

# A STUDY ON IMPACT OF FACEBOOK BRAND-RELATED USER GENERATED CONTENT (UGC) ON CONSUMER RESPONSES

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## **ABSTRACT**

The purpose of this study is to propose and test a model that investigates the impact of brand related Facebook UGC on consumer responses. Research objectives include: Understand the impact of brand related UGC with respect to consumer emotional & cognitive responses, Investigate the process by which these cognitive and emotional responses are impacted, and Test whether homophily and brand involvement have any moderating impact on these proposed relationships. SOR Model has been used to drive the proposed model for this study (Mehrabian & Russell, 1974). The SOR model studies the impact of environmental elements on consumer responses; there responses may include behavior, emotion and cognition. Data collection for this research will be done through online survey questionnaires. These questionnaires will be shared online to potential respondents. These questionnaires will also contain a link to dummy Facebook Fan Pages that will work as stimuli, then after being exposed to these stimuli will the respondent be asked the required questions. The respondents will be selected through Purposive Sampling who have the characteristics of being a regular Facebook user and have exposure to E-Commerce. The data of this research will be analyzed through SPSS and AMOS to confirm reliability and validity of our constructs and to test our model.

**Keywords:** Social Commerce, Stimuli Organism Response Model, Social Media, E-commerce, S-O-R, SEM-PLS, Homophily, Brand Involvement, Social Networking Sites, SNS, Purchase Intention, Consumer Responses, Facebook **JEL Codes:** D91, L81

## 1. INTRODUCTION

The purpose of this chapter is to discuss the background of social media in the retail industry and how social media is used by customers. The Objective and Significance of this research are also discussed.

## 1.1. BACKGROUND

With the adaption of new technology, the retail industry is on the verge of changing rapidly. Technological Advancements have played a major role in improving operations and customer relations in retail industry (Accenture, 2013). There has been a drastic change in consumer experience due to technology. There have been a significant reduction in barriers towards adopting a technological tool as a part of lifestyle, and that has resulted in technology users of many ages and backgrounds (Accenture, 2013), this usage of digital medium allows consumers to take full control of their purchasing experiences. Getting information about any product and purchasing has become easier then ever. According to a google survey (Google, 2013), about cell phone user by consumers, 82 % of 1,507 shoppers looked for product information via their smartphones in-between shopping and 90% used smartphones the compare prices and product information prior to shopping.

With the latest technologies changing consumer behavior in the retail industry, the impact of social media is also significant. There are many social media platforms that enable consumers to interact and share experiences, which impact their buying intention (Tuten, 2008). These social media platforms include Social Networking Sites (SNSs), wikis, online forums, blogs, micro blogs, and other content sharing online platforms. SNSs allow people to search for

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and find people of similar likings and mindset, and enable social communication (Joinson, 2008). Wikis are type of SNS that are designed to allow all customers to collectively participate and update information on wikis (Heinonen, 2011). Micro-blogs and blogs have content shared in a free writing style by customers and organizations both. Other platforms may include content sharing platforms that may include content that is visual in nature (videos and pictures) (Heinonen, 2011). Everybody is able to participate in these social networking sites and share related content (Tuten, 2008).

### 1.2. RESEARCH OBJECTIVE

Social media platforms allow participants to share their views about certain brand; this content containing their experiences has an influence on other participants as well. This impact need to be examined and understood. There has been limited research conducted on the impact of user generated content (UGC) on consumer intention and behavior; so, this research aims to conduct a research on the impact of brand related UGC on customer response. Understanding the role of UGC is very crucial, as it is considered to have a significant impact on customer response and it also presents a great challenge because lack of research has led to lack of understanding in controlling its impact. Empirical research is also important for better understanding of how

Consumers are using UGC, resulting in a shift of focus from market to consumers. This addresses the impact of UGC and its extent of impact due to which consumer response is influenced.

All social media platforms differ in the way they enable participants to get and share information with others via UGC. This research specifically focuses on Facebook, as it is one of the most used social media platforms and provides a variety of ways to share and consume UGC. A broad approach is taken to understand the impact of UGC on consumer behavior. This broad approach involves testing of SOR consumer response model (Mehrabian & Russell, 1974). For this research, the main focus is on the investigation of impact of brand related UGC on customer response specifically on Facebook a eWOM. So, the two main characteristics of eWOM were also included as moderation variables that are homophily and brand involvement from the theory of communication (Hovland et al., 1953).

