

The impact of online reviews on purchase intention: A case of an emerging country

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ABSTRACT

Consumers take into consideration their past experiences and/or of their friends/family to form an opinion about a product. Online platforms provide reviews that offer relevant data which consumers consider before decision making as per their criteria for evaluation of the product. All these factors, along with the consumer's own personality have an effect on the final purchase decision. (Engel, Blackwell, and Kollat, 1968). This research study takes into account the factors that impact the decision-making process of the consumer, specifically, in today's economy where the consumer is bombarded with multitude of online reviews. Many of such reviews are not consciously sought out but random exposure is huge due to presence and heightened use of social media. A survey was carried out to explore the impact of online reviews on young consumers whose usage of social media is high and thus is the influence of social media. A sample of 300 respondents was taken. As the questionnaires were self-administered so the acquired data resulted in the valid final sample of 300. There were five hypothesis statements to be tested. Regression analysis was applied to test the hypothesis statements. The results showed that all hypotheses were supported and held statistical significance. The results from the regression analysis supported the existence of relationship between Consumer's Personality and Purchase Intention while being moderated by factors such as Amount of Online Reviews, Length of Online Reviews, and Social Media Influence; and being mediated by the consumer's Opinion of Online Reviews.

KEYWORDS

Personality, amount of reviews, length of reviews, influence of social media, purchase intention

INTRODUCTION AND BACKGROUND

A consumer takes several facts into consideration before deciding what, how and when to purchase. External forces, such as weather, transport, shopping street chaos and store image created via improved consumer experience may influence the purchase intention (Belwal and Belwal, 2017). In particular, consumers narrow down their choices to the most suitable option, from a pool of available options, after realizing the need to purchase a certain product (Lackermair et al., 2013). This decision to narrow down to the most suitable option is influenced by the consumer's income, need, surroundings and interests. A consumer's surroundings have the biggest impact on their decision process, as compared to other factors mentioned earlier. A consumer's surroundings revolve around friends, family, acquaintances, that is, the people that build the social space encapsulating the consumer. These people may have a profound impact on the purchase decisions of the consumers reflected through their positive or negative opinion about any specific product. The word of mouth or their opinions impacts the perception and decision-making process due to the convenience seeking behaviour of the consumer. They try to match their purchase choices to that of their social surrounding to reduce the bias or disagreement that may occur due to the difference in choices.

The effect of positive and negative word of mouth or reviews on purchase intention has been widely studied. Sago and Hinnenkamp (2014) report in their research that negative comments have a higher impact on the purchase decisions, regarding a specific product or a service's usage. The research work of Fei Wu et al. (2011) clearly suggests that quality is in fact the differentiating factor that decides whether people will react positively or negatively. Nonetheless before the reaction towards a product, the frequency and negativity of reviews has a downgrading impact on the purchase intention (Sago and Hinnenkamp, 2014).

In Pakistan the shift towards online purchase is on the rise and so there is marked increase in use of social media for marketing and reviewing the use and quality of products available in market. Moreover, along with this practice, there is enhanced use of online reputation management firms. Such firms employ different

methods to a positive image of the brands by suppressing the negative reviews that emerge in social media. The purpose is to hinder the negative reviews to have a defining impact on purchase intention.

To further this point, Proserpio and Zervas (2017) found that firms do take actions to make sure that the negative reviews are not prominently displayed on the social media website, in an effort to minimize their impact on purchase intention. They may be able to deal with negative reviews when they are posted to their own website, but becomes difficult to deal with when customers post reviews on popular review sites. Therefore, the research questions that arise are:

- Do negative reviews impact the purchase intention of university students of Lahore?
- Do the negative reviews impact all consumers similarly? Or there is a difference of personality in responding towards negative reviews
- Do fewer number of negative reviews have the same impact as larger number of negative reviews?
- Does the time spent on social media impacts the level of influence that a consumer will take while making his purchase decisions?

The main aim behind the study is to analyse the impact of negative reviews on the purchase behaviour of the consumers in Pakistan. For this purpose, the research objectives and questions are listed below;

- To study the relationship between the amount of negative reviews and purchase intention for the purpose of obtaining an understanding of how the amount of negative reviews can affect the online presence of a product/service and its sales.
- To identify the relationship between the Length of a Negative Review and Purchase Intention. To determine the length of negative reviews and to what extent it effects the purchase intention of a buyer.
- To determine the impact personality has on perceiving the online negative reviews
- To investigate the relationship between millennial' online behavior and their opinion of online reviews to identify how millennial enhance interaction through social media and other platforms where you can find product/service reviews, and how it affects their opinion about online reviews.

People use different social media platforms and a significant amount of marketing budget for most brands involves using influencer marketing techniques to reach out to their target demographics.

