PREDICTIVE MODEL TO STUDY THE CONSUMER BUYING BEHAVIOUR TOWARDS E-PHARMACY THROUGH SOCIAL MEDIA INFLUENCE: A CROSS COUNTRY STUDY

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ABSTRACT

Purpose*: The persistence of this research was to conclude the relationship and impact amongst the variables which includes i.e. Trust, perceived usefulness and Purchase intention,(independent construct) on online buying behaviour of e-pharmacy through social media influence (dependent variable) across the developed and emerging countries i.e. United States, United Kingdom and India. Researcher used big – data modelling approach to predict whether the Millennial will get influenced or not influenced with the social media towards e-pharmacy.*

Design/methodology/approach*: A structured questionnaire covered descriptive inquiries, five point Likert scale questions, and qualitative questions to collect data from respondents who were SSC/HSC, UG(under graduate) and PG (Post Graduate) scholars across India, USA, and the UK. As a methodology, Partial least square structural equation modelling was used for Data Analysis. We collected data from India, USA, and UK from the Millennial group, accounting for nearly 34 %, 40% and 35% of the inhabitants respectively. The growth of the online retail sector has increased due to the usage of internet for searching by the youngster. E-retail sector is predicted to upwelling from 3% of the whole Indian retail marketplace in 2017 to 7% by 2021. Similarly, for USA surge from 6 %of overall US retail market in 2017 to 15% by 2021 and UK come from 5% of total US retail market in 2017 to 12% by 2021. These show a positive sentiment for the online pharmacy industry to gain momentum in the coming years in these countries.*

Findings*: The outcomes show that trust is more important parameter and influenced by the social media in the UK context, but it is not playing a significant role in USA and India context through social media. Perceived usefulness, perceived intention and demographics are influenced by the social media feedback posted across different cultures which impact online buying behaviour of medicine (e-pharmacy).*

Practical Implication: *This study will be benefited for the retail sector managers to plan the strategies for communication to target Millennial more effectually and design their advertising campaigns that can influence their belief and purchasing activities in a positive way.*

Originality/Value*: This research paper highlights the use of Technology Acceptance Model in identifying Millennial behaviour for e- pharmacy through social media.*

Keywords: Predictive Model, On-Line Shopping, Generation Y, Consumer Behavior, Emerging Countries, Developed Countries, E-Pharmacy.

INTRODUCTION

Among the various verticals of e-commerce, one that ruins extensively untouched with excellent likely in the forthcoming online pharmacy market or E-Pharmacy. E-pharmacies are recently competitors in the Global e-commerce sector, with it receiving greater emphasis from government and investors in the last three to five years. India has over 850,000 independent pharmacy retail stores that can meet around 60% of the overall domestic therapeutic demand. (Statista, World Bank, EY, Frost & Sullivian, Deutsche Bank Market Reserch and Televisor's Research). The old Brick and Mortal Retail pharmacies are responsible for the annual sale of 99% of the pharmaceutical product's sales in which online pharmacy contributes only 1% of the total sales.

The Indian, US, and UK online pharmacy market development have become modest by an increase in the consumers from India, US and UK suffering from long-lasting clinical indications like diabetes, hypertension, Asthma, and Obesity, consequential in an increased demand for medicines. Government of India initiated various step to promote telemedicine, non-specific drugs, and E - healthcare. These steps are likely to provide quality healthcare services in rural India. More than 60% of the Indian population resides in rural areas.

In the USA, the Food and Drug Administration runs BeSafeRx campaign that creates awareness about the risks associated with ordering the drugs online. So, in this context, the National Association of Boards of Pharmacy (NABP) runs the Proved Internet Pharmacy Practice Sites (VIPSS) program which delivers endorsement to pharmacies that sell prescription drug via drug. In fact, "*NABP has reviewed over 11,500 online drug outlets [in the US] and found that 96% appear to be operating in conflict with pharmacy laws and practice standards*" which increases the consumers buying behavior towards e-pharmacy. Similarly, in the UK, the British National Health Service (NHS) which keep tracking on the e-pharmacy.

Social Media as a Tool for an Advertisement for E-pharmacy

Social media promotion

Internet marketing is Social media marketing (SMM), which employs public networking websites as a tool for marketing. The purpose is to develop content that our target audience will segment with their social network to support. SMM is entertaining in your peer circle and home town. You form a part of assemblies, clubs, and establishments created on your welfares. The number of groups sharing data online is ever increasing. One of the critical anxieties with social media promotion from a professional perception is that it can be highly timewasting. Social media marketing is not a one-shot affair; they need to be encouraged over time.

Social Media Advertising Social media promotion emphases on promoting products or services on social networking sites. With the user's demographic information, the advertisers on social media marketing platforms can focus on their ads. Current targeting group is analyzed and using that analyses it tries to association these selections (like geotargeting, social targeting, socio-psychographic targeting, etc.), to make comprehensive target group empathy possible.

Why social media for E-pharmacy

Generate Indications

The objective of all paid promotion must be to get indications. Every social media broadcast shaped ought to be connected to a landing page and therefore, the landing page to embrace a decision to action. The link to the landing page that has a choice to work can maximize the effectiveness of the campaign.

Upsurge Your Perceptibility

Indorsing posts on Facebook may be the right way of skyrocketing the perceptibility of your content. Your job can seem earlier to the peak, and also, it helps people's News Feeds to endorse like never before. Increase consciousness in client Loyalty – after you produce a Facebook page for your commercial then put on the market through Facebook advertising to gather additional "*likes*" thus serving full awareness.

Influence associate Involved Viewers

Social media users tend to be tremendously involved. As a result of this, persons visit social networking sites many epochs per day and pay an excessive deal of your time on them. Ads on social networks square amount additional opportunity to be seen snapped and communal.

Target Precise Targets

Consumers on social media sites incline to give away an excessive deal of private info in their profiles. Businesses will use that info to focus on user's interest in specific products or criteria, together with their topographical position, individual benefits, gender, and age. On Facebook, promoters will even have their ads placed on pages that reference explicit keywords.