#### 1.3. SIGNIFICANCE

Based on the given questions, cover both theoretical and practical aspects. This research has added theoretical understanding towards the impact of UGC on consumer response. This consumer response will help brands to better understand the best way to use brand related UGC. Studying the role of homophily and brand involvement will help the marketers to better understand how brand related UGC impacts consumer response. Following this research, the marketers are able to better understand how UGC impacts different characteristics of consumer behavior; this would allow them to use UGC in a more strategically effective way.

Prior work done on eWOM was followed to build a theoretical standing, then the study extended this theory into social media context and examining the impact of eWOM on consumer response specifically in social media perspective, then a process was documented to explain this impact (Kim, 2014). The proposed model was the first to present this process of brand related UGC impacting consumer response derived from S O R Model (Kim, 2014).

#### 2. LITERATURE REVIEW

The literature review covers the theoretical framework being tested, the related theory for the framework, and hypotheses being tested in this research (Kim, 2014).

#### 2.1. THEORETICAL BACKGROUND

# 2.1.1. STIMULUS ORGANISM RESPONSE (SOR) FRAMEWORK

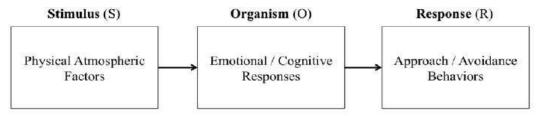
The SOR model was initially designed to depict the impact of environment on behavioral responses (cognitive and emotional). The SOR model depicts that the relationship between its three main constructs in linear with the mediating role of organism between stimuli and response (Kihlstrom, 1987).

Stimulus: In SOR model, the construct stimuli relates to the physical environment that influences an individual's internal (Eroglu et al., 2001; Sherman et al., 1997). In regard to this model, many stimulus have been tested; for example, color (Bellizzi et al., 1983; Bellizzi & Hite, 1992), lights (Baker et al., 1992), music (Baker et al., 1992), as factors that influence a consumers behavior.

Organism: In SOR model, organism is the construct that mediates the relationship between stimuli and response (Mehrabian & Russell, 1974). Mehrabian & Russell in 1974 proposed that organism involves pleasure, arousal and

dominance. Pleasure represents happiness, arousal represents state of being active, and dominance is to state of not restrictions (Brengman & Geuens, 2004; Mehrabian & Russell, 1974). Based on many follow-up researches, arousal and emotion have been found to be emotional responses as dominance has little or no empirical evidence (Donovan & Rossiter, 1982). Response: The response in SOR model represents the final outcome reactions (Bagozzi, 1986).

Figure 1. SOR model (Eroglu et al., 2001)



#### 2.2. HYPOTHESES DEVELOPMENT

The focus of this research is on the impact of brand related UGC on Facebook on consumer behavior. So, the hypotheses have been designed in this context. Anjella J. in 2014 investigated the same hypotheses on the basis of which, a grounded level theory was built in UGC domain (KIM, 2014). This research attempts to retest them in a different context to authenticate the credibility of the theory previously generate.

### 2.2.1. ORGANISMIC RESPONSES TO BRAND-RELATED UGC: S-O RELATIONSHIPS

- H1. Consumer emotional responses are influenced by UGC related to Brand.
- H1-a. Pleasure is influenced by UGC related to Brand.
- H1-b. Arousal is influenced by UGC related to Brand.
- H2. Perceived Information Quality responses are influenced by UGC related to Brand.

## 2.2.2. BEHAVIORAL RESPONSES TO BRAND-RELATED UGC: O-R RELATIONSHIPS

- **H3.** Information Pass-along is positively influenced by emotional response.
- H3-a. Information Pass-along is positively influenced by Pleasure.
- H3-b. Information Pass-along is positively influenced by Arousal.
- **H4**. Information Pass-along is positively influenced by cognitive response.
- **H5**. Impulse buying is positively influenced by emotional response.
- H5-a. Impulse buying is positively influenced by Pleasure.
- H5-b. Impulse buying is positively influenced by Arousal.
- **H6**. Impulse buying is positively influenced by cognitive response.
- **H7.** Future-purchase intention is positively influenced by emotional response.
- H7-a. Future-purchase intention is positively influenced by Pleasure.
- H7-b. Future-purchase intention is positively influenced by Arousal.
- **H8.** Future-purchase intention is positively influenced by cognitive response.
- **H9.** Brand engagement is positively influenced by emotional response.
- H9-a. Brand engagement is positively influenced by Pleasure.
- H9-b. Brand engagement is positively influenced by Arousal.
- **H10.** Brand engagement is positively influenced by cognitive response.

## 2.2.3. MODERATION

- **H11.** Relationships between consumer internal states and UGC is moderated by Homophily.
- H11. Relationships between consumer internal states and UGC is moderated by BrandInvolvement.