LITERATURE REVIEW

Impact of Amount and Length of Negative Reviews

There exists a significant positive association of Amount and Length of Negative Reviews with Purchase Intention (Bhatti & Rehman, 2020). As per the study of Weisstein et al. (2017), negative reviews are the kind of reviews that speak unfavourably or give poor ratings to a product or service on an online platform. Getting a negative review is part of the business. Negative reviews represent consumers' first-hand bad experience with the product. Consumers inspect every aspect of the product before making a purchasing decision. However, not every product is made to be 100% stable, whereas, negative reviews sometimes creates wide opportunities for the businesses to gain valuable feedback from the customers in order to improve the product or services. Moreover, negative reviews are specifically significant in reshaping the consumers' opinion regarding the product or the brand. Generally, companies tend to make more valuable decisions based on negative reviews instead of positive ones. In this case, the amount of negative reviews reflects the proportion of total negative reviews to the positive reviews.

Negative reviews are generally considered more beneficial than positive ones because it allows the business to potentially improve the brand image by gaining better consumer insights based on consumer behaviour, attitudes and sentiments (Liu & Qiu, 2013). Negative reviews possess higher popularity over positive reviews due to their inherent honest attribute that enables the firm to detect the product defect and improve the offering accordingly. However, the length of a review impacts firm in different ways. Liu and Qiu (2013) found out that negative reviews are highly effective in boosting the sales of the organisation. It shows that products with a detailed review of 1.5 lines had less impact on sales, as compared to the products with one line reviews. This is why; the challenge of measuring the quality of a review remains intact as one negative review may impact two different consumer's purchase decision uniquely (Lackermair et al., 2013). Therefore,

H1: Amount of Online Reviews has an impact on Purchase Intention

Millennials' Online Usage and the Positive Opinion of Online Reviews

Millennials are people who were born between the early 1980s and early 2000s. By online usage we associate the number of hours they spend online for shopping, and the positive opinion takes into consideration how helpful the online reviews are in their opinion. In this modernized era, millennial are more concerned about buying the product after seeing different reviews posted online. Khan et al. (2020) evaluated the millennial positive opinion of preferring shopping online due to the easy comparison and selection of the products or

alternatives through online platforms rather than physical stores. The millennial opinion of online reviews is significantly higher in gaining trustworthiness than any other demographics (Kong et al., 2020). Stoddard et al. (2016) found that a correspondence analysis results suggest that millennials who spend more time online end up making more purchases than any other demographics which reflects their positive opinion regarding the online shopping. Furthermore, it has been revealed that millennials prefer to shop online due to time and price factors. Millennial use online shopping platforms to attain the positive experience of quicker shopping without waiting in the long queue. There exists a significant positive association of Amount and Length of Negative Reviews with Purchase Intention (Bhatti & Rehman, 2020). This study shows a relationship between length and amount of negative reviews with purchase intention.

Sethi et al. (2018) evaluated that over 7,000 internet users in different countries revealed the impact of positive online games reviews on millennial purchasing decision. In addition, it identified the effect of positive online reviews is as strong as the expert opinions or personal reviews. As millennial possess higher chance to participate in the shopping due to their vast social circle and connections with the friends, they have positive opinion regarding the processing of online information or reviews of the product or services by being anywhere, anytime, through multiple venues.

Similarly, millennial feel convenient in shopping online due to their perceived trust, and positive opinion of the online products or services due to multiple positive or negative reviews posted in different social media platforms (Hall et al., 2017). They believe that online reviews help in categorising products based on their attributes or consumer experiences with the usage of the product that would make millennial online product evaluation and selection easy (Kong et al., 2020). For example, SWOT Facebook official page in Pakistan display various opinions, likes, dislikes of the consumers regarding the restaurants and food. Through this page consumers post their reviews regarding the ambience, quality, taste and price of the meal they have tasted or ordered. This influence the teenagers and young people of Pakistan to order food online, which reflects their dependency and positive opinion towards online reviews being posted in social media channels (Mohseni & Tutu Madara, 2020).

It will be interesting to see how university students or millennials in Pakistan are impacted by online reviews. Therefore,

H2: Opinion of Online Reviews affected the Purchase Intention of a consumer

Popularity of Online Influencers & Purchase Decision

As per the study of Hughes et al. (2019), online influencers are the individual who holds the power of influencing consumer purchase decision due to their authority, position and knowledge with the audience. Online content creator and influencer constantly engage their audience in order to achieve marketing objectives. In addition, they make several posts, and contents about the specific topic on their preferred social media channels to generate a large following and enhanced engagement based on their view. Brands mostly prefer online influencers to create trends, run campaigns and engage followers to buy products being promoted.

