



STUDENTS' PERCEPTION ON SMART PHONE AND ITS EFFECT ON PURCHASING BEHAVIOUR

Dr. M. Aishwarya

Assistant Professor, PG and Research Department of Commerce, Srimad Andavan Arts and Science College (Autonomous), Tiruchirappalli, Tamil Nadu, India

ABSTRACT

The purpose of this paper is to explore how social need, social influence and convenience affect dependence on Smart Phones and purchasing behavior among affiliated and university students in Indian's emerging economy. Survey methods and non-probability purposive sampling were used to collect data from 274 respondents, and structural equation modeling was used to test the hypothesis. Overall the results provided evidence that social need; social influence and convenience significantly affect students' dependence on their Smart Phones. A significant relationship also existed between students' dependence on Smart Phones and their purchasing behavior. The availability of 3G/4G mobile networks and the growth in Smart Phones' computing power have meant that this form of mobile technology is in great demand. This study provides an exclusive viewpoint concerning students' dependence on Smart Phones and the effect of this on their purchasing behavior, which is a subject that has not been covered previously in the Indian context.

Key words: Smart Phone, 3G/4G

Cite this Article: M. Aishwarya, Students' Perception on Smart Phone and its effect on Purchasing Behaviour, *International Journal of Management (IJM)*, 11(12), 2020, pp. 4109-4119.

<https://iaeme.com/Home/issue/IJM?Volume=11&Issue=12>

1. INTRODUCTION

The telecom industry is one of the fastest growing industries in India. India has about 200 million telephone lines making it the third largest network in the world after China and USA (Gopinath, 2011a). With a growth rate of 45 per cent, Indian telecom industry has the highest growth rate in the world. The mobile communication plays a major role in telecommunication industry. Indian telecommunication sector is prosperous as Indian economies are considerably good. Mobile network comes under the service sector, which is experiencing a rapid development which in turn is supporting the growth in Indian economy, provides ample chances employment and self-employment generation (Usharani & Gopinath, 2020a).

A Smart Phone is a mobile phone with an advanced mobile operating system which combines features of a personal computer operating system with other features useful for mobile or handheld use. They typically combine the features of a cell phone with those of other popular mobile devices, such as Personal Digital Assistant (PDA), media player and GPS navigation unit. The term “Smart Phone”. refers to a multimedia phone handset, which is a multifunctional electronic device that has features ranging from Camera, Audio-Video Playback, Web browsing to a high-density screen display along with several other multimedia options.

Technological advancements in the past decade have changed the ways we consume, distribute and create information significantly (Jaya & Gopinath, 2020). Vidyasaarathi (2020) reported that 79% of the Indian students now have a Smart Phone or a mobile device. Moreover, half of them said that they accessed the internet via their devices on a daily basis to read and send e-mails, check news and weather, receive maps and directions, and access social networking sites (SNS) (Usharani & Gopinath, 2020b). A smaller, but growing, group of students in the Indian also uses phones to conduct online banking, shopping and the downloading and streaming of music and videos. Scholars have argued that university students are often early adopters of new technologies, particularly with respect to Smart Phones (Kim and Parka, 2014; Sultan *et al.*, 2009; Auter, 2007; Unnamalai & Gopinath, 2020). Other studies have also noted a remarkable increase in Smart Phone possession among university students (Jacob and Issac, 2008). It has also been argued that university students are a “sweet spot” market segment (Haverila, 2013; Karthick *et al.*, 2020 a).

Mohd Suki (2013), this study's focus has been to understand whether social needs, social influences or convenience have stimulated dependence on Smart Phones among university students in Pakistan. Furthermore, our findings have also confirmed the results of similar researches that have established evidence of a relationship between Smart Phone dependence and users' purchasing behaviors (Karthick *et al.*, 2020 b). Hence, under the umbrellas of holistic marketing management and strategic planning, this study should be useful for determining customers' needs in order to provide up-to-date technologically advanced Smart Phones. It is also our belief that this present research can provide guidance to Smart Phone manufacturers and distributors concerning the development of strategic marketing management and planning in respect of potential Smart Phone sales.