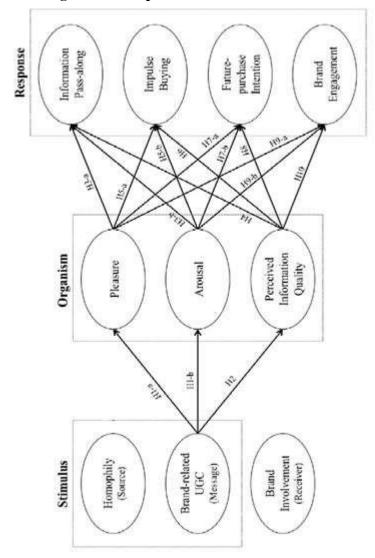


Figure 2. Conceptual Framework

## 3. METHODOLOGY

#### 3.1. PHILOSOPHICAL UNDERPINNING OF RESEARCH

For online buying, customer intention to purchase is researched to be impacted by user generated content (UGC) or customer feedback on online platforms; these platforms include all social media platforms where customers may engage in a discussion regarding their opinion on an online purchase of a product or service. These discussions provide feedback, comments, ratings, and customer ranking etc.

This research focuses on understanding the impact of customer feedback on social media platforms on consumer buying intention. The data is collected through online questionnaire forms. The participants are social media users, who have experience with conducting purchase online. We follow Post-positivism theory for this research; Positivism argues that only observable and measurable entities are a part of knowledge and reality, and everything beyond that is impossible. That means that human emotions and thoughts would also be considered as not a part of human decision-making process, as we can't directly observe and measure these. Online survey makes it possible to generate a simulation that properly represents the phenomenon of interest. As the main objective of this research is to investigate the impact of UGC in SNS on Consumer response, an exposure to an online UGC is expected to impact the response from consumer and so a stimulus was also introduced during online questionnaire survey; Because of this, online survey was the right methodology for this research. On the other hand, Post-positivism follows the concepts of critical realism, which states that there is much more the reality that what we can observe. This means, that emotions and thoughts are also a part of the reality and are observable and measurable to an extent. Now these observations do not represent reality itself but

help us in understanding it, as post-positivism argues that fully understanding reality is not possible.

#### 3.2. RESEARCH DESIGN

This study was conducted through an online Questionnaire Survey. The purpose of this survey is to get quantitative behavioral responses from the respondents that will allow the researchers to make interference regarding the respondents using this data (Creswell, 2009). World-wide, the rate of online survey method is growing significantly (Comley, 2003). Compared to all traditional methods, online surveys allow much larger reach, quicker response rate, and much more cost effectiveness (Sue & Ritter, 2011). This type of surveys allow researchers to accumulate large data and easily transfer it to any other research tool (Duffy et al., 2005). This method of online survey is also proven to be convenient for respondents. This way, the questionnaire can be filled at time and place of choice and convenience. Because the online questionnaire survey is filled in privacy and in the absence of the researcher, their possible biases of the researcher is eliminated (Duffy et al., 2005; Duffy, 2005).

## 3.3. INSTRUMENT DEVELOPMENT

## 3.3.1. DEVELOPING A VISUAL-STIMULI

In order to examine the impact of UGC on consumer response, stimulus Facebook SNS fan pages were made along with relevant postings. Fan pages allow customers of a certain brand to share their experiences of that brand and interact with each other in-order to make an informed decision regarding a purchase. Fan page is a platform where firms can directly communicate with its customers and consumers; because of this reason, the concept of eWOM can also be analyzed through this medium (Chen et al., 2013). There are many fan pages of Facebook that allow customers to post their experiences with the brand and respond through comments to other customers.

## 3.3.2. QUESTIONNAIRE DEVELOPMENT

Online questionnaire that has been used for this research has been adapted (Kim, 2014).

#### 3.4. SAMPLING

All respondents of this research are active users of Facebook, one of the most well-known and used SNSs for the purpose of sharing experiences. According to Smith (2014), more than 65% of internet users are also Facebook users (Wildrich, 2013). Comparing all age brackets, the most concentration is found in the age bracket of 18 - 27. Based on these research base facts, Criteria for respondent was to be a Facebook user and of age above 18. Purpose sampling technique was used.

### 3.5. DATA COLLECTION

Online questionnaire survey is being used to gather data from respondents. The questionnaire will be circulated to university students of 3 well-known universities in Karachi city. The questions are 7 – Scale Unipoler likert Scale. For gathering demographics, there are open ended questions in order to get a deeper insight into respondents' background.