Growth responsiveness and customers faithfulness

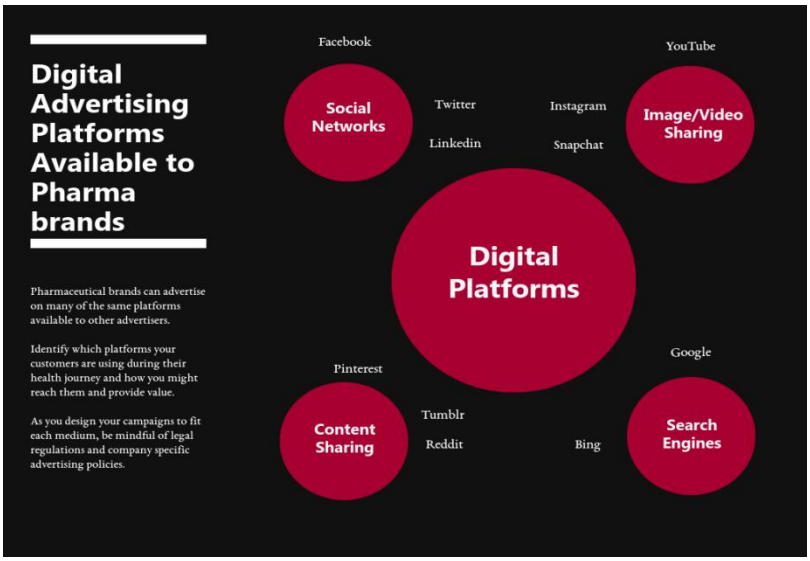
When you generate a Facebook page for your professional and post into the market through Facebook advertising, it accumulates additional "*likes*" and also increases whole consciousness. Facebook fan pages simplify to outspread client loyalty, and the outcome is that the company can employ it to move directly along with your customers, that retains the business at the forefront of their minds and sources you to appear more approachable.

Test Ambition Elevations

Marketing on social networks is cost-efficient since you target those who have an interest in your merchandise and services. You will solely be charged when somebody clicks on your ad, and you're individually paying for clicks from those who are purchasing the product. It's additionally unbelievably low-cost to run tests and confirm that ads work best and that ads want tweaking; thus, you don't discard your publicity greenbacks on campaigns that aren't playing awake.

Increase Flexibility

The span of the ad images that Facebook and substitute social networks document square portion stretched than those accessible by Google Ad Words. You've got the choice to use pictures in your ads that helps to attract in additional consideration to them. You're furthermore able to stop and begin campaigns at your own will. This method is next to not possible to try and do with typical advertising campaigns in Figure 1.



Source: Ethoseo-SEO. PPC. Social.Web Analytics.

Figure 1
WEB ANALYTICS

Type	Definition	Example	Health-related examples (not endorsed or recommended)
Blog	Online journal or diary, where authors share stories, opinions, or views	http://www.blogger.com http://www.tumblr.com http://www.wordpress.org	http://www.health.org.uk/blog http://healthylivingblogs.com/location/uk/ http://www.patient.co.uk/blogs http://sharing.mayoclinic.org/
Microblog	Similar to a blog, but posts are much shorter and more contemporary	Twitter.com Tumblr.com http://www.foursquare.com	Almost all health organizations, bodies, and leaders will have a Twitter account http://www.moodmill.com http://www.googlehealth.com
Social networks	Online communities that share interests or activities, through profiles which link together	http://www.facebook.com http://www.google plus http://www.myspace.com	http://www.patientslikeme.com/
Photo/video/file sharing sites	Website that allows sharing of digital media	http://www.youtube.com http://www.flickr.com	Many organizations have specific channels on YouTube http://www.youtube.com/user/PatientUK http://www.youtube.com/user/kingsfund http://www.youtube.com/user/NHSChoices
Instant messaging/ contacts	Website or app that allows easy instant calls/messages/photographs and location sharing to groups or individuals	http://www.whatsapp.com http://www.vibee.com http://www.kik.com http://www.snapchat.com	
Wiki	Website that allows user created and developed web pages on their chosen topic. Allows connectivity with a group	Wikipedia	Many organizations will have Wikipedia pages http://www.medikidz.com/medipedia/

Source : http://www.thesocialskinny.com and http://www.blog.digitalinsights.in

Figure 2
SOCIAL MEDIA

Figure 2, describes the types of social media, definition of social media sites, examples, and some of the available health-related social media sites.

Millennial Consumer Behaviour and Presence in Social media

Indian, the USA, and the UK Millennial-aged 18-35 contributing nearly thirty-four percent, forty-percent and thirty-five percent of the inhabitants have obsessed e-retail industry's development through their growing web usage. Millennia's' increasing usage of the web for searching has driven the growth of online retail. E-retail is anticipated to surge from three percent of total Indian, the US and UK retail market in 2017 to seven percent by 2021,*" same the report* "*Trend-setting Millennial: Redefining the buyer story*."

Born between the Eighties and 2000, the Indian Millennial, conjointly called 'GenY,' are prime wage earners, accounting for nearly seventy-one percent of the whole home financial gain during a majority of Indian homes, as found by the study conducted in conjunction with the Retailers Association of Asian country (RAI). With a median age of its population as twenty-eight years, the Asian country is one among the youngest significant economies globally. The Millennial is driving the expansion in shopper markets.

Multiple reports highlight India's Gen-Y look employing a mixture of on-line and offline modes, where they compare costs associated with purchasing and see reviews on-line although they look in an offline store to buy the same. "*Social media platforms and on-line reviews form a crucial part of the Millennial searching journey because it influences their decision-making journey*." Millennial are found to spend almost seventeen hours of per week on online activities like net browsing, film streaming, social media, and online banking.

The convenience of shopping for anyplace and anytime, discounts, and access to product not on the market offline were mentioned as a number of the most important reasons for India's Gen-Y taking to on-line searching.

Understanding the Millennial consumers' perception towards on-line buying behavior of medicine, i.e., e-pharmacy by the inspiration of social media sites. The persistence of this research was to conclude the relationship and impact amongst the variables which includes i.e. Trust, perceived usefulness, Purchase intention, and external factors (independent construct) on online buying behaviour of e-pharmacy through social media influence (dependent variable) across the developed and emerging countries i.e. United States, United Kingdom and India. Further, we also developed the predictive model to forecast whether the consumers shop or do not shop from e-pharmacy in Figure 3.