A majority of people use social media for evaluating the products based on the posted reviews and are influenced by the word of mouth that circulates within their social circle. In certain cases, consumers post multiple comments which spread quickly forming several consequences in the consumer mind regarding the purchasing decision. This word of mouth is escalated into more stories than reality (Ha et al., 2015). Influencers play a significant role in creating social media opinions about certain products. Social platforms are heavily influenced by the people we may prefer, admire, follow or idealize in some way (Siddiqui & Singh, 2016). Influencer marketing is adopted in the industries, especially in restaurants and eateries where influencers posts pictures of the food they ate. If the posts receive negative comments and dislikes, it ends up in forming a negative opinion which reflects the negative image of the eatery.

Gafni & Golan, 2016 carried out a study which showed that consumers do consult the bloggers and take their opinion while making a purchase decision. They go through various blog posts and articles regarding the products and services to achieve the desired results based on the suggestions, recommendations and reviews defined. Word of mouth is a widely trusted source of reviews, especially if it is coming from a person they trust. In a survey, it has been shown that 92% of the consumers believe recommendations from friends and friendly based on their personal experiences rather than relying on traditional advertising to make the informed decision. It is proved to be an effective form of marketing for organisations to achieve better consumer response (Pee, 2016). There exists a significant positive association of Amount and Length of Negative Reviews with Purchase Intention (Bhatti & Rehman, 2020). This study shows a relationship between length and amount of negative reviews with purchase intention. Therefore,

H3: Influence of Social Media has an impact on Purchase Intention

Length of Online Reviews impacts the consumer's Purchase Intention

As per the study of Price et al. (2018), consumer mind-set explores the way people perceived the products, services and experiences. The change in buying behaviour is influenced by various factors, including increase in

income level, education and marketing factors, which varies based on consumer type, reflecting the need of consumer changing mind-set towards the products or services. The buying behaviour refers to the actions of the consumers in the marketplace and understands the motives related to their actions. This creates a substantial impact on the consumers' changing mind-set by affecting consumers' thought process, information retrieval and encoding process. Moreover, Murphy and Dweck (2016) identified that consumers constantly change their mind-set before making a final purchase decision. In addition, consumers a certain way of thinking (changing mind-set) influence their shopping behaviour. For example, a consumer loves buying Samsung smartphones, but after several complaints and negative reviews occurred related to the Samsung phones, consumers' diverted their mind-set towards the better choice, i.e. Apple iPhones.

Furthermore, John and Park (2016) elaborated that two similar mind-set portray how consumers make decisions when choosing from large sets of distinct products based on two different factors, which includes, abstract and concrete. An abstract mind-set refers to the process of thinking more broadly. Consumers with abstract mind-set more focus on the products with shared attributes especially associated with an overarching purpose. One of the examples is hair or skincare products. Whereas, consumers with concrete mind-set draw attention towards the lower level details for differentiating between the products (Mathur et al., 2016). These changing mind-set are important for organisations to reshape consumer perceptions and motivation. Mind-set identifies the consumer criteria and though the process of perceiving the brands, organisations or products and how people accept changes, adaptations and extensions. Many SMEs and new ventures shape their mind-set before entering into a new market to attract diverse audiences by understanding people's perceptions and mind-set about their products (Mathur et al., 2016).

Ramadhanti et al. (2020) elaborated that brands are highly imbued with personality traits to deliver attractive and reliable products to the customer. For example, brand differs based on personality traits such as excitement, honesty, competence and so on. The unique traits help consumers to change their mind-set and purchasing decision regarding the brand. This can be seen in one of the marketing tactics of the brand "Coca-Cola" which include the themes "All-American" and "real" for the consumer to easily distinguish from its competitor, Pepsi. Moreover, a brand's negative image also influences the consumers to change their mind-set and shift to another brand. It has been demonstrated from the research that people mind-set changes based on the rebuilding of trust by the brand, followed by the trust violation (Murphy & Dweck, 2016). Generally, mind-set are situationally activated or directly changed in different cases. This changing mind-set helps companies to influence the consumer purchasing process. The marketers need to put themselves in the shoes of consumers for understanding their preferences regarding the product or a brand (Ota et al., 2020). Therefore,

H4: Length of Online Reviews impacts the consumer's Purchase Intention

Consumer's personality which affects the purchase decision

As per the study of Tang et al. (2017), consumer behaviour is strongly influenced by many factors including, demographics, personality, motivation, knowledge, psychology and so on. One of the significant aspects which are greatly studied in consumer behaviour is personality based on the consumer psychology. The consumer's experiences psychological changes through environmental, cultural, and social influences. According to Sobia et al. (2018) the personality of the customer's influences, how, when and what the consumer purchases. In any person, there are certain personality traits, as a result of which people are labelled as aggressive, sociable, aggressive and are generally described as compliant, competitiveness and so on, which describes the individual psychology. Commonly consumer purchase products which suit their personality i.e. cars, houses, clothes reflect their personalities.