#### 3.6. DATA ANALYSIS

In order to test our proposed model, SPSS and AMOS are being used for statistical analysis of collected data. Descriptive and frequency analysis are conducted on SPSS to determine the demographic characteristics. Independent sample T-test is being used in this study to analyze the difference of brand awareness between the two brands being analyzed. For testing validity and reliability, correlation, reliability tests, and factor analysis are conducted. Structural equation modeling (SEM) is being used in this data analysis as it allows simultaneous examination between multiple independent and dependent variables. SEM is being used here for analyzing direct and indirect paths.

# 4. ANALYSIS

# 4.1. BRAND AWARENESS INDEPENDENT T-TESTS

**Table 1: Independent Samples Test** 

Tubic 1. Indept					resistant president			
		Levene's Test for	Equality of Variances	t-test for	Equality of	f Means		
		F	Sig.	t	Df	Sig. (2-tailed)	Mean-Differ	Std.Error- Differ
Equ	al variances							
В	assumed	14.352	.000	59.587	398	.000	3.89250	.06532
Α	Equal			59.587	370.97	.000	3.89250	.06532
vari	ances not assumed							

(Stylo m = 6.2, Borjan m = 2.3; t = 59.587, df = 371, p = .000)

This shows that brand awareness level between the 2 brands is significantly different. One brandhas high brand involvement and other has low brand involvement.

# 4.2. PILOT TEST: UGC CONTENT DIMENSIONS

# Table 2

Construct	Items	N	Min	Max	Mean	Std.
	RM1	400	4	7	5.86	.913
	RM2	400	4	7	5.92	.892
UGC Message	RM3	400	4	7	5.87	.925
	EM1	400	4	7	5.86	.939
	EM2	400	4	7	5.91	.944
	EM3	400	4	7	5.83	.950

This confirms that UGC item stimuli are good for use to be used as stimuli for this research.

# 4.3. PILOT TEST: EFA OF RELIABILITIES

Table 3

Construct	No. of Items	Eigenvalue	% of Variance	Cronbach's Alpha
UGC	6	3.39	6.78	0.82
PL	6	3.27	6.54	0.91
AR	6	3.19	6.39	0.77
IQ	4	3.02	6.04	0.74
PA	5	3.01	6.03	0.72
IB	2	2.64	5.28	0.48
FP	5	2.61	5.22	0.73
BE	6	2.44	4.88	8.22
HM	4	2.24	4.48	0.78
BI	6	1.61	3.23	0.77

The cronbach's alphas show that the constructs have a strong convergent reliability. This is apilot test done from first 50 responses.

# 4.4. **DEMOGRAPHICS**

Table 4

Description	Frequency		
Gender			
Women	121		
Men	79		
Age			
18-24	80		
25-34	30		
35-44	43		
45-54	27		
55 and up	10		
Marital Status			
Married	111		
Divorced	12		
Single	77		
Education			
High school or less	53		
Technical school	72		
Some college	24		
College graduate	28		
Master's degree	43		
Household Income			
Under 20,000 Rs	43		
\$20,000- \$39,999	65		
\$60,000-\$79,999 89 16.7	51		
\$80,000-\$99,999 63 11.8	30		
Over \$100,000 54 10.1	11		

# 4.5. FACEBOOK ACTIVITIES

#### Table 5

	Table 5			
Characteristic	Frequency			
Frequency of Facebook Use				
Continuously	33			
Multiple times/day	54			
Once/day	25			
Couple of times/week	41			
Once/week	23			
Occasionally	26			
Missing	4			
Reasons for Use				
Stay in touch	20			
Expression	48			
Making connections	52			
General Information	11			
Surveillance	22			
Entertainment	37			
Keeping in touch with people	10			
Number of Brands Following				
None	51			
1-10	21			
10-50	68			
50-100	44			
100 or over	16			
Missing	0			
Number of Fashion Brands Following				
None	24			
1-10	59			
10-50	71			
50-100	3			
100 or over	10			
Missing	1			
Created UGC related to brand Posting				
Yes	79			
No	121			
Missing	0			
UGC related to brand Posting				
Site				
Brand fan pages	29			
Personal wall page	69			
Type				
Narrative form	10			
Photos of consumption	33			
Likes ("liking" a brand)	45			