Social Media Statistics

The following data represent the users checking social media sites in a day to day life.

Example of social media	Data on activity
Facebook	1.15 billion users
	23% of Facebook users check their accounts more than five times a day
	75% of possible engagement with a post gets it in the first 5 hours
	25% of users do not use privacy settings
Twitter	Over 500 million users with 288 million active monthly
	60% of users access it from mobile devices
	400 million tweets per day
	Fastest growing age demographic is aged 55–64 years
Google Plus	Over 500 million users in the platform and 67% male
	60% users log in everyday
LinkedIn	240 million users with 1.5 million groups
	3 million businesses have pages
	50% of users have a degree
YouTube	700 YouTube video links shared on Twitter every minute
	500 years' worth of YouTube videos watched on Facebook every day

Source: Copyright © 2013. Digital Insights. Reproduced from Digital Insights. Social media facts, figures and statistics 2013.

Figure 3
DIGITAL INSIGHTS. REPRODUCED FROM DIGITAL INSIGHTS

LITERATURE REVIEW

The emerging use of mobile phones helps in increasing the penetration of healthcare environments via various mobile healthcare information systems. Perceived usefulness has a substantial impact on behavioral intention to use such systems (Mohammed et al. 2013). Health information technology has a vast potential in terms of efficiency, quality, safety, reduced cost, but there are specific barriers in developing countries in terms of awareness, availability, infrastructure, etc. These factors impact the user acceptance of this technology in developing countries (Rahman et al. 2014).

Social media, in no small extent, impacts the decision-making process for the purchase of complex products where individual seek information about the brand, associated risks, and high cost of acquisition. Social media takes a significant part in influencing customer satisfaction at various stages of product purchase cycle (Voramontri et al., 2018). People share their experiences on social media by sharing their experiences, information related purchase, advice, reviews, issues, and problems which helps the other consumers in making purchase decisions.

Posting such information has a positive impact on creating awareness among peer groups (Patarawadee, 2013).

Nowadays, many companies widely use social media to increase awareness of the brand by creating pages on social media platforms and engaging with consumers. Such Extensive use of social media has influenced the behavioural changes among consumers to a large extent (Elisabeta et al., 2014). Social media plays a significant role in the lives of Millennial as they spend most of their time on the internet. Hence it is essential to analyze the buying behavior of Millennial before choosing the type of advertising (Sharon et al., 2013).

Millennial is a highly attractive part of the consumer segment, where they are well versed the use of technologies. They tend to spend their income quickly and profoundly dependent on the reviews of peers and their friends. Hence it is essential to segment the market based on the behavior of Millennial (Moreno et al., 2017). Generation of Millennial is widely categorized based on the characteristics 3C such as creativity, confidence, and connected. It was also observed that the unique aspect of one generation in family differs significantly from other age in the same family. This behavior differs in terms of awareness, buying patterns, decision-making process, and post-purchase evaluation. Millennial family is more inclined towards digital platforms, and they participate actively in connecting with open people while making a purchase decision and provide valuable feedback post-purchase (Ayuningtyas et al., 2018).

The explosive development of the internet, along with the emergence of disruptive technologies, has led to the generation of new commercial opportunities. In developing countries, the Internet is mostly being used for the collection of information and purchase of healthcare products. Consumers do give importance to the advantage of doing the online transaction and analyze the risk associated with the acquisition of healthcare products online (Gurau, 2005). With the evolution of E-commerce, there is an increase in the number of transaction and the sharing of information among various individuals and enterprises. E-commerce has provided a more efficient mode of operation to pharmaceutical companies and also helped them to achieve a competitive advantage in the market (Kanungo, 2007).

Advancement in social media has led to an increase in the opportunity to consumers while engaging in social interaction over various platforms. Consumers use social media to share the content with other users, find reviews and ratings of people about their purchase, post their experience related to purchasing. There are various factors in technology acceptance model such as Trust, Purchase intention, Perceived Usefulness, and Social Media activity which impact the buying behavior of consumers. Social media has increased the interaction, which led to an increase in the level of trust and intention to buy (Hajli, 2014).

Various business-to-consumer activities have created the need for active participation of people in E-commerce. Use of technology acceptance model helps in predicting the online shopping activity, which includes consumer's intention to purchase and actual purchases. The task-technology fit model helps in analyzing not only the individual's belief about perceived ease of use and perceived usefulness but also helps in identifying the activities which meet their needs and abilities of the individual (Klopping, 2004).

Some researchers, like Rodgers & Harris (2003), Brown et al. (2003), Van Slyke et al. (2002); Teo (2001), have recognized that there is the noteworthy influence of demographics for making online shopping preferences. Others, however, like Ulbrich et al. (2011), Alreck & Settle (2002), Stafford et al. (2004); Hernandez, et al. (2011) have failed to find a significant gender differential. Others like Lynch & Beck (2001); Dellner (2007) have emphasized that usage of

social media sites; glancing and buying designs differ between countries since of differing cultural beliefs, attitudes, and perceptions.

Hypothesis Development and Conceptual Model

The Technology Acceptance Model (Davis, 1989) is the Model used many researchers as per innovative technologies are developing (Horton et al., 2001; Venkatesh et al., 2007). TAM is unique the most operative and broadly adopted information systems theoretical frameworks (Holden & Karsh, 2010; Lee, Kozar, & Larsen, 2003; Li, 2010).
The research model is shown in Figure 4.