This paper is organized as follows. In the next section, a literature review relating to students' dependence on Smart Phones and hypotheses about that are discussed. Next, we have presented the methodology that describes the sampling and data collection techniques, and the methods employed for measurement of the stimuli underpinning purchasing behavior. The test of the proposed model using structural equation modeling (SEM) and the study's findings are presented in the results section, which is followed by a discussion of the results' implications, whereby our findings are expounded.

2. LITERATURE REVIEW

There has been created a greater dependency on Smart Phones for consumers, especially when communicating while traveling, or while at offices, at home and so on (Genova, 2010). In the same vein, consumers have come to perceive Smart Phones as necessities and so they have a higher propensity to use them now (Tian *et al.*, 2009). In this sense, future purchasing behavior by consumers will be influenced by their positive perceptions of Smart Phones. Similarly, their dependency on Smart Phone usage has underlying implications for the purchasing behavior of students.

Muthumani, *et al.*, (2007) focused in their research on different attributes that contribute to the consumer preference and to provide suggestions to improve the quality of service been

rendered and to focus on building market share with special reference to Reliance Infocomm. Also, this study aimed to reveal the consumer preference towards the services offered by various mobile connections and also the buyer behavior (Kavitha & Gopinath, 2020). Both primary and secondary data was collected by interview method and referring the company manual and website of the company. The limitation of the study was that the data provided by the respondents may be false at times and it was confined to 200 consumers only and conducted in Chennai only. The statistical tool used in the study was percentage analysis, weighted average Method, chi square test and one sample run test. Most of the respondents were not aware of the schemes of Reliance India Mobile. Many of the respondent's opinion were that in all the mobile service's prepaid connection SMS were free but in RIM whether it is prepaid or postpaid SMS was not free.

Bishal Nagarkoti (2009) aimed in the study to know about the factors influencing consumer behavior of Smart Phone users. In this study, the researcher mainly focused to identify whether Smart Phone users bought Smart Phone because of their need or wish, reasons to buy expensive smart phones, how social and personal factors affected them to make purchasing decision, for what purposes they used Smart Phone, where and how long a day, change in usage of computers due to Smart Phone and how high was the phone bill after using Smart Phone. The theoretical part was framed through the books, journals and articles whereas the empirical part was concluded by conducting focus group interviews. Two focus group interviews were done with the Smart Phone users under the age group of 20-30 from the Helsinki region. There were 6 voluntary participants in each focus group interview. All the participants of the focus group also stated Smart Phone as their need. All the focus group participants had expensive smart phones. The average time that focus groups spent on Smart Phone is 2-3 hours per day. After starting to use Smart Phone, focus group participants didn't feel increase in their phone bill at all.

Omer Torlak, *et al.*, (2011) analyzed in their study that the results from a large sample of teenagers, providing a rich understanding of the substantial differences in Turkish youth consumers' behavior toward cell phones and discussed implications for cellphone marketers. In this study, descriptive statistics and Structured Equation Modeling (SEM) were used. The sample consisted of 2,140 high school students, of which 48.6 percent were females and 51.4 percent males. Cronbach's alpha test, Anova, exploratory and confirmatory factor analysis and correlation analysis were used in this study. Findings revealed that three major usage groups in Turkey's cell-phone youth market: trendy style, heavy-usage style and price-conscious style. Also, they obtained in their study that the cell phone usage of young Turkish consumers and the factors significantly identified categories of young wireless users. These results provided substantial insight and direction for marketing strategists.

One study by Mohd Suki and Mohd Suki (2007) has also drawn our attention to consumers' acceptance of Smart Phones. Their findings suggest that intensive use of Smart Phones leads to greater levels of knowledge and better social networking. More recently, Mohd Suki (2013) recommended that investigations into the dependency on Smart Phone usage among university students should be conducted in developing countries in order to obtain more holistic and accurate findings about Smart Phone buying behaviors and how they reflect the perceptions of those students.