Furthermore, Farid and Ali (2018) evaluated that education is an important factor which facilitates the consumer decision-making process. In addition, education enhances the skills and develop knowledge in managing various resources and help in implementing the actions that influence consumer decision making process. Moreover, education in the openness personality allows the individual to explore new things and supports the rational decision-making style. This factor helps in consumer pre-purchase decision and purchase information process. A perfectionist consumer possessing openness has a different level in perceiving the products or services due to his specific ideas and existing knowledge about the price, and quality of the product. This reflects that a higher level of education leads to perfectionism trait which positively affects the decision-making process (Lu & Chen, 2017). There exists a significant positive association of Amount and Length of Negative Reviews with Purchase Intention (Bhatti & Rehman, 2020). This study shows a relationship between length and amount of negative reviews with purchase intention. Therefore,

H5: Personality of the Consumer impacts their Purchase Intention

RESEARCH METHODOLOGY

A quantitative approach is used because of its main advantage that the value of knowledge produced is checked through validity criteria, i.e., the degree of confirmation, refutability, and logical consistency. The purpose of

the current study is to identify the impact of variables like negative reviews, opinions of online customers, influence of social media and personality of a consumer on the actual purchase intention.

Hence, the current study utilizes a survey to collect data to be researched for its intended purposes. Survey was used in this study for knowing about the preference and attitude of the consumers related to the study variables and collect the associated data. Moreover, the study aims to explain and make sense of the demographic elements in the surrounding environment that may have an impact on purchase intention.

The purpose of the empirical testing of the theory is served through a survey. All forms of analysis and interpretation could easily be carried out in statistical terms using the survey (Creswell, 2013). The design and its execution are discussed in detail in the sections below.

Survey design is the complete structure and process of how a survey will be carried out. Since the main objective of this study is to identify variables that have an impact on purchase decision. Therefore, the survey assessed and evaluated the mitigating effects of the moderating variables as well as the connection of the main path (Personality of the consumer — Purchase Intention) of the model. The survey method was selected due to its major advantage of a rapid turnaround in data collection; gathering 300 sample responses within a month; greater range covering three major universities over the city; and economy of the design. It also helped in identifying a large number of attributes from the selected sample. Therefore the theoretical model, having six variables was more aptly empirically analyzed through survey method.

The purpose of the research signifies the type of investigation used for the research (Walliman, 2015). As described above the purpose of the current study is to describe and explain the phenomena of MLH trap and its mitigating contingencies and provide empirical verification of the theory. Moreover, the survey aims to explain and make sense of the demographic elements in the surrounding environment involved with the impact created by negative reviews. The investigation aims for the systematic establishment of the relationship between consumer personality, purchase intention, opinion of online reviews, influence of social media, & length and amount of negative reviews in an online environment. It helps in arriving at a conclusion based on the degree of association between the correlating variables, fulfilling the purpose of empirical testing.

The survey is designed to take place in the natural setting, with minimal interference from the researcher. Since the research settings are an important determinant of the effectiveness of the research process. Therefore no artificial constraints were embarked. The respondents were informed before questioning that they were part of a research study. The data is collected at three different points of time with prior intimation to the respondents.

Sample selection from the population is an integral part of survey research, and the representativeness of the sample is very important for its effectiveness and ability to fulfill the purpose (Groves et al., 2011). An effective, representative sample for the survey was obtained through random sampling of the universities offering Business Administration courses across Lahore. There are a total of 11 universities in Lahore that offer MBA and BBA. A list was obtained and four universities were randomly selected for data collection (Burroughs et al., 2013; Lambert, Fincham, Stillman, & Dean, 2009; Rindfleisch et al., 2009; Stillman, Fincham, Vohs, Lambert, & Phillips, 2012). From these four universities, non-random convenience sampling was used to collect data from respondents, who were students enrolled in business study programs, on different days after taking permissions from the faculty and administration.

The survey tests the empirical viability and strength of the proposed relationships of the theoretical framework. A sample size of 300 was selected legitimizing the extensive length of the survey instrument, helping to reduce the normality issues in empirical analysis. The university students of BBA/MBA program, (who are the respondents for survey and in the experiment) were from 18-24 years of age, represent late adolescents and make up a good sample for online social media influence research (Lambert et al., 2009; Rindfleisch et al., 2009; Stillman et al., 2012). The sample selection was purposefully kept age-specific treating age as a control variable. In Pakistan, however teenagers have a lower disposable income (pocket money) and often are allowed to buy only from a limited range of products, compared to late adolescents who enter universities, have higher disposable income and can buy products of their choices. Also, late adolescents exhibit the similar life goals and expectations and also start developing a sense of purpose and use. In addition to it, late adolescent university students have better comprehension of the marketing processes and their role as consumers deeming their responses to be more informed and meaningful compared to teenagers. Therefore late adolescents were chosen for this study.