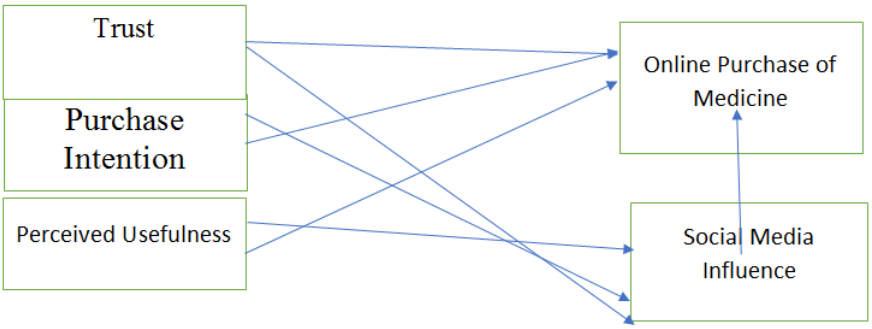


Figure 4
TECHNOLOGY ACCEPTANCE MODEL TO STUDY THE IMPACT OF SOCIAL MEDIA ON BUYING BEHAVIOUR OF MILLENNIAL FOR ONLINE MEDICINE PURCHASE

Table 1
DESCRIPTION OF THE CONSTRUCTS

Construct	Definition	Reference
Trust	Is a composite public sensation that redirects technological, behavioral, social, psychological, as well as organizational features of interactions among various human and non-human agents?	Lee (1998)
Social Influence	The degree to which an individual considers as inspiration significant the detail those others trusts he or she must use the innovative system.	Venkatesh et al. (2003)
Perceived Usefulness	The grade to which individual trusts that were using IT (i.e., MHCIS) system would recover his/her and job presentation.	Davis et al. (1989) Davis & Cosenza (1993) and Davis (1989)
Purchase intention	The grade to which a healthcare employer's inspirations aim to use the MHCIS, and this is our goals, aspirations, and predictable reactions to the approach purpose.	Ajzen & Fishbein (1975 and 1979) and Davis & Cosenza (1993)
Consumer's Demographic	Gender, age, education, and monthly income	

METHODOLOGY

The quantitative data regarding consumer's perception of e-pharmacy across the country, i.e., US, UK, and India, were used as a methodology. The research questions highlighted in this study is as mentioned in Table 1.

Q_1: *Is there any relationship occur among trust and online purchase behaviour of medicine by using social media influence?*

Q_2: *Is there any amount does an association occur between perceived usefulness and online purchase behaviour of medicine by using social media influence?*

Q_3: *Is there any amount does a relationship occur between purchase intention and online purchase behaviour of medicine by using social media influence?*

Q_4 : *To predict the consumer buying behaviour towards e-pharmacy?*

Instrument

The study adjusted procedures of existing instruments and items used for each construct are discussed in Table 2.

Table 2
ITEMS USED IN THE STUDY INSTRUMENT

Construct	Articles Adapted by Lee (1998); Venkatesh et al. (2003); Davis et al. (1989); Davis & Cosenza (1993); Ajzen & Fishbein (1975 and 1979); Davis & Cosenza (1993)
Trust	1. I am likely to provide information to social media sites to better serve my needs related to purchase of medicines online. 2. I am likely to use Credit/Debit card to purchase medicines online through social media sites 3. On reading positive comments on social media, I am motivated to buy drugs online 4. I changed my purchase preference of online medicine platform based on relevant information obtained from social media sites
Social Influence	1. Information on social media are reliable to purchase medicines online 2. I do not doubt the honesty of my favorite social media site concerning the purchase of drugs online 3. Based on my experience with social media sites, I know they care about buyer's need 4. I believe privacy issues are taken care of by my favorite social media sites 5. I think my favorite social media sites maintain the integrity of user data.
Perceived Usefulness	1. I believe searching and buying medicines online through social media sites are useful. 2. I believe searching and buying online medicines through social media sites makes my life easier 3. My preferred social media site enables me to search and purchase online drugs faster 4. My favorite social media sites keep me updated about online medicine platforms 5. My favorite social media sites address my concerns/doubts and provide quick response to my queries
Purchase intention	1. I use online forums & communities to acquire information about medicines available online for purchase 2. I am receptive to promotional messages available on my favorite social media sites 3. I usually use people's ratings on social media about drugs available online 4. I often use people's reviews & recommendation on social media to purchase medicines online 5. I am proud to be part of the Social Media community 6. Social media sites broaden my understanding of the overall medicine platform

Hypothesis Development

Many empirical research have shown that trust is impacted by social media sites (Pavlou 2003; Wu & Chen 2005) and online purchase behavior (Ha & Stoel, 2009; Pavlou, 2003). Therefore, we propose the following.

H_{1a}: *There is a positive effect of trust on buying behavior to shop online.*

H_{1b}: *There is a positive effect of trust on social media influence.*

H_{1c}: *Social platform impact mediates the association between trust and online purchase behavior of medicine (e-pharmacy).*

Previous studies identified a strong association between Perceived Usefulness with social platform and online purchase behaviour (Davis, 1989). Base on this, we prepare the following:

H_{1d}: *There is a positive effect of Perceived usefulness on buying behavior to shop onli**ne.***

H_{1e}: *There is a positive effect of Perceived usefulness on social media influence.*

H_{1f}*: Social platform impact mediates the association between perceived usefulness and online purchase behavior of e-pharmacy.*

Previous studies identified a strong association between purchase behaviour with social media and online buying behaviour (Klopping, 2004):

H_{1g}*: There is a positive effect of Purchase intention on buying behavior to shop online.*

H_{1h}*: There is a positive effect of Purchase intention on social media influence.*

H_{1i}*: Social platform impact mediates the association between purchase buying behavior and online buying behavior of e-pharmacy.*

Social media is a strong platform that helps people to develop a network with others and learn various health related issues to make strong purchase decisions (Toney et al. 2015). Hence, we proposed the following hypothesis:

H_{1j}: There is a positive effect of social media influence on buying behavior to shop online.

Data Collection

The survey questionnaire was established after reviewing the literature and shared with target population i.e. Millennial. The research reinforced various clarifications developed by researchers and delivered contextual proof into the Millennial generation's behaviour's.

The review consist of structured questionnaire covered descriptive inquiries, five point Likert scale questions, and qualitative questions. Detailed surveys consist the demographics information about the consumers. Respondents were assured of confidentiality.