# 4.6. RESULTS: T-TESTS

Table 6

Construct Items         & Mean Style Borjan (df = 378)         T-test (df = 378)         Construct & Mean Style Borjan (df = 378)         Mean Style Borjan (df = 378)           Brand Involvement BI1         3.2         2.9         0.3         PL1         5.1         5.0           BI2         2.9         2.8         0.1         PL2         4.9         5.2           BI3         3.4         3.2         0.2         PL3         4.8         5.0           BI4         3.1         2.6         0.5         PL4         5.3         5.1           BI5         3.2         2.7         0.5         PL5         4.8         4.6           BI6         3.4         2.9         0.5         PL6         5.2         4.9           Information Pass-along         Arousal           PA1         5.2         5.0         0.2         AR1         3,8         4.2           PA2         5.2         5.2         0         AR2         4.6         4.3	T-test (df = 378) 0.1 -0.3 -0.2 0.2 0.2 0.3 -0.4 0.3
Brand Involvement         Pleasure           BI1         3.2         2.9         0.3         PL1         5.1         5.0           BI2         2.9         2.8         0.1         PL2         4.9         5.2           BI3         3.4         3.2         0.2         PL3         4.8         5.0           BI4         3.1         2.6         0.5         PL4         5.3         5.1           BI5         3.2         2.7         0.5         PL5         4.8         4.6           BI6         3.4         2.9         0.5         PL6         5.2         4.9           Information Pass-along         Arousal           PA1         5.2         5.0         0.2         AR1         3,8         4.2	0.1 -0.3 -0.2 0.2 0.2 0.3
BI1         3.2         2.9         0.3         PL1         5.1         5.0           BI2         2.9         2.8         0.1         PL2         4.9         5.2           BI3         3.4         3.2         0.2         PL3         4.8         5.0           BI4         3.1         2.6         0.5         PL4         5.3         5.1           BI5         3.2         2.7         0.5         PL5         4.8         4.6           BI6         3.4         2.9         0.5         PL6         5.2         4.9           Information Pass-along         Arousal           PA1         5.2         5.0         0.2         AR1         3,8         4.2	-0.3 -0.2 0.2 0.2 0.3
BI2       2.9       2.8       0.1       PL2       4.9       5.2         BI3       3.4       3.2       0.2       PL3       4.8       5.0         BI4       3.1       2.6       0.5       PL4       5.3       5.1         BI5       3.2       2.7       0.5       PL5       4.8       4.6         BI6       3.4       2.9       0.5       PL6       5.2       4.9         Information Pass-along       Arousal         PA1       5.2       5.0       0.2       AR1       3,8       4.2	-0.3 -0.2 0.2 0.2 0.3
BI3       3.4       3.2       0.2       PL3       4.8       5.0         BI4       3.1       2.6       0.5       PL4       5.3       5.1         BI5       3.2       2.7       0.5       PL5       4.8       4.6         BI6       3.4       2.9       0.5       PL6       5.2       4.9         Information Pass-along       Arousal         PA1       5.2       5.0       0.2       AR1       3,8       4.2	-0.2 0.2 0.2 0.3 -0.4 0.3
BI4       3.1       2.6       0.5       PL4       5.3       5.1         BI5       3.2       2.7       0.5       PL5       4.8       4.6         BI6       3.4       2.9       0.5       PL6       5.2       4.9         Information Pass-along       Arousal         PA1       5.2       5.0       0.2       AR1       3,8       4.2	0.2 0.2 0.3 -0.4 0.3
BI5       3.2       2.7       0.5       PL5       4.8       4.6         BI6       3.4       2.9       0.5       PL6       5.2       4.9         Information Pass-along       Arousal         PA1       5.2       5.0       0.2       AR1       3,8       4.2	0.2 0.3 -0.4 0.3
BI6       3.4       2.9       0.5       PL6       5.2       4.9         Information Pass-along       Arousal         PA1       5.2       5.0       0.2       AR1       3,8       4.2	0.3 -0.4 0.3
Information Pass-along         Arousal           PA1         5.2         5.0         0.2         AR1         3,8         4.2	-0.4 0.3
PA1 5.2 5.0 0.2 AR1 3,8 4.2	0.3
	0.3
DA2 52 52 0 AD2 46 42	
PA2 5.2 5.2 0 AR2 4.6 4.3	_
PA3 5.0 5.1 -0.1 AR3 3.9 4.3	-0.4
PA4 5.1 5.0 0.1 AR4 4.5 4.6	-0.1
PA5 5.1 5.1 0 AR5 4.1 4.2	-0.1
Impulse Buying AR6 4.0 3.9	0.1
IB1 4.1 4.3 -0.2 Information Quality	
IB2 3.8 3.8 0 IQ1 4.2 4.1	0.1
Future Purchase Intention IQ2 3.8 4.0	-0.2
FP1 4.1 4.1 0 IQ3 3.7 3.9	-0.2
FP2 4.3 4.5 -0.2 IQ4 4.1 4.3	-0.2
FP3 4.4 4.1 0.3 UGC Message	
FP4 4.7 4.5 0.2 RM1 3.4 3.2	0.2
FP5 4.2 4.3 -0.1 RM2 3.1 2.6	0.5
Brand Engagement RM3 3.2 2.7	0.5
BE1 4.2 4.1 0.1 EM1 3.4 2.9	0.5
BE2 3.8 4.0 -0.2 EM2 3.8 4.0	-0.2
BE3 3.7 3.9 -0.2 EM3 3.7 3.9	-0.2
BE4 4.1 4.3 -0.2 Brand Involvement	
BE5 3.9 4.0 -0.1 BI1 5.0 4.1	0.9
BE6 4.1 3.8 0.3 BI2 5.2 3.9	1.3
Homophily BI3 5.0 4.0	1
HM1 3.8 4.0 -0.2 BI4 5.1 3.9	1.2
HM2 3.7 3.9 -0.2 BI5 4.6 4.3	0.3
HM3 4.1 4.3 -0.2 BI6 4.9 4.0	0.9
HM4 3.9 4.0 -0.1	