3. DEVELOPMENT OF HYPOTHESIS

Social Needs. The need for social interaction with others is referred to as a social need, which is fulfilled via communication with friends, family members and affiliates, such as coworkers and fellow group or club members (Tikkanen, 2009). Social need is one crucial factor under pinning consumers' dependence on smart phones. Smart phones (which make the internet

available on the go) have made it easy to use SNS such as Twitter, WhatsApp and Facebook. People have become dependent on Smart Phones because they enable them to shop, research and connect with the world and feel more active among their social circles (Goldman, 2010; Kang and Jung, 2014). The most popular mobile activities on Smart Phones are sending and receiving short text messages; sending and receiving e-mails, transferring files and using SNS (Jung, 2014).

H1: Students' needs to connect to social media have positively affected their dependence on Smart Phones.

Social Influence. Social influence arises when one person's feelings, emotions and activities are affected or influenced by others in social groups (Mason *et al.*, 2007). It has been identified by Lee *et al.* (2009) and Chun *et al.* (2012) that social relationships are strongly connected to consumers' decisions to adopt a technology. Social influences come from a variety of people such as neighbors, relatives, family members and friends, as well as from inspirational figures in the media, such as sports celebrities or movie stars. A satisfied Smart Phone user's dependency on

Smart Phones will increase and consequently will lead to positive word-of-mouth communication about the technology with others (Brown *et al.*, 2005). Consumers who rely on positive word-of-mouth opinions given by members of a common social group have their usage initiated by either a transformation of their beliefs or through a process of imitation (Ting *et al.*, 2011).

H2: Social influence positively affects university students' dependence on Smart Phones

Convenience. Convenience refers to a situation where work is simplified, made easy or can be done with less effort, without discomfort or difficulty. Consumers have a high need for convenience where they are able to use their Smart Phones at any time and in any place without having to park the Smart Phone in a fixed workstation (Ting *et al.*, 2011; Genova, 2010). Smart Phones provide quick access to multiple products on multiple channels with greater levels of quality, efficiency and personalization, and they can do almost everything that a laptop can (Basaglia *et al.*, 2009). (Stephens and Davis, 2009). The dual-use nature of Smart Phones has increased their usage. Moreover, with the availability of high-speed 3G/4G and Wi-Fi networks, especially on university campuses, in malls, restaurants and at home, surfing the internet has become more convenient for users who are bound by severe time constraints (Lu and Su, 2009).

H3: Convenience positively affects students' dependence on Smart Phones.

3.1. Dependency and Purchasing behavior

The recent proliferation of Smart Phones and the functions they offer suggest that soon their use will overtake that of primitive mobile phones. Smart Phones offer diverse internet content with multimedia options. For instance, users can download various kinds of mobile apps to their Smart Phones, which has enabled users to customize their mobile devices and services by installing the functionalities that they want (Jung, 2014; Tam and Ho, 2006). This user-empowering Smart Phone attribute of customization is perceived by consumers as being liberating and it is viewed by them now as a necessity, which has increased the propensity for continuous high Smart Phone usage. Using Smart Phones engages consumers by allowing them to gain personal knowledge about their characteristics and how they can be made to work to satisfy needs and improve personal experiences (Keaveney and Parthasarathy, 2001). Ting *et al.* (2011) have also observed that users' high dependence on Smart Phones is positively correlated with their future purchasing behavior. Thus:

H4: Students' dependence on Smart Phones positively affects their purchasing behavior

4. RESEARCH METHODOLOGY

Data were collected in 2020 from students at different affiliated colleges from the universities in Tiruchirappali, who were using Smart Phones, since this market segment is viewed as important for the continued advancement of the telecommunications industry (Haverila, 2013). A self-administered questionnaire was designed for use as a survey instrument to record the respondents' experiences with, and perceptions about, Smart Phones on a five-point Likert-type scale that varied from "strongly disagree" (1) to "strongly agree" (5). Each item used for the development of the survey instrument was adopted from earlier studies and the measurements taken are given in the next section.

4.1. Measurement

The dimensions assessed for this study (i.e. social need, social influence, convenience, dependence and purchasing intention) and the survey items that comprised them were derived from different previous studies.