A questionnaire was designed for the survey to collect the data from the respondents. The instrument contained the opening statement describing the purpose of research and instructions for the respondents. The respondents were given clear instructions for how to fill each part. The first part required personal information of the respondent including gender, age, marital status, employment status, education and the platforms that they engage with to access online reviews.

In total, there were six variables, (three constitute the main path of the model, and the other three are moderators) divided into different sections for measurement. Items relating to each variable were a part of the instrument. However, these were not separated or highlighted in the questionnaire.

Data Collection Process

BBA/MBA class sections were chosen by using convenience sampling from the selected universities. A sample of 75 filled survey questionnaires was obtained from each university making up a total of 300, of which all questionnaires were complete and usable.

Measurements of Study Variables

The undertaken research encompasses six variables. Personality of the Consumer (the independent variable) impacts the Purchase Intention (dependent variable) through Opinion of Online Reviews (mediating variable) and influence of social media, amount of online reviews, and length of the reviews act as moderators to the relationship. The measurement of each of these variables provides the data for statistical testing which is the objective of this study.

Amount of Online Reviews was measured through established instruments, (Danish et al., 2019 & Berger, 2012). It had 4 items tested on a Likert scale of 1-5 ranging from 'strongly disagree' to 'strongly agree'. Length of Online Reviews was measured through an established instrument, scale ([Li et al., 2013](#) & [Liu & Qui, 2013](#)). It had 4 items tested on a Likert scale of 1-5 ranging from 'strongly disagree' to 'strongly agree'. Influence of Social Media was measured through an established instrument, ([Zhu & Tan, 2007](#) & Siddiqui & Singh, 2016). It had 5 items tested on a Likert scale of 1-4 ranging from 'not at all' to 'extremely'. Online Usage and Opinion of Reviews was measured through an established instrument, ([Stoddard et al., 2005](#)). It had 3 items tested on a likert scale of 1-6 ranging from 'not at all' to 'extremely'. Purchase Intention was measured through an established instrument, (Kanten & Darma, 2017, Dotson and Das, 2016). It had 4 items tested on a likert scale of 1-6 ranging from 'not at all' to 'extremely'. Personality of the Consumer was measured through an established instrument, ([Tang et al., 2017](#), Price et al., 2018). It had 2 items tested on a likert scale of 1-6 ranging from 'not at all' to 'extremely'.

Data Analysis Strategy

Testing for Model Reliability

This refers to the model's ability to reproduce the data. A model is termed as a good fitting model if it is statistically dependable and stable with the data and re-specification is not entailed ([Kenny & McCoach, 2003](#)). The Model fitness helped in gaining confidence in the proposed model before the interpretation of the causal paths of the structural model. For this purpose Cronbach's Alpha test was applied to test the reliability of the model, and the internal consistency of our set of scale items.

The research model is show in the diagram below.

