

**An Empirical Study of Factors Affecting Purchase Intention of College Students About Smartphone**

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**ABSTRACT**

Smartphone has significantly influence human life especially in case of interaction between person to person or person to business either domestically or internationally. With the tremendous improvement in telecommunication technology like smartphone upgradation, wireless network and GPS system etc. are changing with the increasing speed everyday due to changing preferences and needs related to consumers. So, this research paper aims to identifying factors affecting buying behaviour especially intention of smartphone among colleges students. Finding of the study show that product convenience, relative advantage against other products, social influence and brand name has significant positive impact on purchase intention for college students about smartphone.

**Keywords:** *Smartphone, purchase intention, social influence, brand name, perceived value.*

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## **Introduction**

Smartphone now a days play a vital role in our lives. The smartphone gadget has undeniably greatly influenced the way people manage their day-to-day affairs. Importance and usefulness of smartphone is increasing especially in youngsters with tremendous speed. Recently, smartphone device is not only for making and receiving calls. Smartphone plays an important role in human life by connecting them with rest of the world through internet. History of mobile phone in India is from 1995, when first mobile phone call was done between Kolkata and New Delhi and now India has second-largest market of smartphone in the entire world after China. It is very rare to find persons who are not using mobile phone in these days. For daily life communication with rest of the world and accomplishment of business activities, mobile phones become very vital instrument. The way of interaction between peoples has been changed by inclusion of smartphone in communication instruments. Use of smartphone in communication provides us a number of options of interaction i.e., audio or video calls, text messages, e-mails and sending and receiving multiple documents at single time. Mobile phones are light weight and easy to carry everywhere. Young generation adopt smartphone more easily and they are much more technology oriented. So, the proportion of youngsters in buying smartphone is larger than any other age groups. Main purpose of the College students to use smartphones is to connect with their friends and family, collect information and for entertainment also. Smartphone devices technologies are continuously upgrading as well as becoming more affordable for everyone. We cannot carry landline phone with us everywhere due to their unhandy nature and heavy weights. Conversely, smartphone have number of comparative advantages over old trended phone i.e., portable in nature, compactness and lots of other features as computer. Now a days, Technological advancement is on pick, so risk of cyber-crime also increased simultaneously. Concern about the cyber security of smartphone users becomes a crucial task for smartphone manufacturing companies. Due to number of distinctive functions, smart phones become very useful and popular among students and young professional. Usefulness of Smartphone and its magnificent feature helps smartphone manufacturing companies to build lucrative market in largely populated country like India. Smartphone users is rapidly growing in India. Convenience, Social influence, Relative advantage, Brand name are some variables which influence the purchase intention (independent variable) of smartphone. Smart phone now a days are necessity for the students. Large population of India has really attracted the national and international brands. Now a days it is very hard to imagine our lives without smart phones.

## **Review of Literature**

Consumers' purchase intention have significant positive relationship with the customer perceived value, customer knowledge about product, sale promotion through celebrity endorsement (Cathcart & Killen, 1940). Finding of a study conducted by Leo et al., (2005) shows that Consumer purchase intention and decision-making styles are influenced by consumers' cultural values so it is important for managers to make strategic decision to understand cross-cultural decision-making styles of consumers. According to a research conducted by Nelson & McLeod, (2005) in US which identified there was impact of

advertisement by commercial media and customer perception about brand consciousness on United State adolescents'. Social influence cover social media channel and finding of Malhan & Kumar, (2021) shows that there are no significant impact of social media on buying behaviour of male and female. An empirical study conducted in Odisha found that large number of students and poor people attracted by mobile phones different features and even used debt to purchase the smartphones (Das, 2012).

**Convenience:** In today's technology era of upgrading of technology we can witness lot of high-tech features in smartphones. In a study conducted with students, it was identified that smartphone's different features put positive impact on satisfaction level of consumers with different degree (C. Ling et al., 2006). Findings of Stephens & Davis, (2009) show that the fusion of regular cell phones and desktop computers into smartphones was purely for the convenience of consumers. One more research found that good quality camera with high mega pixel image resolution, operating system and many innovative product features helps in attracting more buyers. Product durability, brand name and handy nature of smartphone are decided followed by features and price (Ahmed & Qazi, 2011). Another important thing which really attracted users towards was that the smartphones provide easy access to a variety of goods through various platforms, with a higher degree of quality, reliability, and personalization, and can do almost anything a laptop can (Persaud & Azhar, 2012). According to finding of study conducted by Arif & Aslam, (2014) shows that there are significant positive relationship in between student's dependence on smart phone and their purchase intention. Study conducted by E. Sthapit & Coudounaris, (2018) revealed that the smartphone consumers in Nepal attracts more towards product features which are designed according to their needs.