The data was collected in two ways ie. an online survey with WhatsApp messenger link and personal communications. It was shared with the respondents that they could be withdraw at any time by ending the browser, and they would not be traced in future. The data was recorded on Google form. To validate the model, a series of questionnaire concerning demographic profile, the amount of time spent on-line, retail sites viewed, product purchased, awareness of e-pharmacy stores, and their experience on it, were discussed. The previous studies confirms that the youngsters are very much comfortable with the technology and they spend maximum time on social networking sites in day to day life. This study had been carried out on university students (India, UK and USA) because samples drawn from students expedite comparability across cultures (Craig and Douglas 2005). Five-point Likert-type scales (1 = "*strongly disagree*," and 5

= "*strongly agree*") were created to record contributors' responses. We used the connivance sampling process for the collection of the data.

For this study, the researchers utilized a measurable analysis (survey). To developing the respondents' demographic and general characterstics, Statistical descriptive was used by using SPSS 20. Also, the model was tested by using AMOS.

A questionnaire was distributed and sent online to students registered in higher Management education at large universities in India, USA, and the UK. The data collected in between September 2020 to October 2020. We randomly designated four courses in which to manage the survey. The number of students enrolled in each course varied from 60 to 65 in India, in the US it's between 45 to 55, and in the UK the figure is 35 to 45. We obtained a total of 130 from India, 112 from US and 129 from the UK through the surveys administered in India, USA, and the UK, respectively. Out of these, 15 responses, 12 responses, and 17 responses from India, US and UK were missing on one or two constructs, so removed from our final data. The last data from India, US, and the UK are 115, 100, and 112; Table 3 presents the respondent's profiles on different parameters.

Table 3
RESPONDENT'S DEMOGRAPHICS

	India		USA		UK	
Variables	**Frequency**	**Percentage**	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Gender						
Male	61	53%	51	51%	50	45%
Female	54	47%	49	49%	62	55%
Age						
15-19 Years	40	35%	33	33%	37	33%
20-23 Years	38	33%	30	30%	35	31%
23+	37	32%	37	37%	40	36%
Education						
SSC/HSC	34	30%	35	35%	39	35%
Undergraduate	36	31%	29	29%	37	33%
Post Graduates	45	39%	36	36%	36	32%

Measurement Model Assessment

To tested the model, we conducted quite a lot of tests of convergent and discriminant validity (Chin, 1998; Fornell & Larcker,1981). The result presented in Table 4 includes Factor loading, Average variance extracted and critical reliability.

Table 4
ITEMS, CONSTRUCTS, AND MEASUREMENT MODELS

Construct	**Factor Loading**			**AVE**			**CR**		
Trust	**USA**	**UK**	**India**	**USA**	**UK**	**India**	**USA**	**UK**	**India**
I am likely to provide information to social media sites to better serve my needs related to purchase of medicines online.	0.77	0.60	0.69						
I am likely to use Credit/Debit card to purchase medicines online through social media sites.	0.68	0.71	0.67	0.79	0.8	0.8	0.77	0.81	0.80
On reading positive comments on social media, I am motivated to purchase medicines online.	0.76	0.74	0.75						

I changed my purchase preference of online medicine platform based on relevant information obtained from social media sites	0.89	0.80	0.75						
Perceived Usefulness									
I believe searching and buying medicines Online through social media sites are useful.	0.80	0.78	0.77						
I believe searching and buying online medicines through social media sites makes my life easier	0.89	0.81	0.80	0.92	0.8	0.7	0.83	0.80	0.89
My preferred social media site enables me to Search and buy online medicines faster	0.87	0.73	0.78						
My preferred social media sites keep I updated about online medicine platforms	0.79	0.76	0.81						
My preferred social media sites address my concerns/doubts and provide quick response to my queries	0.89	0.85	0.85						
Purchase Intention									
I use online forums & communities to acquire information about medicines available online for purchase	0.76	0.72	0.74						
I am receptive to promotional messages Available on my favourite social media sites	0.96	0.86	0.73						
I usually use people's ratings on social Media about medicines available online	0.97	0.87	0.88	0.83	0.7	0.7	0.85	0.87	0.85
I usually use people's reviews & recommendation on social media to purchase medicines online	0.91	0.79	0.87						
I am proud to be the part of Social Media community	0.89	0.84	0.88						
Social media sites broaden my Understanding of the overall medicine platform	0.87	0.76	0.86						
Social Media Influence									
Information on social media are reliable to purchase medicines online	0.79	0.73	0.79						
I do not doubt the honesty of my favorite social media site with respect to purchase medicines online	0.69	085	0.67						
Based on my experience with social media sites, I know they care about buyer's need	0.81	0.80	0.80	0.72	0.8	0.8	0.71	0.90	0.88
I believe privacy issues are taken care of by my favorite social media sites	0.74	0.76	0.76						
I believe my favorite social media sites maintains the integrity of user data.	0.69	0.70	0.71						

The above table represented the factor loadings of the entire construct. And, we used average variance extracted (AVE) and composite reliability (CR), to construct reliability. All AVE scores (ranging from 0.72 to .92, 0.76 to 0.82 and 0.75 to 0.87 for the USA, UK, and India, respectively) exceeded the recommended value of .50 (Fornell and Larcker 1981). Similarly, the CR (ranging from 0.71 to 0.85, 0.80 to 0.90 and 0.80 to 0.89 for the USA, UK, and India respectively) exceeded the recommended value used as a cut off of .70 (Straub et al. 2004).

The results of the model fit index presented that the chi-square and other fit indices for the USA sample is 3.41 and comparative fit index [CFI] = 0.89, goodness-of-fit index [GFI] =0.968, root mean square error of approximation [RMSEA] = 0.01, for UK sample is 2.11 and comparative fit index [CFI] = 0.98, goodness-of-fit index [GFI] = 0.900, root mean square error of approximation [RMSEA] = 0.06 and for the India sample is 1.59, CFI = .93, GFI = 0.899 and RMSEA = 0.013 are sufficient according to the guidelines, provided by Hair et. al. (1998). This indicates that the model fit to the data for USA, UK and India samples.

RESULTS AND DISCUSSION

Path Analysis and Hypothesis Testing

Direct Effect

Direct Effects of USA sample, the results indicate that social media influence is not related to perceived intention (b = -0.044, p-value =0.742). Thus, H1h is not supported, whereas social media influence has strong direct (positive) impact on trust (b= 0.769, p-value=0.00) , perceived usefulness (b= 0.329, p-value = 0.00) and demographics (b = 0.011, p-value =0.011) thus H1d, H1l and H1e are supported (Table 5). However, the online buying behaviour has strong direct (positive) impact on trust (b= 0.058, p-value = 0.00), perceived intention (b= 0.067, p-value = 0.00), perceived usefulness (b= 0.070, p-value = 0.00) and demographics (0.129, p-value = 0.00) respectively.

