

Impacts of Brand Equity on Consumer Buying Behavior In Smartphone Industry Among University Students of Bahawalpur

Muhammad Hassan Shahzad

The Islamia University of Bahawalpur, Bahawalpur, Pakistan

Corresponding Author Email: hassanshahzad2501@gmail.com

Abstract

The main motive for this research was to inspect the effect of brand equity on consumer buying behavior in smartphones industry among university students of Bahawalpur region. In this research the research questions are addressed and a descriptive research design is used. The population for the research are the university students of Bahawalpur region. The investigation populace comprised of 30,000 students. A sample size of 395 students was determined, and collected them. The researcher has firstly checked the reliability and validity of the data. Then correlation and regression analysis is done for testing. Descriptive statistics are used to analyze the description and summary of the data. Whereas the correlation and regression analysis is used to check the relation between the independent and dependent variables. The researcher has found that the independent variables which are Perceived value and Brand image are statistically significant and are positively related to the Consumer buying Behavior. While there is a moderator in the research called "Word of Mouth". The researcher also found out that all the independent variables have a significant impact on the buying behavior of the consumer with respect to word of mouth. This research only investigates the industry of smartphone and students who are linked to the universities present in the Bahawalpur Region. Although this has not prevented the emergence of significant results. The results of this study hold important implications for both industry and academics. This research helps the industry holders to analyze that what steps they could take to increase their sales of smartphones whether they are the new or old in the market. And how they can make their better place in the market. This research is one of the few which investigate brand equity and its effects on consumer buying behavior in smartphone industry with independent variables which are perceived value and brand image with word of mouth as a moderator.

Keywords: Brand equity, Consumer buying behavior, Perceived value, Brand image.

Introduction

The cellphone industry is very ground breaking segment in the “Information and Communications Technology” sector and the smartphone is eventually going up and is becoming the standard pattern of cellphones and for the time being it is representing the quickest growing marketplace in the telecom sector (Cecere, Corrocher & Battaglia, 2014). Cecere et al. initially saw in 2013, that the selling of smartphones with web connection has increased for those cellphones which are more common, for example, the sales of global smartphones has been increased from 3.6% to 435 billion units in the end of 2013. Cecere et al. (2014) states that, the recent battle clearly shows that both of the companies i.e. Apple and Samsung are working hard for the betterment of their brand image and for the leadership of the market.

Sarwar & Somro (2013) analyzed that, however smartphone took place in the market in 1993, which wasn't till the second quarter of 2006, when one of the famous brand that is Blackberry was newly came to the market place, and in a short period of time it became one of the best smartphone selling brand. Then after that, one other smartphone company joined the market that is “Apple” in 2007, and they made their very first model in sixth month of 2008. Then “Samsung” came and developed the Samsung drive which was in competition with the iPhone directly. A very famous smartphone in the marketplace. Since that day, when both companies started new products in the marketplace, it's been a very tough competition for both of the companies, and as well as for all those who are coming new in this field.

Andai (2016) states that equity of the brand is a combination of elements, that can be added or subtracted from the term that is delivered from service or product to customers and it can be the firm itself. These assets contain incorporate image of the brand, association with the brand, perceived value from the brand and brand awareness. To watch over firms appropriately, "Andai" states that advertisers are required to obviously grasp worth, parts of the firms as far as what is most important to them and to recognize how they will qualify to lead the market and they will have to

know their worth to quantify the valuation of equity of the brand at consumer, items and the monetary stages.

Regionally, Bahawalpur is a lot significant in nature of the sale purchase of cellphones. It is generating a very good share of the Pakistan's market in the sales of the smartphones. This optimizing growth has been done just due to the hard work of the mobile marketers in this region and the tough competition in the telecommunication companies and the makers of these handsets. A project named "Pakistan-China Fiber Optic Project" was signed in 2013 between Pakistan and China, worth \$44 million and the belt was almost 820 km's long. And it is making the internet penetration more rapid and fast. Pakistan's increasing internet projects and the growing market of smartphones it has boost the economy of Pakistan and is making it a very attractive market in the past recent years.

Major goal of the thesis is to investigate that how the consumer buying behaviors in smartphone industry are effected by equity of the brand. This research is done on the consumers in the Bahawalpur region. In this research it will be analyzed that whether the customers in this industry tend to buy their product on the basis of equity of the brand. It is also shown that how equity of the brand is helpful for the companies to make their customers satisfied and making their industry more profitable with a higher share in market.