The difference between the t-test values for two brands is quite close. This signifies that itemsused it these constructs are all valid.

# 4.7. NORMALITY OF PRIMARY DATA

Table 7

Items	Mean	Std.	Skewness	Kurtosis
BI1	5.87	.899	412	605
BI2	5.84	.919	368	707
BI3	5.92	.893	389	689
BI4	5.95	.947	464	796
BI5	5.90	.971	410	897
BI6	5.88	.949	382	847
PA1	5.88	.929	382	774
PA2	5.85	.909	277	823
PA3	5.94	.925	467	694
PA4	5.85	.906	340	727
PA5	5.83	.941	355	799
IB1	5.90	.867	315	694
IB2	5.87	.942	384	798
FP1	5.85	.881	332	646
FP2	5.86	.934	385	760
FP3	5.86	.949	431	737
P4	5.86	.943	359	838
FP5	5.87	.917	466	580
BE1	5.79	.950	256	912
BE2	5.89	.935	388	800
BE3	5.82	.956	307	901
BE4	5.87	.893	417	567
BE5	5.90	.933	456	691
BE6	5.86	.922	389	707
PL1	5.88	.943	402	788
PL2	5.82	.925	259	862
PL3	5.89	.915	455	617
PL4	5.86	.985	369	956
PL5	5.90	.930	472	646
PL6	5.84	.862	262	673
AR1	5.86	.938	390	762
AR2	5.93	.880	435	564
AR3	5.88	.896	371	671
AR4	5.89	.954	405	836
AR5	5.89	.957	443	789
AR6	5.87	.914	413	655
IQ1	5.88	.944	410	782
IQ1 IQ2	5.89	.877	343	665
IQ3	5.84	.963	370	857
IQ3 IQ4	5.88	.956	375	875
RM1	5.86	.913	365	725
RM2	5.92	.892	448	586
RM3	5.87	.925	370	765
EM1	5.86	.939	344	842
EM2	5.91	.944	470	722
EM3	5.83	.950	315	874
HM1	5.86	.920	466	578
HM2	5.87	.896	355	689
HM3	5.88	.981	381	948
HM4	5.86	.933	300	894

## 4.8. RELIABILITY OF MEASURES

Table 8

Construct	No. of Items	Cronbach's AlphaCoefficients
UGC	6	0.82
PL	6	0.91
AR	6	0.77
IQ	4	0.74
PA	5	0.72
IB	2	0.68
FP	5	0.73
BE	6	0.62
HM	4	0.78
BI	6	0.77

The cronbach's alphas show that the constructs have a strong convergent reliability.

# 4.9. CORRELATION OF VARIABLES

Table 9

	DI	D.A	TD	ED	DE	DI	4.70	10	TICC	113.4
	BI	PA	IB	FP	BE	PL	AR	IQ	UGC	HM
BI	1	.757**	.507**	.491**	.544**	.527**	.555**	.555**	.513**	.496**
PA	.757**	1	.547**	.527**	.529**	.522**	.607**	.600**	.534**	.520**
IB	.507**	.547**	1	.446**	.521**	.482**	.522**	.483**	.491**	.522**
FP	.491**	.527**	.446**	1	.515**	.489**	.505**	.505**	.503**	.474**
BE	.544**	.529**	.521**	.515**	1	.531**	.562**	.536**	.520**	.563**
PL	.527**	.522**	.482**	.489**	.531**	1	.520**	.509**	.503**	.538**
AR	.555**	.607**	.522**	.505**	.562**	.520**	1	.548**	.476**	.494**
IQ	.555**	.600**	.483**	.505**	.536**	.509**	.548**	1	.511**	.562**
UGC	.513**	.534**	.491**	.503**	.520**	.503**	.476**	.511**	1	.544**
HM	.496**	.520**	.522**	.474**	.563**	.538**	.494**	.562**	.544**	1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

The results showed that correlation between PA and BI exceeded .85, however the two variableswere included in the model as response variables. The high correlation between these two variables does not create estimation problems in SEM.