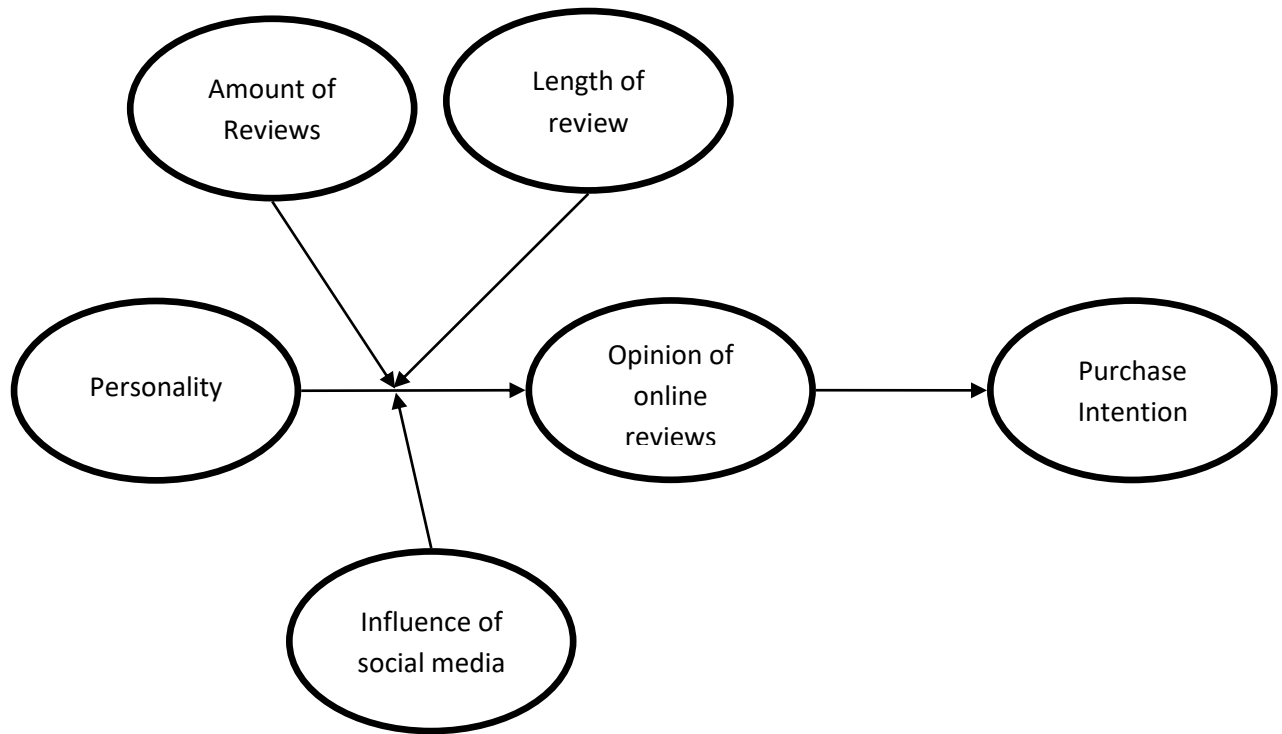


Figure 1: Research Model

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics provided a detailed description of the collected data including the respondents' characteristics; reliability and validity of the measures used; the range of scores regarding means and standard deviations; the group comparisons and the correlation matrix. These aspects are discussed comprehensively in the following sections.

Respondent's Characteristics

The total number of respondents was 300, out of which 78.3% were males. The survey was aimed at late adolescents and the sample was purposefully taken from age-specific respondents. The rationale is discussed earlier in the research methodology section. The age group 19-21 comprised 91.3%. Accordingly, 93% respondents were single due to being younger. Moreover, being age-specific, approximately 88% were unemployed, signifying a limited and dependent source of income. The education level for 94% of the respondents was Bachelors. The sample mainly composed of people that use multiple platforms for reading reviews at 68.3%, respondents who only used Facebook composed 11% of the sample, followed by Instagram at 10%, while Google, Quora, and Twitter composed 6%, 3.3%, and 1.3% respectively.

A cross-tabulation of the variables was then made by gender. The details are given below.

Table 1: Respondents Characteristics by Gender

Variables	Category	Gender		Total
		Female	Male	
		Frequency	Frequency	Frequency
Marital Status	Married	7	14	21
	Single	58	221	279
Employment	Yes	6	30	36

	No	59	205	264
Age	<i>Below 18</i>	3	13	16
	<i>19-25</i>	57	217	274
	<i>26-32</i>	1	5	6
	<i>33-39</i>	1	0	1
	<i>40-46</i>	0	0	0
	<i>Above 46</i>	3	0	3
Education	<i>Bachelors</i>	57	225	282
	<i>Masters</i>	4	5	9
	<i>M.Phil</i>	3	1	4
	<i>Other</i>	1	3	4
Platforms	<i>Facebook</i>	3	30	33
	<i>Twitter</i>	0	4	4
	<i>Instagram</i>	12	18	30
	<i>Google Reviews</i>	4	14	18
	<i>Quora</i>	4	6	10
	<i>Multiple</i>	42	163	205

The above cross-tabulation of data shows us important information related to the demographic that was surveyed. A majority of the respondents were males, studying in Lahore Business School of the University of Lahore. Among the people who were surveyed, a majority of the students' marital status was single. A large section of the demographic is unemployed at the moment, and only involved in educational activities. Most of the respondents belong to Generation Z and Millennial generations, between the ages of 19 to 25.

As for education, a majority of the respondents are currently studying in a Bachelor's program. There is no singular platform that this demographic engages with, as most of the respondents favored using multiple review platforms before making an online purchase. A Missing Value Analysis showed no results, meaning all respondents responded to all required values.

Reliability of Measurement Scales

The reliability statistic Cronbach's alpha of 0.60 and above is considered acceptable. All reliability measures fall within the acceptable range. Table 2 shows the reliabilities for the measurement scales.

The highest reliability α was shown by influence of social media with 0.74 and amount of online reviews with 0.71. Whereas, the variables of Purchase Intention, Personality, Online Usage & Opinion of Online Reviews and Length of Online Reviews showed fairly good reliabilities; ranging from 0.63 to 0.68.

Table 2: Reliability of Measurement Scales

Variables	Items	Cronbach's Alpha α
Amount of Online Reviews	4	0.709
Length of Online Reviews	4	0.633
Influence of Social Media	5	0.741

Online Usage & Opinion of Online Reviews	3	0.662
Personality	2	0.660
Purchase Intention	4	0.685

The Cronbach's Alpha test indicates that the scale for all variables is reliable. All values are <0.60 , which is a universally acceptable as a reliability score, while two variables rank higher than 0.70 for the reliability scale. It can be said that the scales are reliable, which shows internal consistency of the set of scale and the items being tested.