Main center of study is to do an analysis on the emphasis of equity of the brand in the smartphone industry in terms brand image, and perceived value on consumer buying behavior with "Word of Mouth" as a moderator. Cellphone business companies are one the fast growing businesses in the world. This study will be carried out in the region of Bahawalpur, which is the whole population interest of this research.

Statements:

- i) Absence of Brand Equity in customers is causing problems in sales of the products.
- ii) There are different researches done on the buying behavior of customers related to different industries, e.g. Cosmetics, Fast Moving Consumer Goods (FMCG), Packaging,

Pricing etc, but at hand is no study on finding the impacts of equity of the brand on consumer buying behavior among the university students of Bahawalpur Region.

Gap of the Research:

i) Previously there is no research done using the Independent Variables Perceived Value and Brand Image including the Word of Mouth as moderator, and Consumer Buying Behavior as a moderator.

The questions developed are given below:

- 1: About what range does Perceived value from the brand effect buying behavior of customers in smartphone industry among University Students of Bahawalpur?
- 2: About what range does Brand image effect buying behavior of customers in smartphone industry among University Students of Bahawalpur?

The key interest of the dissertation is to investigate determinants for buying behavior of customers among University Students in Bahawalpur with special reference to marketing and social communication influences. Objectives are given below:

- 1: To empirically examine association between Perceived value by the brand to the customer's purchasing behavior of smartphones among University Students of Bahawalpur.
- 2: To empirically examine association between Brand image in consumer's mind to their purchasing behavior of smartphones among University Students of Bahawalpur.

A descriptive design of research is deployed for undertaking research. The cross-sectional type of descriptive research is going to help out in acquiring the facts and figures about what is happening in the gathering on any time. Beside this, it helps to give the representations of populace with the least bias too. In 2016, Andai stated that proposal is supple at all. It allows the researcher to have a look from different angles and to view the problems with different facets, and the researcher can now obtain different ideas and new insights of the problem.

Literature Review

The major part of the section will basically assess the various causes of subordinate information applicable in the research, to build up a more prominent comprehension of research questions featured in the past chapter.

The Effects of Perceived Value in Consumer Buying Behavior

In 2011, Price, Coulter, and Strizhakova, for recognizing the brand likings of the customers, they established two particular variables, named as self-identity brand signal and brand. They realized that consumers in created and creating nations lean toward worldwide brands attributable to greater value. It was the perception that, if the business is perceived as generally reachable, then the business worth is believed to be globally acceptable. Thusly, customers see advanced style of global trademarks. Moreover, Strizhakova et al, established the worldwide companies intrigue, hence neighborhood buyers inferable from greater observed value and its reputation. Customers usually conclude the nature of an item dependent on an assortment of instructive signals, characteristic or outward, which they compare with items. In 2010, Schiffman et al., said that signs which are at natural concerns having physical attributes of the items their selves, for example, Item's exhibition, highlights, dependability, toughness, workableness and feel. Then again, outward qualities are prompts which are outer to the item only, for example, value, and image, name of the brand, organization notoriety, firm's status, and the country of origin. Consequently, emotional decision of product might get influenced by own item for consumption encounters, one of a kind solicitations, and utilization circumstances, though the long involvement with a brand causes customers to perceive the favorable circumstances and separation of company (Aure and Nervik, 2014). In 2013, Masika pointed that additionally in light of the information that decisions about what is essential to customers is included, and customers contrast as a part of their characters, needs and inclinations.

- 1 *H1*: Perceived Value has a significant effect on Consumer Buying Behavior.

The Effects of Brand Image in Consumer buying Behavior

Customers are usually faithful to the firm in light of increasingly changing boundaries identified with specialized, affordable or psychosomatic components that

create it expensive or hard for client to switch and different causes are that, the client might be faithful since they were happy by the company that why they need to proceed with the connection by the company. Firm's characteristics may be seen as significant aspects in a customer's assessment creation. Customers depend on trademarked items and generally want to purchase items by renowned firm designation. Organizations at any cost need to fulfill their buyer with the best items. Individuals are moving to firms which are registered and make their own designed products and give monstrous joy by getting to be communal individual from realized firm by going along with it and dedication to any firm emerges when purchaser ends up as a stable purchaser of the firm which in return moreover blows up industry (Contractor, 2015)

2 H2: Brand Image has a significant effect on Consumer Buying Behavior.

Word of Mouth as a Moderator between the Effect of Independent and dependent variable

For the people who attain data, the persons who blowout data don't have some professional purposes. In 2001, Silverman considered word of mouth as an unrestricted communication in regards to products as well as benefits in purchasers by non-promoting channels in which providers are most certainly not included. Verbal exchange is fast. Instant questions and responses could be done to give associated and ample reference esteems as said by Silverman, in 1997.