The study reveals, that direct Effects of UK sample, the results indicate that social media influence is not related to perceived intention (b = 0.999, p-value =0.112). Thus, H1h is not supported.

Table 5
PATH ANALYSIS RESULTS FOR A DIRECT RELATIONSHIP

Dependent variables	Independent Variables	Hypothesis	USA		UK		India	
			Standardized coefficients	p-value	Standardized coefficients	p-value	Standardized coefficients	p-value
Social media Influence R^2 (US, UK & India) = 0.63, 0.56 & 0.74	Trust	H1d	0.769	0.00**	0.833	0.00**	0.635	0.00**
	Perceived Usefulness	H1e	0.329	0.00**	0.112	0.00**	0.418	0.00**
	Perceived Intention	H1h	-0.044	0.742	0.999	0.112	-0.015	0.748
	Demographics	H1l	0.011	0.011**	0.061	0.00**	-0.972	0.00**
Online Buying Behaviour R^2 (US, UK & India) = 0.73, 0.66 & 0.62	Trust	H1a	0.058	0.00**	0.061	0.00**	0.060	0.00**
	Perceived Usefulness	H1b	0.067	0.00**	0.044	0.00**	0.059	0.00**
	Perceived Intention	H1g	0.070	0.00**	0.055	0.00**	0.073	0.00**
	Demographics	H1g	0.129	0.00**	0.160	0.00**	0.068	0.00**

**statistically significant at 0.05 and 0.01 and 0.10

Whereas, social media influence has strong direct (positive) impact on trust (b= 0.833, p-value = 0.00), perceived usefulness (b=0.112, p-value = 0.00) and demographics (b=0.061, p-value =0.011) thus H1d,H1l and H1e are supported Table 5. It may also be observed that the online buying behaviour has strong direct (positive) impact on trust (b= 0.061, p-value = 0.00), perceived intention (b= 0.055, p-value = 0.00), perceived usefulness (b= 0.044, p-value = 0.00) and demographics (0.160, p-value = 0.00) respectively.

As observed on the table above, the Direct Effects of India sample, the results indicate that social media influence is not related to perceived intention (b = -0.015, p-value = 0.748). Thus, H1h is not supported. It can also be seen that social media influence has strong direct (positive) impact on trust (b=0.635, p-value=0.00).

It can be inferred from the table above, the perceived usefulness (b=0.418, p-value=0.00) and demographics (b = -0.972, p-value=0.011) thus H1d,H1l and H1e are supported.
However, it may be observed that the online buying behaviour has strong direct (positive) impact on trust (b= 0.060, p-value=0.00).

The perceived intention (b= 0.059, p-value = 0.00), perceived usefulness (b= 0.0734, p-value = 0.00) and demographics (0.068, p-value = 0.00) respectively. The most influencing buying behaiviour in all the fields, here in the table we can observe that the trust on social media influencing is significant and positive so we can conclude trust is the most influencing parameters on e-pharmacy. Social media also has a great impact as these e-pharmacy stores promot their companies by either posting their advertisements on social-media platforms like-Facebook,Twitter, Linkedin etc. The hypothesis (H1j) established the positive relationship between purchase intention on social media influence, and, in turn, buying behaviour to online. This reflects that opinions of individual whom buyers contemplate influential or imperative in their peer groups or society does plays a important role of an e-pharmacy services. Past study done by Hajli 2014, also represents that social media influence an users opinion related to adoption of a new technology.

Indirect Effect

The study reveals, that when we test the indirect effects for the USA sample, The R2 of online buying behavior increases from 0.73 to 0.82. This indicates that social media contributes significantly toward online buying behavior of medicine (e-pharmacy).
Now to test H0c, we observed that the trust is having a positive impact on online buying behavior by direct effect, but there is an insignificant relationship between trust and online buying behavior by the mediating result of social media influence.

However, for H1f we observed that perceived usefulness is having the positive impact on online buying behavior from the direct effect; there is also a significant relationship between perceived value and online buying behavior by the mediating result of social media influence.

For H1i, we observed that perceived intention is having the insignificant impact on online buying behavior from the direct effect, but there is a significant relationship between perceived intention and online buying behavior by the mediating result of social media influence. Finally, for H1m, we observed that demographics are having the positive impact on online buying behavior from the direct effect, there is also a significant relationship between demographics and online buying behavior by the mediating effect of social media influence Table 6. Findings indicate that the indirect effects for the UK sample, The R^2 of online buying behavior increases from .66 to .76, which indicates that social media contributes significantly toward online buying behavior of medicine (e-pharmacy).

Table 6
PATH ANALYSIS RESULTS FOR IN-DIRECT OR MEDIATING EFFECT RELATIONSHIP

Independent Variables →	**Trust**			**Perceived Usefulness**			**Perceived Intention**			**Demographics**		
Mediating Variable ↓	USA	UK	India	USA	UK	India	USA	UK	India	USA	UK	India
Social Media Influence → online Buying Behaviour. R^2 (USA, UK & India) = 0.82, 0.76 & 0.71	0.788 (p-value = 0.145)	0.112 (p-value = 0.00**)	0.765 (p-value = 0.344)	0.233 (p-value = 0.00**)	0.112 (p-value = 0.00**)	0.678 (p= 0.000**)	0.034 (p-value = 0.011**)	0.988 (p-value = 0.00**)	0.988 (p = 0.001**)	0.111 p-value = 0.00**)	0.566 (p-value = 0.00**)	0.767 (p= 0.00**)
** statistically significant at 0.05 and 0.01 and 0.10												

Now, to test H1c, we observed that trust is having the positive impact on online buying behavior from the direct effect, but there is also a significant relationship between trust and online buying behavior by the mediating result of social media influence.