Table 1

S.NO	Variables	No of Items	Cronbach's α
1	Social Needs	4	0.795
2	Social Influence	5	0.731
3	Convenience	5	0.692
4	Dependency	4	0.712
5	Purchasing Behaviour	5	0.793

Those which have established reliabilities that have been used in similar contexts by previous researchers. To ensure that the sample was representative, both private and public affiliated colleges were targeted. Questionnaires were distributed in person and a non-probability convenience sampling method was adopted. For content validity, the measurement items used in the questionnaire were adapted from a wide range of earlier relevant researches and these were used to operationalize the research constructs of this study. A total of 284 questionnaires were distributed, 274 usable completed questionnaires were received and statistical procedures were applied to analyze the data. Cronbach's α was used to evaluate the internal consistency of the items and to construct validity exploratory factor analysis. Principal component analysis was performed by using IBM SPSS Statistics 20.0. To test the hypothesized relationships among the latent variables further, the SEM was employed using IBM SPSS Amos 20.

5. ANALYSIS AND RESULTS

Structural Equation Model is used to test and eliminate causal relationship in a combination of statistical data and qualitative caused assumptions. There is no difficulty in hypothesis testing in SEM because it takes the confirmatory approach rather than the exploratory approach. Many sub-criteria are considered under each criterion. This is the reason why the relative weightage arrived from SEM is considered more valid than through any other approach. This model also takes measurement error into account when analyzing the data statistically. SEM is capable of estimating or assessing measurement error. It can incorporate both observed and latent variables. To evaluate whether the dataset used in this research was valid for the suggested model or not, model fitness analysis was carried out for the confirmation and modification of the model. The model's fitness was verified by using three types of fit measures which were an absolute fit measure that included χ^2 , a goodness-of-fit index (GFI) and root mean square error of approximation (RMSEA); incremental fit measures that included an adjusted goodness-of-fit index (AGFI), a normed fit index (NFI), a comparative fit index (CFI), an incremental fit index (IFI) and a relative fit index (RFI); and parsimony fit measures that included a parsimony

comparative fit index (PCFI), a parsimony normed fit index (PNFI) (Gopinath & Kalpana, 2020; Ramamoorthy *et al.*, 2016; Hair *et al.*, 2010).

Based on the model-fit indices obtained, the model had adequate and acceptable GFIs: $\chi^2/df = 1.347(<5)$, GFI = 0.954(<0.90), RMSEA=0.032(<0.08), AGFI = 0.931(<0.80), NFI = 0.931(>0.90), CFI = 0.981(>0.95), IFI = 0.981(>0.95), RFI = 0.907(>0.90), PCFI = 0.728(>0.50) and PNFI = 0.691(>0.50). These indices have been among the most frequently used, as they are less affected by sample size (Kavitha & Gopinath, 2020; Hair *et al.*, 2010; Gopinath *et al.*, 2020, Ramamoorthy *et al.*, 2016).

The results indicated that convenience, social needs, social influences students' dependency on Smart Phones were positively related at $p < 0.01$ levels. Convenience was found to be significantly related to university students' dependency on Smart Phones ($\beta = 0.37$, $p < 0.01$). Thus, H1 was supported. Moreover, the results indicated that social needs had a significant impact on the dependency on Smart Phones ($\beta = 0.31$, $p < 0.05$). Therefore, the H2 was supported. Finally, social influences were significantly related to university students' dependency on Smart Phones ($\beta = 0.69$, $p < 0.01$) hence, H3 was supported.