In 1998, Buttle, said that verbal exchange isn't really communicated personally. The contents talked about never again focus around companies, goods, or services, they additionally cover associations. Word of mouth could be prepared by support or net broadcast. In 1995, Johnson and Gelb, proposed the data communication and business by means of internet can likely be named one kind of verbal exchange, known as "online word of mouth". In 2004, Hennig-Thurau et al., called attention to production of the web empowers clients to collect item data and discussions by surfing the internet. Clients are enabled to share the happenstances, suppositions, and associated learning on a particular topic to make E-word of mouth.

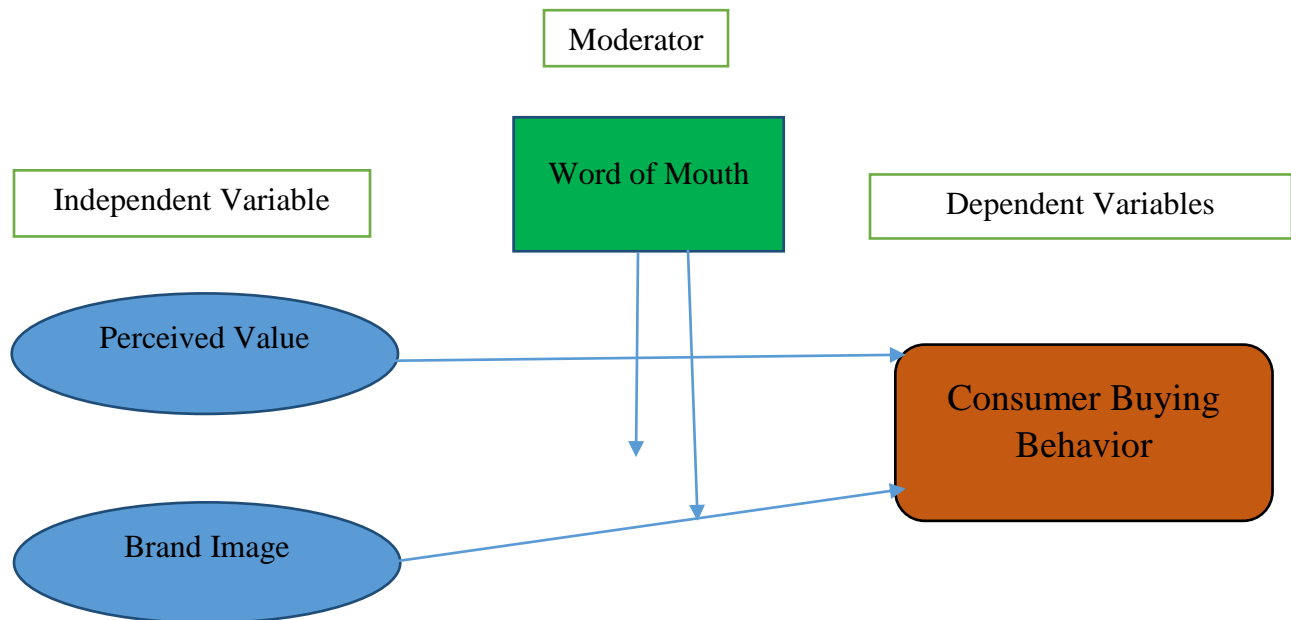
3 H3: Word of Mouth positively moderates the relationship between Perceived Value and Consumer Buying Behavior.

4 H4: Word of Mouth positively moderates the relationship between Brand Image and Consumer Buying Behavior.

Framework

There is a diagram given below which is used in this study. The model is adapted with two new variables that is perceived value and brand image. And furthermore it has also added with a moderator that is word of mouth, to the existing model taken from (MUIGAI, 2017). Consumer buying Behavior is treated as the D.V. And I.Vs are brand awareness, perceived value, brand image, and brand association. Furthermore it's added with the moderator, "word of mouth" which is the cause of change in effects of I.Vs on the D.V.

