

Role of Social Media in increasing Environmental issue Awareness

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ABSTRACT

This study aims to explore different motivating factors of social media encouraging users to adopt environmental friendly behavior. Social media is a powerful tool enabling users to entice themselves with entrainment and to widen the horizon of their knowledge by paying attention to information related contents. Study focuses on determining the usage level of social media sites, level of environmental concern and exploring the different factors of social media that bolster encouraging pro environmental behavior among users. Factor analysis and Percentage Analysis are used for data analysis and data is collected through structured questionnaires. Six factors are explored from 19 statements; Competitive Persuasive Power, Persuasive Power, Perceived Reliability, Ease of Accessibility, Perceived Trust, Promptness of Activism.

Keywords: Pro Environmental Behavior, Social Media, Environmental Concern.

INTRODUCTION:

Global community as well as every country is worried about the current state of environment degradation. This concern has led pressure to spread environmental awareness among people to get them aware about global warming and other natural hazards. Environmental concern gives rise to Earth Stewardship practices through which society as well as organizations are becoming committed to adopt sustainable practices (UNESCO, 1997). Spread of environmental knowledge and awareness of environmental issues requires certain tools of communication, offline or online. Social media tools are gaining importance in increasing environmental concern and environmental responsible behaviors in public. (Krätzig & Warren-Kretzschmar, 2014). Social media (e.g. Facebook, Twitter, whatsapp, instagram etc.) permit users to generate and exchange of user generated contents on different themes. Online space is provided to users for interaction by Social networking sites (SSNs). Thus social media can be used as an enabler to create awareness of environmental issues.

Pro Environmental Behavior:

In this era of potentially catastrophic global environmental change, inducing pro-environmental behaviors (PEBs) in individuals is one of the important challenges in the path to sustainability. Human behavior has a certain influence on environment. Pro-environmental behavior is exhibited by consumers when their activities have lesser impact on environment or their activities are beneficial to preserve environment. Pro-environmental behavior is a behavior which is judged in the context of society to contribute for creation of healthy environment. Equivalent terms for pro-environmental behaviors are –“Environmentally Responsible Behavior”, “Environment Preserving Behavior” etc. reducing energy consumption, using bikes instead of cars, adoption of recycle products etc are some of the examples of pro-environmental behavior.

Pro environmental behavior is defined as, “*Intentionally reducing the negative impact that an action can have on the environment*”. (Kollmuss, 2002).

Human connection to the environment leads to more understanding of environmental issues. Concern for environment and awareness of environmental issues influence society and it leads to identify different ways to resolves these environmental crisis by changing their behavioral actions. Research studies have examined

positive relationship between environmental awareness and pro-environmental behaviors. Attitudes are main predictors of exhibiting pro-environmental behaviors (Kaiser, Wolfing, & Fuhrer, 1999). Individuals' environmental attitudes are determined by beliefs and values hold by them towards environment.

Social media:

Social media had its inception since 1978 through the use of e-mail for communication and information share. Emergence of social media transforms consumers to be active creators of information rather than mere receivers of information (Shao, 2009). Changes in technology, lifestyles and education mode have lead to unprecedented growth in usage of networking sites. Social media is a powerful tool of content creation, sharing ideas, disseminating and expressing knowledge, opinions. Social media is not limited to sharing and communication of information, it has emerged as a platform of webcasting, gaming and blogging also. Social media provides space to users to participate in collaborative projects enabling them to create, add or edit web contents. Blogging on social sites provides information on recent events in informal way. Communities or groups interact with each other on this platform for information sharing. In short, social sites help individuals in socializing.

Social Media and Pro-Environmental Behaviors:

Promotion of environment friendly behaviors need communication on environment related issues but it encounters with certain problem like lack of significant awareness. To spread awareness regarding environmental issues and to promote environmental friendly/responsible behaviors, various tools can be used. Mass media has played a significant role towards this end. But now we can see a trend, in which communication uses non standard forms of addressing these issues. With the growth of internet services and applications, users become more prone to digital world. They are using web based applications for their personal as well as professional use and for entertainment too. Social media extensively influences users' attitudes, knowledge and perceptions. Social media embraces a group of online activities like blogging, chatting, gaming and instant messaging and even more of this (Boyd & Ellison, 2008). Different groups or communities are formed on social media platform. Environment friendly groups are actively harnessing the power of social media by using it to spread information and awareness on environment issues through environment protection fan pages, environment related posts, green blogging (<http://www.treehuggers.com>), <http://www.greenthinkers.com>) and through online videos. Electronic communication contributes to the efforts of groups in promoting environmental conservation and protection actions by users. Social media such as you tube, Facebook, instagram and twitter may prove beneficial to access users' mind set and to influence their attitude and perceptions.

Many users use social media to share real time videos or photos on variety of environmental issues such as illegal dumping, flowing of chemical spills in water ways; fires in forests and issues on endanger species. This results in awareness and arise attention among help groups and common people. Social media thus helps in inspiring environment activism with the help of messages such as quotations and videos, stories on responsible behaviors. Social media helps in providing momentum to spread awareness and knowledge on these issues.