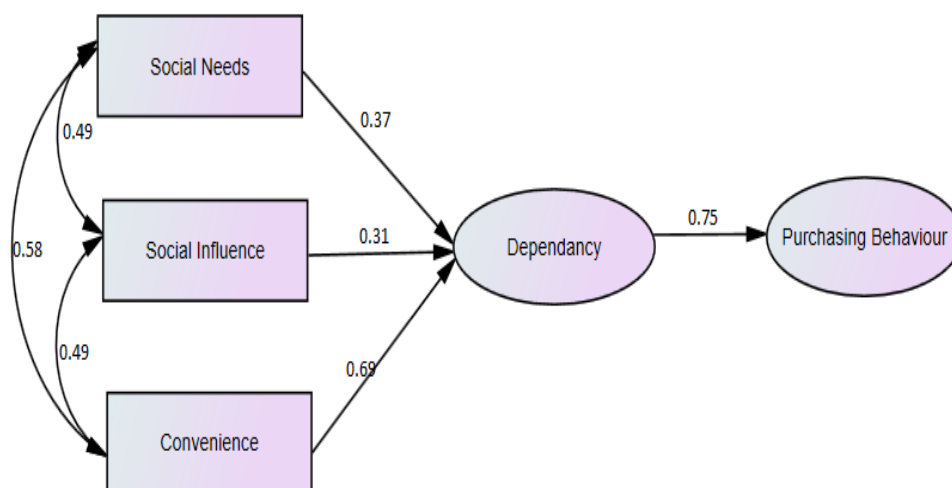


Figure 1 Structural Equation Model

Figure 1 shows that the R^2 between the independent variables on dependency was found to be 0.75. This indicated that 75.0 percent of the variation in students' dependency on Smart Phones could be explained by convenience, social needs and social influences. This evidence supported the interaction effect of convenience, social needs and social influences on students' dependency upon Smart Phones. Hence, were all supported (Tables II-III).

Table 2 Confirmatory Factor Loadings

Constructs	Items	Factor Loadings	CR	AVE
Social Needs	SN1	0.69	0.747	0.577
	SN2	0.74		
	SN5	0.67		
Social Influence	SI1	0.68	0.735	0.639
	SI2	0.78		
	SI3	0.76		
	SI4	0.75		
Convenience	C2	0.70	0.742	0.589
	C3	0.77		
	C5	0.63		

Dependency	D2	0.78	0.725	0.576
	D3	0.62		
	D4	0.69		
Purchasing Behavior	PI1	0.69	0.782	0.685
	PI2	0.74		
	PI3	0.71		
	PI4	0.69		

As for the path between dependency and purchasing behavior, it too was found to be significant ($\beta = 0.60$, $p < 0.01$). Therefore, H4 was supported. The adjusted R² for this path was 0.58. This explained that 58.0 percent of the variation in future purchasing behavior was accounted for by the students' dependency on Smart Phones. This supported the effect that students' dependency on Smart Phones has upon their future purchasing behavior. Thus, H4 was supported (Table III).

Table 3 Correlation Analysis between the Variables

Variable	1	2	3	4	5
Social Needs (1)	0.783				
Social Influence (2)	0.517**	0.712			
Convenience (3)	0.432**	0.478**	0.724		
Dependency (4)	0.387**	0.307**	0.382**	0.780	
Purchase Behavior (5)	0.143**	0.346**	0.371**	0.380**	0.727

Note: **Correlation is significant at the 0.01 level (two-tailed)

6. DISCUSSION AND IMPLICATIONS

The study examined perception of students' dependence on Smart Phones and the effect of that dependency on their purchasing behavior with the help of a SEM. Social need; social influence and convenience were examined to assess students' dependence on Smart Phones while their purchasing behavior was measured by taking students' dependence as an influencing variable. It was found that social influence, social needs and convenience significantly affected students' dependence on Smart Phones (Gopinath, 2019a).

This result demonstrates that social influences and social need do influence the amount which university students use Smart Phones and this creates a dependency to the extent that they would buy a Smart Phone if they believed it would help them to fit in better with their social group. This finding is consistent with the conclusions drawn by Park and Chen (2007). This study's results also found that convenience is another important factor that affects students' dependency on Smart Phones. Having a Smart Phone is like having both a mobile phone and a computer together.

6.1. Hypothesis Testing

Table 4

Path	β	S.E	CR	p-value	Results
Social Needs $\rightarrow$ Dependency	0.37	0.069	4.495	0.000	Supported
Social influence $\rightarrow$ Dependency	0.31	0.087	3.014	0.022	Supported
Convenience $\rightarrow$ Dependency	0.69	0.073	4.695	0.000	Supported
Dependency $\rightarrow$ Purchasing behavior	0.75	0.223	5.789	0.000	Supported

Further investigation during the study showed that there is a positive significant relationship between the influence of students' dependency on Smart Phones and their purchasing behaviors. The results concerning these variables imply that students are deeply dependent on Smart Phones, which causes them to feel insecure when their Smart Phones are not with them. Students' positive experiences with Smart Phones have outweighed their negative experiences, hence their usage of Smart Phones is high.