Conceptual Framework:



Methodology

In this section we will study the methods used in research which are brought in use to collect data. It's essential for the scholar to develop a methodology in the research. This portion of research is very important. In methodology, the validity of the

research is checked (Kallet, 2004). Research strategy is analyzed in the methodology, therefore it should be more precise and accurate so that it has the best logical connections, reasons and justification. The audience, for which we are carrying out this research can check it's replicable or not. Hence this portion should be done very carefully, and it's good to have a thorough proof reading, so that if there are any errors, can be eliminated.

Rajasekar & Philominathan , (2013), stated that methodology is "A systematic way to solve a problem. It is a science of studying how research is to be carried out". Research methods can be used to investigate the solution for a problem with samples, data collected and other techniques. The method, techniques, and patterns are decided by the nature of study. The pattern of methodology of my study is carried out from (MUIGAI, 2017).

A good researcher knows well about the efficiency, productivity and the suitability of the methodology used in research. It needs good planning as well as well-maintained scientific way for describing, being as a value neutral (Rajasekar & Philominathan, 2013).

While doing a research, it should be known that the solutions should be practically implementable and it must be providing a good set of well-working solutions for the non-scientific or non-scientific problems. But beside those things the ethical consideration must also be in mind. The researcher must assure all these consequences from every aspect aspects (Ryan et al., 2006). This chapter is going to describe the key to methodological construct, goal and the basis of the research. Furthermore it describes the techniques of collecting data and sampling.

Consumer Buying Behavior

"Consumer Buying Behavior" is well-defined by study.com is "Consumer buying behavior is the sum total of a consumer's attitudes, preferences, intentions, and decisions regarding the consumer's behavior in the marketplace when purchasing a product or service. The study of consumer behavior draws upon social science disciplines of anthropology, psychology, sociology, and economics."

Khaniwale (2015), mentioned that the consumer behavior basically mentions to the thought, emotional state either positive or negative, actions of the consumer which he has to take during purchasing of an item or a service. Buyer's behavior is that approach which answers an individual that why, what, where, how, and when an individual make the purchases. Hence the result of these questions are the buyer's decision.

Intended Contribution

This study also aims to work in this field of study in which we are going to examine the social factors and marketing influencing factors. And to observe that whether these instincts have any aid in investigating influences of equity of the brand on the buying performance of the young consumers. And whether marketers have influence on the customers to change their mindset about the awareness, image, or association with the brand.

Ethical Contribution

- ❖ The purpose was clearly mentioned on the questionnaire, besides that the respondents are explained clearly.
- ❖ The respondents participate voluntarily.
- ❖ The questionnaire was designed in a manner that the identifying from the subject was not requested in order to keep the information confidential.
- ❖ The permissions were taken from the administrations of different universities to collect the data.
- ❖ The results were reachable to the concerned stakeholders.

Qualitative and Quantitative Approach

Qualitative Approach

There are basically two methods for doing research.

- i) Qualitative Method
- ii) Quantitative method

Qualitative Approach

Basically the qualitative methods consists of the qualitative process, for example qualities and undertaken as their natural step (Rajasekar et al, 2013). In qualitative research, different researcher based on the context and perception of different people

and the social ground can give different meaning to the same construct. Anthropology, Phenomenology, or narration could be used in the qualitative research (Dehgan, 2006). The data is a primary objective of qualitative research to develop a theme.

Quantitative Approach

Quantitative method is the method which involves any quantity or an amount which deals with the phenomena which also involves quantities. Statistical methods are used for data collection, for formulation of hypothesis, testing, and then interpretation furthermore (Rajasekar et al, 2013). This approach take us to “deductive reasoning, the rules of logic and measureable attributes of human experience” as said by Hungler and Polit, in 1999. This is known as hypothesis testing research (HTR). Major focus of scholar in the study is testing and lighten knowledge about consumer buying behavior among the students of universities of Bahawalpur.

The research follow the quantitative approach mainly engaged by positivist approaches (Easterby-Smith et al., 2002). It involves in the systematic and scientific interrogation of quantitative approaches. Researcher has done following steps to achieve objectives:

- a) Generates hypothesis.
- b) Constructs model.
- c) Collects data.
- d) Develops instruments for measurement.
- e) Evaluate results.

Collection of Data

Data collection it is very important to have an ethical consideration and the data is collected within the ethical boundaries. In this research all these precautions are undertaken. As all the respondents of the questionnaire are provided with the main objective of the research and they are not asked with their personal and confidential information.