However, for H1f we observed that perceived usefulness is having the positive impact on online buying behavior from the direct effect; there is also a significant relationship between perceived value and online buying behavior by the mediating result of social media influence.
For H1i, we observed that perceived intention is having the significant impact on online buying behavior from the direct effect, but there is also a meaningful relationship between perceived intention and online buying behavior by the mediating result of social media influence.
Finally, it may be observed that for H1m, the demographics are having the positive impact on online buying behavior from the direct effect, there is also a significant relationship between demographics and online buying behavior by the mediating result of social media influence. (see Table 6)

Finally, when we tested the indirect effect for the India sample, The R^2 of online buying behavior increase from 0.62 to 0.71, which indicates that social media contributes significantly towards online buying behavior of medicine (e-pharmacy).
Now to test H0c, we observed that trust is having a positive impact on online buying behavior from the direct effect, but there is an insignificant relationship between trust and online buying behavior by the mediating result of social media influence. However, for H0f it was observed that perceived usefulness is having the positive impact on online buying behavior from the direct effect, there is also a significant relationship between perceived value and online buying behavior by the mediating result of social media influence.

For H1i, it observed that perceived intention is having a significant impact on online buying behavior from the direct effect, but there is meaningful relationship between perceived intention and online buying behavior by the mediating effect of social media influence. Finally, for H1m, we observed that demographics are having a positive impact on online buying behavior from the direct effect, there is also a significant relationship between demographics and online buying behavior by the mediating effect of social media influence Table 6.

Predictive Modelling

In big data modelling the researcher developed the three predictive model to predict whether the Millennial will get influenced or not influenced with the social media towards e-

pharmacy in USA, UK and India. The logistic regression is used to identify the influence of social media on buying behaviour towards e-pharmacy with respect to trust, purchase intention and perceived usefulness. The following model used for the study is used:

$$y_{iSocial\ media} = \alpha + \sum \beta_i\,(x_i) + \varepsilon$$

Where, Yi defines whether Millennial will get influenced/not influence with the social media towards e-pharmacy, whereas $x_{i's}$ are all the independent variables i.e. trust, perceived usefulness and purchase intention and ε_i is the error term. The logistic regression results for the influence/ not influence with the social media towards e-pharmacy are presented in Table 7 below.

Table 7
VARIABLES IN THE EQUATION

USA						
	B	**S.E.**	**Wald**	**df**	**Sig.**	**Exp(B)**
Trust	0.422	0.171	2.055	1	0.000	
Perceived Usefulness	-0.156	0.155	2.663	1	0.002	
Purchase Intention	0.134	0.154	6.103	1	0.466	
UK						
	B	S.E.	Wald	df	Sig.	Exp(B)
Trust	0.566	0.112	2.564	1	0.001	
Perceived Usefulness	0.145	0.145	2.145	1	0.000	
Purchase Intention	0.781	0.113	3.125	1	0.256	
India						
	B	S.E.	Wald	df	Sig.	Exp(B)
Trust	0.487	0.112	3.254	1	0.001	
Perceived Usefulness	-0.598	0.456	2.145	1	0.000	
Purchase Intention	0.145	0.789	2.897	1	0.569	

From the above Table 7, trust and perceived usefulness are significant (significance of Wald < 0.05) but the purchase intention is not significant. So, there will be no impact of purchase intention consumer buying behaviour towards e- Pharmacy through social media.

The B coefficient for trust is 0.422 > 0, thus consumers have trust so they influence with social media towards e-pharmacy whereas the coefficient for perceived usefulness is -0.156 < 0, so the consumers does not have any inclination on perceived usefulness but still they will get influence with social media towards e-pharmacy for USA sample.

The B coefficients for trust, perceived usefulness and purchase intention are 0.566>0, 0.145>0 and 0.781>0 thus consumers have trust, inclination towards perceived usefulness /purchase intention so they will get influence with social media towards e-pharmacy for UK sample.

The B coefficient for trust is 0.487>0, thus consumers have trust so they influence with social media towards e-pharmacy whereas the coefficient for perceived usefulness is -0.598 < 0,

so the consumers does not have any inclination on perceived usefulness but still they will get influence with social media towards e-pharmacy for India. Further, we will represent the predicted classification Table 8.

Table 8
CLASSIFICATION TABLE

Classification Matrix - USA		
Observed ↓	Predicted	
	Class 1 = Influence (1)	Class 2 = Not Influence (0)
Class 1 = Influence (1)	65 (True Positive TP)	10 (False negative FN)
Class 2 = Not Influence (0)	13 (False Positive FP)	27 (True Negative TN)
Classification Matrix -UK		
Observed ↓	Predicted	
	Class 1 = Influence (1)	Class 2 = Not Influence (0)
Class 1 = Influence (1)	63 (True Positive TP)	7 (False negative FN)
Class 2 = Not Influence (0)	15 (False Positive FP)	15 (True Negative TN)
Classification Matrix – India		
Observed ↓	Predicted	
	Class 1 = Influence (1)	Class 2 = Not Influence (0)
Class 1 = Influence (1)	54 (True Positive TP)	12 (False negative FN)
Class 2 = Not Influence (0)	36 (False Positive FP)	20 (True Negative TN)

From the classification table 8 it can be inferred that out of 75 consumers, 10 consumers are classified as they will not influenced with social media towards e-pharmacy in near future whereas 27 consumers are classified as they will get influenced with social media towards e-pharmacy in near future for USA sample. For the UK sample, 7 consumers are classified as they will not influenced with social media towards e-pharmacy in near future whereas 15 consumers are classified as they will get influenced with social media towards e-pharmacy in near future, finally from the India sample 12 consumers are classified as they will not influenced with social media towards e-pharmacy in near future whereas 36 consumers are classified as they will get influenced with social media towards e-pharmacy in near future.

Now, we will calculate the sensitivity and specificity percentages for USA sample:

$$\text{Sensitivity (recall rate)} = \left(\frac{TP}{TP+FN}\right) = \left(\frac{65}{65+10}\right) = 86\%$$

From the sensitivity, we can say that 86% are the chances that consumers are currently influenced with social media towards e-pharmacy will also get influenced with social media towards e-pharmacy.

$$\text{Specificity} = \left(\frac{FP}{FP+TN}\right) = \left(\frac{13}{13+27}\right) = 52.9\ \%$$

From the sensitivity, we can say that 53% are the chances that consumers are not currently influenced with social media towards e-pharmacy will also not get influenced with social media towards e-pharmacy.