A significant positive relationship between social influence and dependency on Smart Phones shows how persuasive societal factors have been in making Smart Phones become perceived as essential within social communities (Bearden and Etzel, 1982; Raento *et al.*, 2009). Positive word-of-mouth communication may be disseminated via promotions and endorsements made by effective reference groups that are at the center of students' attention. Positive word-of-mouth marketing would allow social influencers to increase awareness about Smart Phone functions and make positive recommendations by giving potential purchasers greater encouragement to use Smart Phones (Brown, 1989). The positive significant relationship between social needs and university students' dependency on Smart Phones signifies that there is a perceived need for university students to stay connected (Kang and Jung, 2014). Smart Phone providers should design Smart Phones that are provided with high-speed data connections for online multimedia applications, which will allow multimedia connectivity between university students and their social circles.

Similarly, a positive significant relationship between convenience and students' dependence on Smart Phones indicates that the convenience of Smart Phones (Verkasalo, 2009) has enhanced the dependence on Smart Phones (Ting *et al.*, 2011). For some time, it has been noted that the demands for convenience made by consumers have risen (Brown, 1989). Since university students consider that the convenience of Smart Phones is a factor that has motivated them to increase their Smart Phone usage, Smart Phone manufacturers should emphasize convenience when promoting Smart Phones to students. Finally, this research shows a strong positive and significant relationship between university students' dependency on Smart Phones and their future purchasing behavior which indicates that their dependency on Smart Phones has a direct effect on the formation of predictive expectations concerning future purchasing behavior.

This research offers practical insights for mobile industry players in emerging markets. It will help marketers understand consumers' purchasing behavior and their usage behavior, and it will give them the ability to develop appropriate marketing strategies. Smart Phone manufacturers can use the findings of this research for advertising. They can promote the concept that Smart Phone users are able to acquire information anywhere, at any time, which will further enhance the user's confidence in life. Advertising could also suggest that Smart Phones make users feel at ease, by offering a better communication environment supported by mobile messenger services and SNS apps, which offer constant connection with friends.

7. CONCLUSION & LIMITATIONS

The purpose of this study is to analyze perception of student's dependency and purchasing behavior towards Smart Phone in Trichy district by identifying various factors that influence consumers' perception and satisfaction of Smart Phone. In this modern era, a Smart Phone is just not only the want but also a need if know how to make proper use of it. Obviously, Smart Phone have changed the ways that students used to study, communicate professor and connect with other students all over the world. Smart Phone features like, text to speech; GPS and social integration are some examples, which can helps group of study for students to easily remain their plan of study in college (Gopinath, 2019 b). There are some limitations in relation to the sampling techniques adopted for this study. The analysis and interpretation of the results was

not based on a nationwide systematic random sample. Rather, a non-probability sampling technique was adopted and data were only collected from affiliated colleges and university in Trichy (Gopinath, 2019 c). The choice of this sampling strategy may limit the generalizability of our findings. Even though the applied sampling technique supported collection data from the youth market, which is a vital consumer segment within the Smart Phone market, the findings from this research were limited to the slender sampling frames of university students (Gopinath, 2011 b).

FUTURE DIRECTION OF THE STUDY

Although, this study has provided several useful pieces of information for policymakers and academics, there were several limitations which should suggest new directions for future studies. First, the generalization of the results would require extra attention where Smart Phone markets are stable, since India's Smart Phone market has shown relatively rapid growth and the expectations of Smart Phone users there are overheated and extraordinary. So, further studies should be conducted in places where the Smart Phone user numbers are stable. That would provide support for the existing body of literature.