Descriptive Statistics

After endorsing the reliability and validity of the measurement scales, the descriptive statistics for the variables was obtained. The descriptive statistics exhibit the range of the sample data and how it has been responded. The mean and standard deviation of all the variables was obtained along with the minimum and maximum range for each of the variables. The range of scores for each variable is given below:

Table 3: Descriptive Statistics of the Study Variables

Variables	Min	Max	Mean	Standard Deviation
Amount of Reviews	1	5	3.6	0.86
Length of Reviews	1	5	3.5	0.71
Influence of Social Media	1	4	2.7	0.64
Opinion of Reviews	1	6	3.7	1.05
Purchase Intention	1	5.5	4	0.89
Personality	1	6	4.1	1.22
Social Support	1.14	4.00	2.90	0.61

The measurement scales used for each variable were different ranging from 1-4 for Influence of Social Media till 1-6 for Personality and therefore exhibited dispersed scores for the mean of each variable.

Group Comparisons

A detailed comparison of the six variables under study was made by five grouping variables: gender, age, marital status, employment status, education, and platforms used. The t-test was used for comparing the six variables.

Table 4: Comparison of Study Variables by Gender

Variables	Gender	Mean	Standard Deviation	p-value
AOR	Female	3.50	0.81	**
	Male	3.61	0.88	
LOR	Female	3.50	0.61	**
	Male	3.51	0.74	
ISM	Female	2.61	0.65	**
	Male	2.73	0.63	
OOR	Female	4.00	1.02	**
	Male	3.64	1.05	

PI	Female	4.12	0.84	**
	Male	4.00	0.91	
Personality	Female	4.20	1.34	**
	Male	4.10	1.20	

* = significant, where * $P < 0.05$; ** $P < 0.01$, ns = not significant

The group comparison on the basis of gender, shown in Table 5.6 revealed that the difference is statistically significant for all six variables. The difference is highly significant at 99% for all variables. The analysis showed that there is no major dissonance between the two genders related to any variable. Both genders seem to be in agreement over the significance, whether positive or negative, of the variables in relation to purchase intention.

Correlation Matrix

The correlation matrix is given in Table 5 confirmed the intended direction of the association between variables. Both age and education were taken as the confounding variables for the relationship milieu. Age only showed a significant association with education (coefficient = 0.528, $p < 0.01$), whereas education showed a significant association with Length of Online Reviews (coefficient = 0.160, $p < 0.01$), and Opinion of Online Reviews (coefficient = 0.122, $p < 0.05$).

The relationships between Amount of Online Reviews and other study variables were highly significant. The correlation of Amount of Online Reviews with Length of Online Reviews (coefficient = 0.592; $p < 0.01$), showed a positive and significant relationship. The correlation of Amount of Online Reviews and Influence of Social Media (coefficient = 0.415; $p < 0.01$), also showed a positive and significant relationship. The correlation between Purchase Intention and Personality was also positive and significant (coefficient = 0.660; $p < 0.01$). Thus the relationship amongst variables of the research model, i.e., PI, PoC, OOR, etc. were in the hypothesized direction. The correlation of all variables showed a significant correlation ($p < 0.01$), as shown in the table below.

Table 5: Correlation Matrix

Variables	1	2	3	4	5	6	7	8
1. Age	1							
2. Education	.528**	1						
3. AOR	-0.053	0.008	1					
4. LOR	0.111	.160**	.592**	1				
5. ISM	0.029	0.101	.415**	.421**	1			
6. OOR	0.107	.122*	.444**	.442**	.456**	1		
7. PI	0.085	0.093	.631**	.607**	.554**	.572**	1	
8. PoC	0.028	0.04	.477**	.451**	.482**	.553**	.660**	1

Notes: Bi-variate Pearson Correlation; Alpha=Cronbach's α ; * $P < 0.05$; ** $P < 0.01$

Amount of Online Reviews and Purchase Intention

According to the first hypothesis statement, 'Amount of Online Reviews has an impact on Purchase Intention'. The regression path between AOR and PI was positive and statistically significant (0.631) and S.E. were 0.047. This confirmed that a relationship between these two variables does exist. Therefore, the *hypothesis was accepted*.

Opinion of Online Reviews and Purchase Intention

The second hypothesis predicted that 'Opinion of Online Reviews affected the Purchase Intention of a consumer'. The regression path between OOR and PI was positive and statistically significant (0.572) and S.E. were 0.041. This confirmed that a relationship between these two variables does exist. Therefore, the *hypothesis was accepted*.

Influence of Social Media and Purchase Intention

The third hypothesis predicted that 'Influence of Social Media has an impact on Purchase Intention'. The regression path between ISM and PI was positive and statistically significant (0.554) and S.E. were 0.068. This confirmed that a relationship between these two variables does exist. Therefore, the *hypothesis was accepted*.