# 4.10. GOODNESS-OF-FIT STATISTICS FOR ITEM SETS Table 10

		Table 10			
Construct	Full Item Set		Reduced Item Set		
	No. of Items	Model Fit Stats.	No. of Items	Model Fit Stats.	
Arousal	6	$X^2 = 298.00$	2	$X^2 = 121.00$	
		df = 9		df = 5	
		p = .00		p = .00	
		CFI = .85		CFI = .93	
Information	4	$X^2 = 182.00$	3	$X^2 = 68.00$	
Quality		df = 5		df = 2	
		p = .00		p = .00	
		CFI = .71		CFI = .94	
IP	6	$X^2 = 231.00$	5	$X^2 = 71.00$	
		df = 10		df = 3	
		p = .00		p = .00	
		CFI = .95		CFI = .97	

Goodness of fit tells you if your sample data represents the data you would expect to find in theactual population. A structural analysis was conducted using the maximum likelihood estimation method. The results from the

structural model are presented. The structural model exhibited a good fit. CFI Improved, X<sup>2</sup> reduced closer to 0.

# 4.11. RELIABILITY

Table11

Construct	No. of Items	Cronbach's AlphaCoefficients
UGC	6	0.82
PL	6	0.91
AR	2	0.89
IQ	3	0.77
PA	4	0.81
IB	2	0.48
FP	5	0.73
BE	6	8.22
HM	4	0.78
BI	6	0.77

Reliability improved after reduction of 4 items.

# 4.12. MEASUREMENT MODEL EVALUATION: STANDARDIZATION LOADINGS Table 12

Construct	No. of Items	Standardized Loadings (min -max)
UGC	6	.8088
PL	6	.9396
AR	2	.8992
IQ	3	.9195
PA	4	.7087
IB	2	.8285
FP	5	.8792
BE	6	.9395
HM	4	.8088
BI	6	.9595

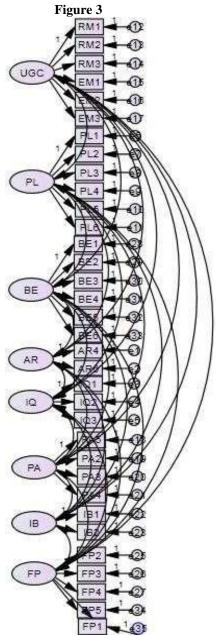
An indicator that almost perfectly reflects the latent variable (e.g., "Brand-related UGC influences pleasure") thus should very highly correlate with the latent variable "PL" (Would expect at least .80-.90). Other indicators that are conceptually more distant from the supposed latent variable couldresult in a lower loading.

# 4.13. RESULTS: MEASUREMENT MODEL

Table 13

	PA	IB	FP	BE	PL	AR	IQ	UGC
PAIB FPBE		.553**	.521**	.527**	.500**	.532**	.557**	.502**
PLAR	.553**	1	.446**	.521**	.482**	.502**	.471**	.491**
IQ UGC	.521**	.446**	1	.515**	.489**	.511**	.524**	.503**
	.527**	.521**	.515**		.531**	.543**	.545**	.520**
	.500**	.482**	.489**	.531**	1	.498**	.532**	.503**
	.532**	.502**	.511**	.543**	.498**	1	.573**	.518**
	.557**	.471**	.524**	.545**	.532**	.573**	1	.539**
	.502**	.491**	.503**	.520**	.503**	.518**	.539**	1
Reliability	0.83	0.91	0.90	0.88	0.82	0.79	0.92	0.87

# 4.14. CFA: MEASUREMENT MODEL SPECIFICATIONS



# 4.15. DISCRIMINANT VALIDITY OF MEASUREMENT MODEL Table 14

				I U.D.	10 1-1			
	PA	IB	FP	BE	PL	AR	IQ	UGC
PA	0.59							
IB	.553**	0.67						
FP	.521**	.446**	0.68					
BE	.527**	.521**	.515**	0.81				
PL	.500**	.482**	.489**	.531**	0.82			
AR	.532**	.502**	.511**	.543**	.498**	0.77		
IQ	.557**	.471**	.524**	.545**	.532** .503**	.573**	0.71	
UGC	.502**	.491**	.503**	.531** .543** .545** .520**	.503**	.518**	.539**	0.67