REFERENCES

- [1] Auter, P.J. (2007). Portable social groups: willingness to communicate, interpersonal communication gratifications, and cell phone use among young adults, *International Journal Mobile Communications*, 5(2), 139-156.
- [2] Basaglia, S., Caporarello, L., Magni, M. and Pennarola, F. (2009). Individual adoption of convergent mobile phone in Italy, *Review of Managerial Science*, 3 (1), 1-18.
- [3] Bearden, W.O. and Etzel, M.J. (1982). Reference group influence on product and brand purchase decisions, *Journal of Consumer Research*, 9 (2), 183-194.
- [4] Bishal Nagarkoti, (2009). Factors Influencing Consumer Behavior of Smart Phone Users. *Arcada University of Applied Sciences*, 1-42.
- [5] Brown, T.J., Barry, T.E., Dacin, P.A. and Gunst, R.F. (2005). Spreading the word: investigating antecedents of consumers' positive word-of-mouth intentions and behaviors in a retailing context, *Journal of the Academy of Marketing Science*, 33(2)123-138.
- [6] Chun, H., Lee, H. and Kim, D. (2012). The integrated model of Smart Phone adoption: hedonic and utilitarian value perceptions of Smart Phones among Korean college students, *Cyberpsychology, Behavior, and Social Networking*, 15(9). 473-479.
- [7] Genova, G.L. (2010). The anywhere office¼anywhere liability, *Business Communication Quarterly*, 73 (119). 119-126.
- [8] Goldman, S.M. (2010). Transformers, *Journal of Consumer Marketing*, 27 (5), 469-473.
- [9] Gopinath, R. (2011 a). A Study on Workplace Emotion Dimensions of Employees' in BSNL, Trichy SSA, Tamil Nadu Circle. *Inventi Rapid: Human Resource*, 2 (2), 1-4.
- [10] Gopinath, R. (2011 b). A study on Men's perception in buying decisions on branded shirts in Tiruchirappalli District. *Asian Journal of Management Research*, 1(2), 600-617.
- [11] Gopinath, R. (2019 a). Factors Influencing Consumer Decision Behaviour in FMCG. *International Journal of Research in Social Sciences*, 9(7), 249-255.
- [12] Gopinath, R. (2019 b). Consumer Perception on Brand Awareness of Household Fabric Care Products, *International Journal of Scientific Research and Reviews*. 8(2), 3418-3424.
- [13] Gopinath, R. (2019 c). Online Shopping Consumer Behaviour of Perambalur District, *International Journal of Research*, 8(5), 542-547.

- [14] Gopinath, R., & Kalpana, R. (2019). A Study on Consumer Perception towards Fast Food Retail Outlet in Perambalur District. *International Journal for Research in Engineering Application & Management*, 5(1), 483-485.
- [15] Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, 7th ed., Pearson, NJ.
- [16] Haverila, M. (2013). Cell phone usage and broad feature preferences: a study among Finnish undergraduate students, *Telematics and Informatics*, 30 (2), 177-188.
- [17] Jacob, S.M. and Issac, B. (2008). The mobile devices and its mobile learning usage analysis, *Proceedings of the International Multi Conference of Engineers and Computer Scientists*, 1. 19-21.
- [18] Jeya, J., & Gopinath, R. (2020). Customer Service Techniques and National Insurance Company Efficiency, *International Journal of Management*, 11(12), 3776-3784.
- [19] Jung, Y. (2014). What a Smart Phone is to me: understanding user values in using Smart Phones, *Information Systems Journal*, 24(4), 299-321.
- [20] Kang, S. and Jung, J. (2014). Mobile communication for human needs: a comparison of Smart Phone use between the US and Korea, *Computers in Human Behavior*, 35, 376-387.
- [21] Karthick, S., Saminathan, R., & Gopinath, R. (2020 a). A Study on the Problems faced by Farmers in Paddy Marketing of Cauvery Delta Region, Tamilnadu, *International Journal of Management*, 11(10), 2155-2164.
- [22] Karthick, S., Saminathan, R., & Gopinath, R. (2020 b). Agricultural Marketing – An Overview, Tamilnadu, *International Journal of Management*, 11(11), 3007-3013.
- [23] Kavitha, J., & Gopinath, R. (2020). A Study on Perception of Internet Banking users Service Quality-A Structural Equation Modeling Perspective, *International Journal of Management*, 11(8), 2204–2217.
- [24] Kavitha, H., & Gopinath, R. (2020). Effect of Service Quality on Satisfaction and Word-Of-Mouth: Small Scale Industries and their Commercial Banks in Tamil Nadu, *International Journal of Management*, 11(11), 3034-3043.
- [25] Keaveney, S. and Parthasarathy, M. (2001), “Customer switching behaviour in online services: an exploratory study of the role of selected attitudinal, behavioural, and demographic factors”, *Journal of the Academy of Marketing Science*, Vol. 29 No. 4, pp. 374-390.
- [26] Kim, M.-J. and Parka, J. (2014). Mobile phone purchase and usage behaviours of early adopter groups in Korea, *Behaviour & Information Technology*, 33 (7), 693-703.
- [27] Lee, D., Rheeand, Y. and Dunham, R.B. (2009). The role of organizational and individual characteristics in technology acceptance, *International Journal of Human-Computer Interaction*, 25 (7), 623-646.
- [28] Lu, H. and Su, P.Y. (2009). Factors affecting purchase intention on mobile shopping web sites, *Internet Research*, 19 (4), 442-458.
- [29] Mason, W.A., Conrey, F.D. and Smith, E.R. (2007). Situating social influence processes: dynamic, multidirectional flows of influence within social networks, *Personality and Social Psychology Review*, 11 (3), 279-300.
- [30] Mohd Suki, N. (2013). Students' demand for Smart Phones: structural relationships of product features, brand name, product price and social influence, *Campus-Wide Information Systems*, 30(4), 236-248.
- [31] Mohd Suki, N. and Mohd Suki, N. (2007). Mobile phone usage for m-learning: comparing heavy and light mobile phone users, *Campus-Wide Information Systems*, 24 (5), 355-365.