**Relative advantages:** A study about students' dependency on smartphone and its impact on buying behaviour of smartphone revealed that University students' purchase intention was influenced by factors termed as product convenience, societal needs and want and dependency on smartphone puts positive effect on future purchase behaviour (Hooi Ting et al., 2011). Naing & Chaipoopirutana, (2014) identified significantly positive relationship among factors "perceived quality, product image, consumer aspiration, emotional value, attitude" towards product buying intention. Findings of study conducted by Adhikari, (2018) revealed that advertising has positive impact on the sales volume of smart phones and study examined that gender of the respondents and trust on information from advertisement have no significant relationship. Similarly, different types of media put positive impact on purchase intention of different age group of peoples. Online, offline and electronic media are positively correlated with each other's.

**Social influences:** Results of a study conducted in Malaysia shows that social influence and product's brand name effects the demand of smartphone positively by students. Social influence and products' brand name identified as the most influential factor (Mohd Suki, 2013). Another study presents that factor i.e., social influence, price of product and compatibility are very important factors for buying a smart phone in Malaysian smartphone market. The smartphone manufacturing companies should understand their target consumers' need even more than consumers itself before performing any marketing activities (Ibrahim et al., 2013).

According to Lee, (2014), factors that influenced the adoption behaviour of college students were peers group impact, monetary burden, and word of mouth from those who adopted smartphones earlier than him. A study revealed that product attributes with consumer inertia put positive significant impact to do repeat purchase. Satisfaction level among consumers is increased the chance of repeat purchase. Societal influence and consumer inertia collectively effect the frequency of repeat purchase (Goh et al., 2016). Consumer purchase behaviour towards acceptance of mobile marketing showed significant positive relationship between performance expected and effort expectancy, while facilitating condition for buying smartphone and social influence do not have significant positive impact on acceptance of mobile marketing (Yap et al., 2017).

**Brand name:** A study conducted in Pakistan concluded that the mobile phone users in Pakistan were loyal customers for a particular brand and considered all features of smartphone during purchase (Ahmed & Qazi, 2011). Results of research conducted on factors putting significant positive or negative impact on purchase intention of smartphone among Malaysian young generation identified that smartphone buying decision was influenced by factors termed as “brand concern, convenience concern, dependency concern, price concern, product feature concern and social influence concern” (Lay-Yee et al., 2013). Research conducted by Fern et al., (2015) shows that appearance of celebrity in an advertisement have positive significant effect on purchase intention of customers. The five key factors expertise, trustworthiness, attractiveness, brand image and fit have a significant positive relationship with customers’ purchase intention. A study conducted in context of purchase behaviour about smartphone in Bangalore identified that the smart phone manufacturing companies need to focus primarily on quality aspect than on design and price of the product for attracting new customer and retaining existing customers (James, 2018).

**Purchase intention:** Result of study conducting on factors effecting the purchase decision of smartphone identified the four factors termed as “price, brand preference, social influence and product features” had put significantly positive impact on the purchase decision of smartphones’ consumers (Ayodele et al., 2016). Research conducted by Rahim et al., (2016), conclude “product features, brand name and social influence” have significantly positive relationship with buying intention about smartphone excluding a single variable which is termed as product sacrifice that has no positive significant relation with consumers’ purchase intention of smartphone. There were positive relationships between the four determinants and brand loyalty (Yeh et al., 2016). Descriptive analysis of a study conducted by Sujata et al., (2016) shows that factors affecting purchase intention of smartphone among Indian youth identified as “technology factors, hardware factors, basic factors, brand factors and financial factors”. Technology factor identified most dominant factor which influence purchase intention of youngster in great extent among these five factors. A quantitative research was conducted to explore that which factors are contributing in influencing purchase intention of expensive smart phones revealed the relationship between different behavioural and demographic factors (Asadullah, 2020).

The above review of literature prompted us to undertake this study on study of factors affecting purchase intention of college students about smartphones in Haryana.