So, our predictive model accuracy as follows:

$$\text{Model Accuracy} = \left(\frac{TP+TN}{TP+FN+FP+TN}\right) = \left(\frac{65+27}{65+10+21+19}\right) = 73.04\%.$$

So, the model accuracy or predictive accuracy of the model developed by the researcher is 73% which is adequate to adopt the developed model for prediction for USA sample.
Now, we will calculate the sensitivity and specificity percentages for UK sample:

$$\text{Sensitivity (recall rate)} = \left(\frac{TP}{TP+FN}\right) = \left(\frac{63}{63+7}\right) = 90\%$$

From the sensitivity, we can say that 90% are the chances that consumers are currently influenced with social media towards e-pharmacy will also get influenced with social media towards e-pharmacy.

$$\text{Specificity} = \left(\frac{FP}{FP+TN}\right) = \left(\frac{15}{15+15}\right) = 50\ \%$$

From the sensitivity, we can say that 50% are the chances that consumers are not currently influenced with social media towards e-pharmacy will also not get influenced with social media towards e-pharmacy.

So, our predictive model accuracy as follows:

$$\text{Model Accuracy} = \left(\frac{TP+TN}{TP+FN+FP+TN}\right) = \left(\frac{63+15}{63+7+15+15}\right) = 75\%.$$

So, the model accuracy or predictive accuracy of the model developed by the researcher is 75% which is adequate to adopt the developed model for prediction for UK sample.

Now, we will calculate the sensitivity and specificity percentages for India sample:

$$\text{Sensitivity (recall rate)} = \left(\frac{TP}{TP+FN}\right) = \left(\frac{54}{54+12}\right) = 81\%$$

From the sensitivity, we can say that 81% are the chances that consumers are currently influenced with social media towards e-pharmacy will also get influenced with social media towards e-pharmacy.

$$\text{Specificity} = \left(\frac{FP}{FP+TN}\right) = \left(\frac{36}{36+20}\right) = 64\ \%$$

From the sensitivity, we can say that 64% are the chances that consumers are not currently influenced with social media towards e-pharmacy will also not get influenced with social media towards e-pharmacy.

So, our predictive model accuracy as follows:

$$\text{Model Accuracy} = \left(\frac{TP+TN}{TP+FN+FP+TN}\right) = \left(\frac{54+20}{54+12+36+20}\right) = 66.07\%.$$

So, the model accuracy or predictive accuracy of the model developed by the researcher is 66.07% which is adequate to adopt the developed model for prediction for India sample.

CONCLUSION

The objective of this research was to authenticate the classical technology application model (TAM) and test the extended TAM's suitability for the online buying behavior for

medicines (e-pharmacy) through social media influence for the developed and emerging Asian market. Our findings provide several valuable insights for the consumers to accept the e-pharmacy by using social media influence. E-retailers and managers fully understand the importance of social media influence in the process of introducing e-pharmacy; such firms should advertise their medicines and showcase the usage of medicines on different social media which can satisfy the consumers' needs in different countries. Our study provides that all the three factors trust, perceived usefulness and perceived intention are the important parameters to impact online buying behaviour of medicines i.e. e-pharmacy and which will become more influence consumers through social media (Davis & Venkatesh, 1996; Dillon & Morris, 1996; Drennan et al., 2005; Lee et al., 2003; Park et al., 2013).

As may be expected, we observed differences between USA, UK, and India concerning social media influence towards online buying behaviour of medicines. People with different countries and backgrounds considered information technology is more or less useful (Straub et al., 1997). Trust is the first step towards online buying behavior, so the trust is most impacted parameter towards online buying behavior. The trust is also influenced by the social media comments, blogs and feedback, etc. posted about the company or e-retailers. Irrespective of culture differences building trust is more important parameter and influenced by the social media in the UK context, but it shows that trust is not playing a significant role in USA and India context through social media, which also supports previous research into the importance of trust at different cultures (Pavlou & Chai 2002). Therefore, trust is more critical in an eccentric philosophy because it allows consumers to diminish the essential hazard to a satisfactory level (Lynch & Ariely, 2000).

Perceived usefulness, perceived intention, and demographics are the step forward towards online buying behavior through social media influence, so the perceived usefulness, perceived intention and demographics are influenced by the social media feedback posted across different cultures which impact online buying behavior of medicine (e-pharmacy). The influence of perceived usefulness on intention in previous studies have been varied, either with significant (Chen & Tan, 2004; Pavlou, 2003) or insignificant (Chen et al., 2002; Shan et al., 2005) influences on buying behavior.

Practical Implication for Theory and Practice

Findings of this research shows that Millennials are extremely active on numerous social media platforms and pursue information before making any purchase. It is identified that Millennials depend on facts shared on social media, peer group recommendation, review, and remarks of friends. This study attempts to make available insights on influence on aspects of technology acceptance model such as Trust, Perceived Usefulness, Purchase Intention, and Social media for online medicine purchase transversely the different cultures. From the analysis, we found that Millennials are awake of being drugs sold online but cautious to buy from online pharmacy sites due to lack of trust, unawareness about the benefits of purchasing online across the country. During the analysis, we found that trust is the most important parameters considered by the consumers from India and the UK, but the consumers from the USA the trust is found to be the insignificant factor. The perceived usefulness and purchase intention are the most impacted parameters for online buying behavior through social media influence across the countries. This research will open a massive opportunity for marketers to change the mind set of consumers regarding online buying behaviour. In the present research, we found the lack of awareness about the benefits of online pharmacy in Millennials which can be used by marketers

to design strategies for communication to target Millennials more effectively and design their promotional campaigns which can impact their trust and buying behavior in a positive way. Furthermore, to motivate the customers to buy the medicine online, the practitioners and e-retailers targeting should focus on formulating strategies that could change online customers' perceptions of control. They develop the website which will provide them the more information about the particular drug which can build confidence among the consumers to buy the medicines online.

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