGB products, familiarity is gained with OGB's processes, operations, and sellers/intermediaries. Familiarity will reduce the danger, confusion, and anxiety associated with adopting a new buying system [4]. It may boost trust in OGB. Thus, the study proposes these hypotheses:

H6: FAM has a significant impact on continuance use.

Research Methodology

The study employed a survey method to investigate the OGB behaviour of college students, as their pocket money is limited and OGB platforms offer discounted products. The study employs six constructs: OCR, PE, PSA, and FAM, to measure their impact on CU in OGB using a Likert scale. All the constructs were reflective in nature with multiple indicators [9]. The items for the survey instrument were developed by adapting the items used in Shi and Liao's [6] study. There were four indicator items in OCR [6], eight in PE, five in PSA, and five in FAM [4]. 460 post-graduation management education students (448 reverted) (ages 21–25) (Table 1) were surveyed (having consented) to determine their perception and usage behaviour.

Table 1
Demographic characteristics

	Category N (%),N = 448	
Gender	Male	214 (64.1)
	Female	234 (35.9)
Annual Family Income	Below 10000	198 (44.2)
	10000-20000	88 (19.6)
	20000-30000	62 (13.8)
	Above 30000	100 (22.3)

Results

The study utilised SPSS Amos 25 to analyse the data using Structural Equation Modelling (SEM). Confirmatory Factor Analysis (CFA) was employed to determine their linkages through route analysis. Testing normality, multicollinearity, and linearity before SEM verified the assumptions.

Table 2

Factor Loadings, mean, median, mode, standard deviation, Cronbach's Alpha, CR, and AVE.

Items	Factor Loadings	Mean	Median	Mode	Standard Deviation	Cronbach's Alpha	CR	AVE
OCR1	0.822	4.495	4.000	4.00	1.694	0.974	0.90	0.70
OCR2	0.848	4.558	5.000	4.00	1.535			
OCR3	0.851	4.692	5.000	6.00	1.607			
OCR4	0.837	4.767	5.000	5.00	1.638			
PE1	0.899	4.571	5.000	5.00	1.569	0.974	0.96	0.78
PE2	0.866	4.660	5.000	5.00	1.600			
PE3	0.851	4.736	5.000	5.00	1.599			
PE4	0.889	4.629	5.000	5.00	1.588			
PE5	0.901	4.549	5.000	5.00	1.593			
PE6	0.893	4.611	5.000	6.00	1.631			
PE7	0.879	4.575	5.000	6.00	1.628			
PE8	0.893	4.549	5.000	4.00	1.670			
PSA1	0.899	4.495	5.000	5.00	1.596	0.973	0.95	0.84
PSA2	0.914	4.464	5.000	5.00	1.621			
PSA3	0.945	4.473	5.000	4.00	1.651			
PSA4	0.927	4.227	4.000	5.00	1.524			
PSA5	0.900	4.343	5.000	5.00	1.658			
CU1	0.933	4.473	4.500	5.00	1.638	0.974	0.96	0.87
CU2	0.931	4.419	5.000	5.00	1.650			
CU3	0.911	4.575	5.000	5.00	1.617			
CU4	0.954	4.611	5.000	6.00	1.631			
CU5	0.947	4.642	5.000	6.00	1.664			

Reliability and validity

There were no items with a factor loading of less than 0.5 in Table 2. All the values of mean, median, mode, standard deviation, Cronbach's Alpha, CR, and AVE met the required standards. The discriminant validity and AVE for each construct were above 0.5 [9].

Measurement Model

To assess construct unidimensionality, all were tested for goodness-of-fit (GFI). To assess model fit, the following statistics were examined: chi-square ($\chi2/df$), p-value, GFI, SRMR, CFI, NFI, IFI, TLI, and RMSEA. Model fit with $\chi2/df = 2.71$, $p = 0.00$; GFI = 0.854; SRMR = 0.05; CFI = 0.893; NFI = 0.910; IFI = 0.894; TLI = 0.885; RMSEA = 0.088 [9].

Structural Model

The results of the structural model are $\chi^2/df = 2.81$, $p = 0.00$; GFI = 0.878; SRMR = 0.14; CFI = 0.824; NFI = 0.848; IFI = 0.825; TLI = 0.813; RMSEA = 0.086, which indicates the model has a good fit value [2].

Hypotheses Testing

Path analysis with regression weight strength tested the study's hypothesis. Table 3 reveals a positive link between OCR and PE, PSA, and FAM, with a p-value of 0.000, supporting H1, H2, and H3. However, H4 and H5 are not supported, as the relationships between PE and PSA and CU are not positive (p-values 0.068 and 0.138, respectively). However, H6 showed a positive relationship ($\beta = 0.549$, p-value 0.000).

Table 3

Hypotheses testing results

Hypotheses	Estimate	S.E.	CR.	P	Results
H1	1.113	.127	8.742	***	Supported
H2	1.133	.124	9.143	***	Supported
H3	1.044	.119	8.761	***	Supported
H4	0.266	.146	1.828	0.068	Not Supported
H5	0.157	.106	1.482	.138	Not Supported
H6	0.549	.099	5.538	0.000	Supported

Discussion

This study examined how OCR affects PE, PSA, and FAM, which impacts the CU of OGB. The findings offer valuable theoretical and practical insights. Initial findings indicate that OCR greatly affect PE, PSA, and FAM. This demonstrates that customer reviews are crucial for providing social proof and building confidence in group buying.

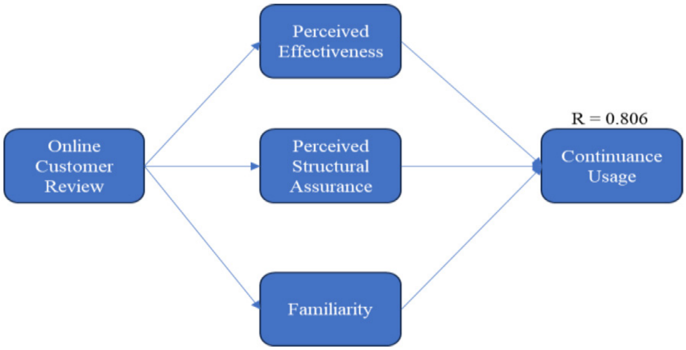

Figure 1

Customers regard the group buying platform as more effective, trusted, and familiar when they see legitimate evaluations. Second, contrary to the predictions of [7], PE and PSA did not affect CU (H4 and H5 unsupported). This suggests that while consumers may like prices and trust the platform's security, these considerations alone are not enough to keep them buying in groups. Consumers may view these elements as necessities rather than drivers of engagement.

Finally, familiarity was a strong predictor of continued use (H6 supported). This shows that consumers are more inclined to use a group buying platform if they are familiar with it and its operations. Familiarity decreases risk, streamlines decision-making, and makes platform navigation easier (Figure-1). This supports previous findings showing that frequent interactions and experience increase user loyalty and online platform involvement.

Managerial Implications

For practitioners, the results highlight the critical role of familiarity-building strategies. Platforms should design interfaces and processes that allow users to interact frequently and effortlessly, thereby reinforcing comfort and habitual use. Encouraging authentic online customer reviews is essential, as they not only build trust but also cultivate familiarity among new and returning users. Features such as loyalty programs, personalised recommendations, and transparent review systems can help convert occasional buyers into continuous users.

Limitations and Future Recommendations

The study is limited to a student sample (21–25 years old) within a single cultural and geographical context, along with the constraints of a cross-sectional design. Future research should examine diverse demographic and cultural groups using longitudinal or mixed-method approaches to strengthen insights about OGB platforms.

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