- [32] Muthumani, M., Thangavel, N., & Choudary, Y.L. (2007). Consumer Preference on Mobile Connections and Buyer Behaviour towards Reliance Mobile in Chennai City. *Journal of Contemporary Research in Management*, 89-102.
- [33] Omer Torlak, John E. Spillan, & Talha Harcar, (2011). Young Consumers' Cell Phone Usage in Developing Market: The Case of Turkish Youth Market. *Journal of Marketing Development and Competitiveness*, 5(3), 47-67.
- [34] Park, Y. and Chen, J.V. (2007). Acceptance and adoption of the innovative use of Smart Phone, *Industrial Management and Data Systems*, 107 (9), 1349-1365.
- [35] Raento, M., Oulasvirta, A. and Eagle, N. (2009). Smart Phones an emerging tool for social scientists, *Sociological Methods & Research*, 37 (3), 426-454.
- [36] Stephens, K.K. and Davis, J. (2009). The social influences on electronic multitasking in organizational meetings, *Management Communication Quarterly*, 23(1), 63-83.
- [37] Sultan, F., Rohm, A.J. and Gao, T.T. (2009). Factors influencing consumer acceptance of mobile marketing: a two-country study of youth markets, *Journal of Interactive Marketing*, 23(4), 308-320.
- [38] Tam, K.Y. and Ho, S.Y. (2006), "Understanding the impact of web personalization on user information processing and decision outcomes", *MIS Quarterly*, Vol. 30 No. 4, pp. 865-890.
- [39] Tian, L., Shi, J. and Yang, Z. (2009). Why does half the world's population have a mobile phone? An examination of consumers' attitudes toward mobile phones, *CyberPsychology & Behavior*, 12 (5), 513-516.
- [40] Tikkanen, I. (2009). Maslow's hierarchy and pupils' suggestions for developing school meals, *Nutrition and Food Science*, 39 (5), 534-543.
- [41] Unnamalai, T., & Gopinath, R. (2020). Brand preferences and level of satisfaction in consuming noodles among working women in Tiruchirappalli district. *International Journal of Management*, 11(11), 2909-2917.
- [42] Usharani, M., & Gopinath, R. (2020 a). A Study on Consumer Behaviour on Green Marketing with reference to Organic Food Products in Tiruchirappalli District, *International Journal of Advanced Research in Engineering and Technology*, 11(9), 1235-1244.
- [43] Usharani, M., & Gopinath, R. (2020 b). A Study on Customer Perception on Organized Retail Stores in Tiruchirappalli Town, Bangalore, *International Journal of Management*, 11(10), 2128-2138.
- [44] Verkasalo, H. (2009). Contextual patterns in mobile service usage, *Personal and Ubiquitous Computing*, 13 (5).