### **Research Gap**

Now a days, smartphone technology puts a great impact on peoples' behaviours especially on young generation. Researches carried out in this context are still insufficient. Still, there are a big difference between consumers preferences and market offerings due to lack of clear through understanding about consumer behaviour as well as preferences. A study conduct by (*ConsumerLab-Ericsson*) shows that 75 percent of university/colleges students sleep next to their mobile phones while 88 percent of total students texted in the class time and 97 percent of total students use smartphones for social networking. In present day due to COVID-19, uses of smartphones for study has increased tremendously. Another important aspect is that the smartphone industry is undergoing continuous and drastic changes in their market. Every now and then new model of smartphones are launched to gain competitive advantage over competitors. So, smartphones' industry growth puts positive impact on the smartphone consumers especially the young generation (University/Colleges students) with respect to their motives and preferences of smartphone purchase decision process of consumers.

### **Objectives**

Main objective of the present study is to find the impact of convenience, relative advantage, social influence and brand name of product on the purchase intention of college students about smartphone.

### **Research hypothesis**

In this study, four independent variables are taken i.e., Convenience, relative advantage of product, social influence and brand name. The following hypothesis are framed.

H<sub>1</sub>: Convenience and relative advantage of product has significant positive relationship with purchase intention of students about smartphones.

H<sub>2</sub>: Social influence and brand name of product has significant positive relationship with purchase intention of students about smartphones.

### **Research Methodology**

In the present study, both primary as well secondary data is used. Primary data is collected through standardized questionnaire. Research questions in this questionnaire are based on 5-point Likert scale of: "strongly disagree" (1) "disagree" (2) "neutral" (3) "agree" (4) "strongly agree" (5). Distribution of research questionnaire were carried out on respondents' e-mail ids and WhatsApp media with the help of google form. Total 230 questionnaires are randomly sent to the college students and we received 152 complete responses. For the collection of secondary data, journal articles, media publications and text books are used.

## Data Analysis and interpretation

**Demographic analysis:** First section of research questionnaire consists of demographic information about respondents i.e., age, gender, education and income level. There are five age segments which are 16-20 years (43.47%), 21-25 years (46.95%), 26-30 years (6.08%), 31-35 years (3.47%) and above 35 years. Analysis based on age group reflect those 16-25 years respondents represent (90.02%) of total sample. Out of total 230 respondents, there are 99 males (43.04%) and 131 females (56.95%). Only 26 respondents (11.03%) are from secondary/Sr. secondary educational background, 120 respondents (52.17%) are from graduation, 76 respondents (33.04%) are from post-graduation remaining 7 respondents (3.04%) are from doctoral background. This analysis shows, graduation and post-graduation students reflect 85.21% of total sample.

**Reliability analysis:** Cronbach's alpha value for independent variables convenience is 0.802, for relative advantage is 0.870, social influence having highest Cronbach's alpha value 0.871, for brand name is 0.787 and for dependent variable purchase intention is 0.789 which shows the high internal reliability and consistency of the items included in the study. Cronbach's alpha values for all the variables included in study is greater than 0.6 and can be accepted as per rule of thumb for coefficient of Cronbach's alpha (Kline, 1999)

**Table 1. Reliability test for both independent and dependent variables**

Variables	Number of items	Value of Cronbach's alpha
All	22	0.937
Convenience	4	0.802
Relative advantage	5	0.87
Social Influence	4	0.871
Brand name	4	0.787
Purchase intention	5	0.789

Source: Primary data

For dependent variable convenience, the value of composite reliability (CR) is 0.798 and value of average variance explained (AVE) is 0.508, value of CR for variable relative advantage is 0.884 and value of AVE is 0.606, CR for social influence is 0.890 and AVE is 0.713 and value of CR for brand name is 0.799 and AVE 0.502. The value of composite reliability for all the dependent variables is greater than all average variance explained values and value of all CR > 0.7. So, we conclude that there exists convergent validity. Table 2 shows the value of Kaiser-Meyer-Olkin is 0.897 which represents that sampling is adequate.

**Table 2. KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.897
Bartlett's Test of Sphericity	Approx. Chi-Square	3145.719
	df	231

Sig.	.000
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**Correlation analysis:**

To identify relationship between independent variables (convenience, relative advantage, social influence and brand name) and dependent variable (purchase intention), statistical tool Karl’s Pearson Correlation is used. Statistical package for social science (SPSS), version-21 is used for the analysis of information.