Furthermore, the process is able to be separated in two major parts.

Data Sources: Primary and Secondary

The data in this study is gathered through questionnaire, observations, and small interviews that is the primary source. While on the other side, there is secondary data

which includes the data collection from the previous studies and it can be used in the background and previous literature of the research. It may include internet, books, journals, or periodicals etc. The researcher in this research has chosen the questionnaire to collect data, which is the primary source.

Research Instrument and pilot testing

In the study, first we conducted pilot study. In this study we collected 20 samples from the respondents, which has been a user of the smartphones. And are the students from the universities of Bahawalpur. First we ask them to make sure that they are the students of the universities present in Bahawalpur so that we can establish the validity, precision, and clarity. There are minor changes that were made to the questionnaire to give a better understanding to the respondents.

Hence, finally we collected the data through this method, using the questionnaire technique. A survey consist of the pre-arranged set of questions were given to a set of samples which are a good representatives of the population of interest.

Sampling and Population

Population

Wilson (2010), stated that a person who is doing a research should know and define the population before selecting the sample size for any study undertaken. In this study our population are the university students in Bahawalpur. Now the researcher investigated the population and found that the students enrolled are 30,000 from different sources. The Islamia University of Bahawalpur consists of 47 departments, University of Central Punjab, Bahawalpur consists of 16 departments and National College of Business Administration & Economics (NCBA&E) consists of 8 departments. Therefore, the students enrolled in different departments of Universities of Bahawalpur are 30,000.

Sample and Sample Size

Sample is a subset of whole population. Moore (2009), believed that, "Sample is a part of population from which we actually collect the information and use a sample to draw conclusion about the entire population". This subset can be selected by two techniques. Either by non-probability or probability sampling. Probability sampling

according to Stephanie (2015), is the sampling technique which uses casual sampling method. Probability sampling is that where each trial from the populace is recognized and it has identical chances of selection.

If we look at the other side, non-probability sampling technique according to Adi Bhat (2019), is that in which the scholar chooses the samples on the basis of his individual decision instead of the casual choices. In this study, the sample is taken from students from universities of Bahawalpur region and are selected from the population as samples.

For a nice sample size, mostly 95% of the confidence interval is chosen, which means it has a chance 5% that the actual result may differ from the result of the study. Niles (2006), believed that a good confidence interval is 95%. Usually researchers use 5% margin of error, due to self-administered survey technique. Hence, for calculating the sample size, researcher is using sample size table proposed by (Krejcie & Morgan, 1970). Hence, treating 30,000 students in the population segment, having the confidence interval of 95%, and 5% as the margin of error, results in the sample size of 395. And there is another formula for calculation of sample size, which is Yamane's formula, which is given under:

$$n = N / 1 + N(e)^2$$

Here,

n = sample size

N = Total Population

e = 0.05

Sampling units selected for data collection as per Yamane's formula is 395 samples which are finally included in study, based on the above mentioned parameters. In table mentioned below also elaborates the same (Krejcie & Morgan, 1970).

Sampling Techniques

Two types of sampling techniques are given in figure below:

- i) Probability
- ii) Non-probability.

Stratified sampling technique is being used by the scholar. It focuses on the process in which the researcher make the groups of the population. These groups are known as strata. From these strata, the researcher choose samples randomly. The researcher himself, visited the universities, and administered the questionnaire by himself. The students were first elaborated about the research topic and requested to fill out the questionnaires with their consent.

Response Rate

In this section the researcher is going to discuss about the questionnaires he delivered to the respondents and how much of them were received back with complete information. Firstly the researcher carried out 400 questionnaires as the population was 30,000. Hence the sample size by Yamane's formula is 395. Researcher distributed 400 questionnaire among the male students studying in the universities of Bahawalpur region, who were well familiar with the smartphone industry and marketing tools and methods. But only 366 questionnaires were received with complete information and response. Then the researcher distributed 50 more questionnaires and completed the total sample size of 395 with fully completed answers. Hence the response rate was 83.60% as given in the table below:

Table

Total Questionnaire Delivered	Questionnaire Received	Questionnaire received complete	Response Rate
450	416	395	87.78%

Data Analysis

Reliability Analysis

The validity and reliability of variables added in the study are made warranted by doing tests and then redoing them to ensure our results. We will get a definite value of the cronbach's alpha. All numeric of cronbach's alpha are calculated below. The composite reliability value is 0.710 of 17 items which is quite a better and recommendable value. Now according to Nunnally, (1970) and Moss et al., (1998) the cronbach's alpha numeric must be more then 0.05 and 0.06 respectively. These 17

items are more than acceptable and reliable to calculate the impacts of brand equity on consumer buying behavior among university students in Bahawalpur region. Hence we can get accurate results by applying statistical results.