Length of Online Reviews and Purchase Intention

The fourth hypothesis predicted that 'Length of Online Reviews impacts the consumer's Purchase Intention'. The regression path between LOR and PI was positive and statistically significant (0.607) and S.E. were 0.058. This confirmed that a relationship between these two variables does exist. Therefore, the *hypothesis was accepted*.

Personality of the Consumer and Purchase Intention

The fifth hypothesis predicted that 'Personality of the Consumer impacts their Purchase Intention'. The regression path between PC and PI was positive and statistically significant (0.660) and S.E. were 0.032. This confirmed that a relationship between these two variables does exist. Therefore, the *hypothesis was accepted*.

Hypothesis Testing for Moderation Analysis

The second set of hypotheses used Process moderation analysis ([Hayes, 2013](#)) for testing.

Moderation

Our hypothesis predicted that ‘Opinion of Online Reviews would have an impact on the relationship between Personality of the Consumer and Purchase Intention’. The moderation was tested through process moderation, and the results are shown in Table 6. The coefficient for personality was positive and significant (0.198; CI = -0.173 to 0.569; $p < 0.01$), and it was also significant for Influence of Social Media (0.259; CI = -0.329 to 0.8475). The two-way interaction between Personality and ISM 0.0206; CI = -0.1156 to -0.1568; $p < 0.05$) was positive and significant. The r-square of the model was 0.4043, and it was also significant ($p < 0.01$). Therefore, the data supported that influence of social media moderates the relationship between personality and purchase intention, *accepting the hypothesis*.

Table 6: Moderation Analysis

Dependent	Purchase Intention			
Variables	Coefficient	SE	LLCI	ULCI
<i>Independent</i>				
Personality	0.1980**	0.1886	-0.1731	0.5691
Influence of Social Media	0.2593**	0.2989	-0.3290	0.8475
<i>Two-Way Interaction</i>				
Personality x ISM	0.0206**	0.0692	-0.1156	-0.1568
<i>Control</i>				
Gender	0.3364	0.1201	0.1001	0.5727
Age	0.0782	0.1203	-0.1587	0.3151
R-Square	0.4043**			

Notes: SE= Standard Error, LLCI = Lower Limit Class Interval, ULCI= Upper Limit Class Interval, Coefficient is unstandardized; * $p < 0.05$; ** $p < 0.01$

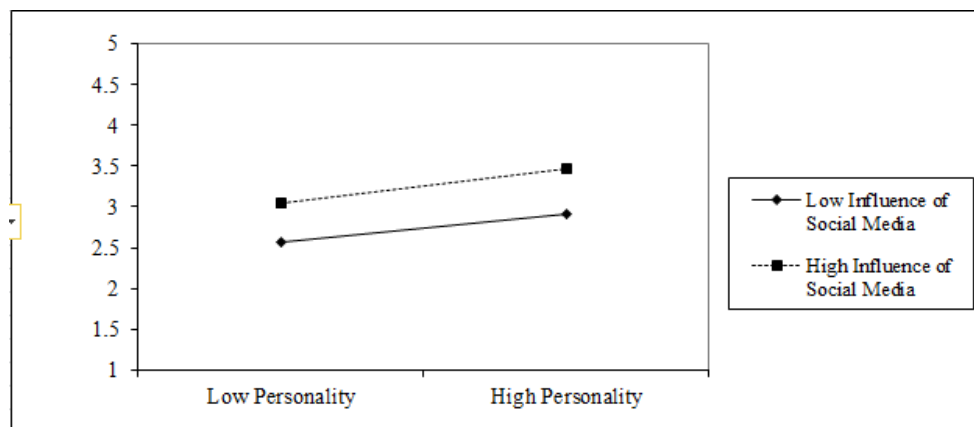


Figure 2: Impact of Levels of Personality x ISM on Purchase Intention

Figure 2 depicts the moderation of ISM on the Personality-Purchase Intention relationship. Table 7 provided the consolidated results for the survey and the experiment. The measures used for each analysis and the tests applied are also given.

Table 7: Consolidated Results of Survey and Experiment

Hypothesis- Survey – Mediation and Moderation Check	Measure	Tests Applied	Status
H1: Amount of Online Reviews has an impact on Purchase Intention	E-B-K Model	Regression	Supported
H2: Opinion of Online Reviews affected the Purchase Intention of a consumer	E-B-K Model	Regression	Supported
H3: Influence of Social Media has an impact on Purchase Intention	E-B-K Model	Regression	Supported
H4: Length of Online Reviews impacts the consumer's Purchase Intention	E-B-K Model	Regression	Supported
H5: Personality of the Consumer impacts their Purchase Intention	E-B-K Model	Regression	Supported

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