**Table 3. Correlation Analysis**

Variables		Convenience	Relative Advantage	Social Influence	Brand Name	Purchase Intention
Convenience	‘Pearson Correlation	1	1.000**	.787**	.613**	.564**
	Sig. (2-tailed)		0.000	.000	.000	.000
	N’	230	230	230	230	230
Relative advantage	‘Pearson Correlation	1.000**	1	.787**	.613**	.564**
	Sig. (2-tailed)	0.000		.000	.000	.000
	N’	230	230	230	230	230
Social Influence	‘Pearson Correlation	.787**	.787**	1	.655**	.722**
	Sig. (2-tailed)	.000	.000		.000	.000
	N’	230	230	230	230	230
Brand name	‘Pearson Correlation	.613**	.613**	.655**	1	.549**
	Sig. (2-tailed)	.000	.000	.000		.000
	N’	230	230	230	230	230
Purchase intention	‘Pearson Correlation	.564**	.564**	.722**	.549**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N’	230	230	230	230	230

\*\*Correlation between included items is significant at the 0.01 level (2-tailed).

Table 3 shows the interdependence of items included in the current study. Social influence as independent variable shows highest positive relationship with purchase intention of value of coefficient correlation between social influence and purchase intention is 0.722, Coefficient

correlation between convenience, relative advantage and purchase intention is 0.564 while value of coefficient correlation between brand name and purchase intention is minimum as 0.549. All the variables included in this study shows positive relation with purchase intention of college students about smartphone.

**Multiple regression analysis:** Multiple regression table 4 shows the standardized coefficient value for independent variables 0.606 is for convenience, 0.564 for relative advantage, 0.636 for social influence and 0.132 for brand name which is minimum. All these standardized coefficient values are at  $P < 0.05$ . The value of total variance explained (R-square) by independent variables is 0.533 and value of adjusted R-square is 0.527. The value of F-change is 86.252 which represent the value of regression square. So, this analysis shows that all the independent variables convenience, relative advantage, social influence, brand name and dependent variable purchase intention are significantly associated with each other in positive manner at significance level  $P < 0.000$ . Here, we can conclude that all the hypothesis are true based on this analysis.

**Table 4. Multiple Regression Analysis**

Variables	Standardized coefficient value (Beta value)	p-value
Convenience	0.608	0.000
Relative Advantage	0.564	0.000
Social Influence	0.636	0.000
Brand Name	0.732	0.029
R Square	0.533	
Adjusted R Square	0.527	
F Change	86.252	

significance level:  $p < 0.05$

### Conclusion and recommendation

The phone, later become mobile and now has become smart. This smartphone has changed the entire life style of people especially the young generation. The Covid-10 challenge has added fuel to fire. The pandemic has resulted in an aggressive marketing strategy for smartphone. Work and study from home has in fact left no option for people but to go for smartphones. Laptops seems bulky for round the clock operations. The present study has attempted identify and evaluate factors that affect the purchase intention of smartphone among college students. Focus of this study was to know whether convenience, relative advantage, social influence and brand name (independent variables) influence the purchase intention (dependent variable) of smartphone. Data of 230 respondents was gathered and analysed using statistical tools like Correlation Analysis and Multiple Regression Analysis. Composite reliability and construct reliability tests were executed. Four different hypotheses were framed to check the relationship between independent variables and dependent variable. Findings of the present study indicated that all the hypotheses were supported.



The present research study confirmed that independent variable convenience and social influence has significant positive relation with dependent variable purchase intention of college students about smartphone at  $p < 0.05$ . These results are also consistent with the previous studies (Lay-Yee et al., 2013; K. Ling et al., 2005). Similarly, relative advantage and brand name have also significant positive relationship with purchase intention of smartphones at  $p < 0.05$ . These results also supporting with the results of Lay-Yee et al., (2013) study. Results of this study shows that purchase decision about smartphone among colleges students in Haryana are more affected by brand name and social influence followed by convenience and relative advantage. Findings of the present research have implications for the smartphone manufacturers. Through this study, smartphone producers can understand knows about the factors that affect purchase intention of students for smartphone. Future studies can be carried out to identify other factors which may affect the purchase intention of smartphones. Hence, we can conclude that it is very important for smartphone manufacturers to know about the factors that influence purchase intention of customers for smartphones and to what extent. Moreover, it will work as a key to increase market share of smartphones producers.

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