Composite Reliability Index

Cronbach's Alpha	Number of items
0.710	17

Reliability of Measurement Instruments

Scales	Number of items	Cronbach's Alpha
Consumer Buying Behavior	4	0.757
Word of Mouth	5	0.757
Perceived Value	5	0.738
Brand Image	3	0.913

In the table, the values of Cronbach's alpha are given for each variable as well as the moderator. As we see that the value for each variable is more than 0.50 which is more than acceptable, as said by Nunnally, in 1970. Then in 1998, Moss et al., said that minimum value for the acceptance of the variables is 0.60. And our each cronbach's alpha value is more than 0.60, which is much better and recommendable. This shows that our each variable is reliable and is applicable for further statistical tests and interpretations.

Correlation Analysis

Correlation is the statistical instrument which can measure forte of variables. It is used to measure the relation in the variables. If a variable effects the other, then correlation analysis also tells us about that change in the variables caused by each other. It also tells the trend of the relation in the variables. In this research Pearson Correlation is run to check the strength in the relationship of variables. The values in the results lies between +1 to -1. In 2001, Fidel and Tabachnick said that, "Bivariate correlation measures the association between two continuous variables without establishing directional causality".

Table
Correlations

		AVGPV	AVGBI	AVGWO M	AVGCB B
AVGPV	Pearson Correlation	1	-.577**	.207**	.392**
	Sig. (2-tailed)		.000	.000	.000
	N	395	395	395	395
AVGBI	Pearson Correlation	-.577**	1	.440**	-.119*
	Sig. (2-tailed)	.000		.000	.018
	N	395	395	395	395
AVGWO M	Pearson Correlation	.207**	.440**	1	.051
	Sig. (2-tailed)	.000	.000		.315
	N	395	395	395	395
AVGCB B	Pearson Correlation	.392**	-.119*	.051	1
	Sig. (2-tailed)	.000	.018	.315	
	N	395	395	395	395

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

In this table, the correlation analysis of coefficients are shown. Results of the correlation shows that all the values are significant i.e. $p < 0.05$ except one. But some values are positively correlated and some are negatively. Variables who are significant and most positively correlated are brand image and word of mouth and positively moderate at 0.440 as $r(395) = 0.440$, $p < 0.05$. Then the correlation between the perceived

value and consumer buying behavior is significant and positively moderate at 0.392 as $r(395)=0.392$, $p<0.05$. Then the correlation between the perceived value and word of mouth is significant and positively weak at 0.207 as $r(395)=0.207$, $p<0.05$. Then the word of mouth and consumer buying behavior is non-significant as $p>0.05$ at 0.315 and positively very weak at 0.051 as $r(395)=0.051$, $p<0.05$. Then the correlation between the brand image and consumer buying behavior is significant and negatively weak at -0.119 as $r(395)= -0.119$, $p<0.05$. Then the correlation between the brand image and perceived value is significant and negatively moderate at -0.577 as $r(395)= -0.577$, $p<0.05$.

Regression Analysis

Regression is a measurable procedure to appraise the connection among dependent and independent variable (s). Generally it tries to discover the causal impact of one variable on other. To scrutinize the separate and combined impact of independent variables which are perceived value and brand image on dependent variable which is consumer buying behavior, we applied different regression examinations to test the suggested theoretical framework as both independent and dependent variables are quantitative. Two models of various regression examination were completed for the accompanying proposed hypothesis.

Developed Hypothesis

- 1 *H1*: Perceived Value has a significant effect on Consumer Buying Behavior.
- 2 *H2*: Brand Image has a significant effect on Consumer Buying Behavior.
- 3 *H3*: Word of Mouth positively moderates the relationship between Perceived Value and Consumer Buying Behavior.
- 4 *H4*: Word of Mouth positively moderates the relationship between Brand Image and Consumer Buying Behavior.

Hypothesis testing by Multiple Regression

The table below shows properties of all I.Vs with D.V. The multiple regression analysis is run as the test. Hence the table below shows that the 34.6% variance in consumer buying behavior is initiated by above mentioned variables.