# 4.16. RESULTS: STRUCTURAL MODEL (HYPOTHESES)

 $(df = 499, p = 0.002, RMSEA = 0.022, CFI = 0.979, CMIN = 597^{***}, CMIN/df = 1.197, NFI = 0.886)$ 

# Table 15

	Effect	S	Estimat	e S.E.	P
PL_1	<	UGC_1	1.234	.129	***
AR_1	<	UGC_1	1.189	.129	***
IQ_1	<	UGC_1	1.266	.131	***
BE_1	<	PL_1	.584	.260	.025
PA_1	<	PL_1	1.132	.367	.002
IB_1	<	PL_1	605	.782	.439
FP_1	<	PL_1	.387	.247	.117
BE_1	<	AR_1	.329	.168	.05
PA_1	<	AR_1	.050	.134	.709
IB_1	<	AR_1	.106	.169	.032
FP_1	<	AR_1	.027	.110	.004
BE_1	<	IQ_1	.100	.181	.50
PA_1	<	IQ_1	243	.292	.404
IB_1	<	IQ_1	1.285	.735	.041
FP_1	<	IQ_1	.392	.207	.05

# 4.17. MULTIPLE-GROUP MODERATION TEST

Table 16

Regression Weights: (Homophily\_high - Default model)

		Estimate	S.E.	C.R.	P
PL <	UGC	.193	.083	2.338	.019
AR <	UGC	.114	.079	1.441	.150
IQ <	UGC	.146	.082	1.774	.076

Regression Weights: (Homophily \_low - Default model)

		Estimate	S.E.	C.R.	P
PL <	UGC	.492	.052	9.473	***
AR <	UGC	.487	.055	8.814	***
IQ <	UGC	.535	.055	9.669	***

Regression Weights: (Brand\_Involvement\_high - Default model)

		Estimate	S.E.	C.R.	P
PL <	UGC	.266	.056	4.768	***
AR <	UGC	.223	.055	4.066	***
IQ <	UGC	.255	.058	4.419	***

Regression Weights: (Brand\_Involvement \_low - Default model)

		Estimate	S.E.	C.R.	P
PL <	UGC	.438	.078	5.633	***
AR <	UGC	.390	.083	4.694	***
IQ <	UGC	.439	.080	5.488	***

## 4.18. SUMMARY OF HYPOTHESES TESTING

# Table 17

	Hypotheses	Results
1-a	Pleasure is influenced by UGC related to Brand.	Supported
1-b	Arousal is influenced by UGC related to Brand.	Supported
2	Perceived Information Quality responses are influenced by UGC related to Brand.	Supported
3-a	Information Pass-along is positively influenced by Pleasure.	Supported
3-b	Information Pass-along is positively influenced by Arousal.	Not Supported
4	Information Pass-along is positively influenced by cognitive response.	Not Supported
5-a	Impulse buying is positively influenced by Pleasure.	Supported
5-b	Impulse buying is positively influenced by Arousal.	Supported
6	Impulse buying is positively influenced by cognitive response.	Not Supported
7-a	Future-purchase intention is positively influenced by Pleasure.	Not Supported
7-b	Future-purchase intention is positively influenced by Arousal.	Supported
8	Future-purchase intention is positively influenced by cognitive response.	Supported
9-a	Brand engagement is positively influenced by Pleasure.	Supported
9-b	Brand engagement is positively influenced by Arousal.	Supported
10	Brand engagement is positively influenced by cognitive response.	Supported
11	Relationships between consumer internal states and UGC is moderated by Homophily.	Supported
12	Relationships between consumer internal states and UGC is moderated by Brand Involvement.	Not Supported

#### 5. CONCLUSION

Future research can address some of limitations in this research. The proposal was done is a certain context of branded UGC on Facebook page. So, the findings are not generic but context based. The research in future can consider using different context in terms of product or service, social media platform, or different type of social media content; so the model could be changed and validated as per need based on future research. The same research can be done on a broader scale of products. As per the hypotheses analysis, the moderating impact of homophily is found to be significant interms of influence on online purchase decision making. For the case of brand involvement, the impact in this case or context seems to be insignificant. The findings also show that there are many situational factors that contribute in collective impact on UGC on purchase intention. The main focus of this research is the influence of branded social media content or UGC is a positive aspect. Future research can focus more on the negative aspect of the branded UGC in thesame context. Focusing on negative aspects will provide us with more concrete findings. So, future research should focus on negative eWOM in the same context as this research.

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