Table

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.414 ^a	.171	.167	.87363

a. Predictors: (Constant), AVGBI, AVGPV

Hypothesis testing and its discussion**Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.937	.330		2.842	.005
AVGPV	.584	.068	.485	8.613	.000
AVGBI	.112	.039	.161	2.858	.004

a. Dependent Variable: AVGCBB

The hypothesis H1 is accepted as relation in perceived value and consumer buying behavior is significant. The beta value is 0.485 and p-value is 0.000 that is < 0.05 and t value is 8.613. This result of my findings are also proved by the previous research (Chi, Yeh, & Tsai, 2011), here it is shown that the perceived value has a positive and significant affect on the buying conduct of the customer in the 2nd hypothesis of the respective research. The researcher has the sig value of 0.000 which is less than $p < 0.05$. Hence, relationship is significant and our hypothesis is accepted. It means that when a customer go to a brand and buy a product or service. Now the value he perceived from that brand against its cost, influence the buying behavior of the

customer from that specific brand. If the perceived value is good, then he will go to that brand again. And if it is not, then this will decrease his buying from that brand.

The hypothesis H2 is accepted as the relation between brand image and consumer buying behavior is significant. The beta value is 0.161 and p-value or sig. value is 0.004 that is <0.05 and t value is 2.858. This is the result in my studies and it is also proven from the previous studies of other writers. Here (Lanka, 2012), it is proven that the brand image is statistically significant at 0.05 level of significance. It has a positive and significant relation with the consumer buying behavior with the beta value 1.611 in the respective research. Hence our hypothesis is accepted. This shows that when the brand image is enhanced for a customer, then he will prefer that brand instead of others. But if the image is ruined, the customer will not prefer that brand.

Moderating Effect of Word of Mouth

Here we are going to discuss about the hypothesis in which the moderator “word of mouth” is included. We are going to check that after applying the statistical tests on the data, the variables have the statistically significant relationship or not. The multiple regression analysis of the variables are given under:

Table:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
MxPV	-.895	.193	-3.655	-4.646	.000
MxBI	.657	.114	3.593	5.783	.000

a. Dependent Variable: Consumer Buying Behavior

Hypothesis H3 is accepted as the relation in word of mouth and perceived value is significant. The beta value is -0.895 and the p-value or sig. value is 0.000 that is <0.05 and t-value is -4.646. It's proven from the research (Aqueveque, 2015). That the perceived value has a statistically significant relationship in which word of mouth is as a moderator. In our research it is also significant at 0.000. Hence our hypothesis is accepted. It means that the customers who perceive good value against their cost from any brand can be influenced through word of mouth. It can positive or negative too.

The hypothesis H4 is accepted as the relation in word of mouth and brand image is significant. The beta value is 0.657 and sig. value is 0.000 that is <0.05 and t value is 5.783. In the previous studies like (Ansary & Nik Hashim, 2018), it's also stated that brand image is statistically significant. And it proves our findings and results are true. Hence our hypothesis is accepted. Which concludes that consumers buying behavior can be inclined by interference of word of mouth.

Conclusion

The relations discussed in this study and the model can lead to a natural guide for future research. This research is carried out on the smartphone industry. However, for further studies it is suggested that different variables can be analyzed and with or without a moderator or a mediator. The researcher in this study has narrowed his research to the students studying in Bahawalpur universities. Hence the other research can help out to study further on other targeted sector and can choose different age groups. It can also be narrowed down the study to a specific brand of the smartphone. And it can provide them the vision and insight to the brand as well, it will be beneficial for that specific brand. Future research can also check the impacts on any other dependent variable or the aspects other than the brand equity, which will be effecting the consumer buying behavior. It will give more holistic and thorough understanding of the concept.

References:

- Andai, J. (2016). Influence of equity of the brand on consumer purchase choices among pay TV subscribers in Nairobi, Kenya. Unpublished MBA Project, University of Nairobi.
- Aure, K.G., & Nervik, K.D. (2014). Building strong brands; A quantitative study of equity of the brand. Unpublished MBA Project, Aalesund University College.
- Wilson, J. (2010). "Essentials of Business Research: A Guide to Doing Your Research Project". SAGE Publications Ltd, pp. 336.
- Buttle, F.A. (1997), "I heard it through the grapevine: issues in referral marketing", Proceedings of the 5th International Colloquium School of Management, Cranfield University.
- Buttle, F.A. (1998), "Word-of-mouth: understanding and managing referral marketing", Journal of Strategic Marketing, Vol. 6 No. 3, pp. 241-54.
- Cecere, G., Corrocher, N., & Battaglia, R.D. (2014). Innovation and competition in the smartphone industry: Is there a dominant design? Journal of Telecommunications Policy, 39(4), 162-175. doi: 10.1016/j.telpol.
- Contractor, S. (2015). Brand Image and Its Impact on Buying Behavior. Abhinav International Monthly Refereed Journal of Research in Management & Technology, 4(1), 7–12.
- Del Siegle (2000). Sample Size Calculator. Available at: <http://www.gifted.uconn.edu/siegle/research/Samples/samplecalculator.htm>.
- Easterby-Smith, M., Thorpe, R., & Lowe, A. (2002). "Management Research. An Introduction" (2nd ed.). London: Sage Publications.
- Gelb, B. and Johnson, M. (1995), "Word-of-mouth communication: causes and consequences", Journal of Health Care Marketing, Vol. 15 No. 3, pp. 54-8.
- Hennig-Thurau, T., Gwinner, K.P., Walsh, G. and Gremler, D.D. (2004), "Electronic word of mouth via consumer-opinion platforms: what motivates consumers to

- articulate themselves on the internet?”. *Journal of Interactive Marketing*, Vol. 18 No. 1, pp. 38-52.
- Khaniwale, M. (2015). Consumer buying behavior. *Journal of Innovation and Scientific Research*, 14(2), 278-286.
- Kotler, P., & Armstrong, G. (2014). *Principles of marketing*. New York, NY: Pearson.
- Krejcie, R., & Morgan, D. W. (1970). “Determining sample size for research activities. *Educational and Psychological Measurement*”, 607-610.
- Masika, C. (2013). The influence of mobile marketing on equity of the brand; A case study of Safaricom Limited. Unpublished MBA Project, University of Nairobi.
- Miciak, A. R. & Shanklin, W. L. (1994). Choosing celebrity endorsers. *Marketing Management*, 3(3), 51-59.
- Mohan, A. (2014). Consumer behavior toward smartphone industry in Indian market. *Unpublished MBA Project*, Dublin Business School.
- Moss, S., Prosser, H., Costello, H. (1998). Reliability and validity of the PAS–ADD Checklist for detecting psychiatric disorders in adults with intellectual disability. *Journal of Intellectual Disability Research*. 42, 173– 183.
- MUIGAI, C. N. (2017). Impact of Equity of the brand on Consumer Buyer Behavior.
- Niles, Robert (2006). “The programmer as journalist: a Q&A with Adrian Holovaty”. Online Journalism Review, June 5, 2006.
- Nunnally, JC. (1970). *Introduction to Psychological Measurement*. New York: McGraw Hill.
- Peter, J.P., & Olson, J.C. (2008). *Consumer behavior and marketing strategy*. New York, NY: McGraw Hill.
- Polit, D. F., & Hungler, B. P. (1999). *Nursing Research: Principles and Methods*. (6th ed.). Philadelphia. Lippincott.
- Rajasekar, S and Philominathan, P. (2013). *Research Methodology*, Physics.ed-ph, India.
- Reichheld, F.F. and Sasser, W.E. Jr (1990), “Zero defections: quality comes to services”, *Harvard Business Review*, Vol. 68 No. 5, pp. 105-11.

- Richard H Kallet (2004). "How to Write the Methods Section of a Research Paper" Respiratory Care, Vol. 49, Issue No. 10.
- Ryan, R. M., Deci, E. L., Grolnick, W. S., & LaGuardia, J. G. (2006). "The significance of autonomy and autonomy support in psychological development and psychopathology". (D. Cicchetti & D. Cohen ed.). NewYork John Wiley & Sons.
- Sarwar, M., & Soomro, T.R. (2013). Impact of smartphones on society. European journal of scientific research, 98(2), 216-226.
- Schiffman, L.G., Kanuk, L.L., & Wisenblit, J. (2010). Consumer buyer behavior (10th ed.). Upper Saddle River, NJ: Pearson.
- Strizhakova, Y., Coulter, R.A., & Price, L.L. (2011). Branding in a global marketplace: the mediating effects of quality and self-identity brand signals. International Journal of Research in Marketing, 28(4), 343-351. doi: 10.1016/j.ijresmar.2011.05.007.