REVIEW OF LITERATURE:

Alarming situation of the environment demands protection and preservation of natural resources. It is very necessary to adopt environment sustainability by human beings to participate in saving the planet and to save the natural flora and fauna. A change in thinking mindset can helps individuals to realize the concept of earth stewardship and this in turn will motivate them to do efforts for environment sustainability. Environmental awareness and environmental responsibility are two key elements for inducing sense of environmental sustainability in individuals. Awareness comes when an informed action leads to information or change. Environmental awareness focuses on knowledge of the environmental issues and environmental concerns and how to react to these problems in a positive way. Environmental awareness helps individuals to understand environmental issues and drive other individuals to participate in environmental sustainable activities (Gadenne, Kennedy, & McKeiver). Adoption of Environmental friendly behavior requires awareness and environment attitude about environment issues. Societal norms and values are crucial factors for consideration while devising strategies of creating and raising awareness of environment issues. Attitudes of the individuals and current environmental friendly behavior provides insights about how they perceive and practice environmental friendly activities when exposed to environmental awareness practices or initiatives. Exposure to environmental issues leads to some change in attitude and behavior but this exposure can brings desired improvement of environment awareness among individuals when information in awareness initiatives is presented appropriately (Yahya & N.

H. Hashim, 2011). Through education process environmental awareness can be imparted to public mindset and it helps in generating a change in their behavior (I. Thomas, 2004). If more people are becoming aware of environmental issues; more there are possibilities to initiate actions to preserve the environment. Disseminating awareness requires a medium of communication. Vast variety of communication medium is available to communities and organizations for communication. But as today's trend is of digital communication so traditional medium is overlooked and online medium starts gaining importance and acceptance.

In today's scenario social media networks are gaining popularity day by day as users joins virtual communities there. Social media is an attractive and efficient medium to fulfill and manage media consumption needs in a more specific way (C. Staff, 2011). Social networking has unprecedented increase both in developing and developed countries in recent times and transforms lifestyle, education style to online education and build tech savvy generation. Facebook, twitter, instagram and whatsapp etc.-the social media platforms are proved very effective and appropriate tools for interaction and communication among users and communities [10] (Zolkepli & Kamarulzaman, 2011). Effectiveness of social media tools is determined by different measuring and tracking tools like "share", "like", "comment" etc. provided with contents. Thus social media has the potential to reach wide swath of public and may act as an effective medium of encouraging and motivating users to develop environmental friendly attitudes and participate in environment friendly activities by seeing contents related with environment issues on social media platforms. For the purpose of making and organizing communities for climate change communication and education for spreading awareness on environment issues, social sciences research is taking initiatives to test the social media (Koteyko, Nerlich, & Hellsten, 2015), (Newell & Dale, 2015). Studies on social media explained users use different technologies because they have specific reasons and goals and they choose and use particular technology that they consider is efficient in meeting their specific goals. According to Uses and gratifications theory (U&G), users choose media selectively according to its potential to meet the desired goals. This theory is basically developed for traditional media but recent research studies expands it scope to social media platforms like Facebook and twitter (Katz, J.G., & Gurevitch, 1974).

Technologies for Pro-environmental Action Model (TPAM) describes that technologies (web and social media etc.) can be characterized for serving three functions; Informational- making available contents online, Relational- providing facility for making social connections in online groups, and experiential- encouraging active participation in online forums. According to TPAM model, these functions can be used to provide personal, contextual and social bases to encourage pro- environmental actions. Gradually social media is not limited to communication and for information sharing, others features like blogging, chatting, webcasting are also emerged as essential package of services provided by social media (Newell, R.; Dale, A. 2015)

Social media is now gaining more popularity not as mere entertainment tool but as an image builder too. "Being green" image can be promoted with the help of electronic communication. Thus Social media such as facebook, twitter and YouTube proves very beneficial tool to access users' mind for spreading environmental awareness. Many environmental organizations are also using social media platforms to spread awareness regarding environment issues. For example World Wildlife Fund (WWF) uses You Tube and facebook to aware users about their campaign initiatives to increase involvement of users to becoming aware and participating in these by doing actions like "share", "like" and "searching links" directly links to WWF and communicating directly with supporters. All these efforts of environmental groups demands certain change in behaviors. Perceived efficacy is factor that can determine future course of action of users. In response to environmental groups' efforts through social media perceived efficacy determine how will person interpret message's theme and how he can accomplish it through his/her actions (Bandura, 1995). Higher the level of perceived efficacy, greater the likelihood that person will responds to environmental messages positively and he will act in accordance with demanded behavior.

RESEARCH QUESTIONS:

This study focuses on exploring factors responsible for motivating users to adopt environmental friendly behavior by increasing their environmental issues' awareness using social media. Social media is a powerful entertainment tool and it helps users to interact on digital platform by serving them in informative ways. Besides entertainment, contents on different issues on this platform increases users' information level also. Now days, environment protection communities are using this media to spread environment issue information through videos, blogs, posts and tweets. Access to these contents helps in altering attitude of users up to some extent. Following research questions are investigated among users of social media.

RQ1: What is the usage level of social media services among users?

RQ2: What is the environment concern level of users of social media services?

RQ3: What are the different factors of social media assisting in promoting pro- environmental behavior?

RESEARCH METHODOLOGY:

Primary data is collected from 150 users of social media of region north India using non probability convenience sampling. Out of which 107 respondents are found valid for study. The sample consisted of 55 males and 52 females. Age group of target sample is 18-30. Respondents are selected from two universities of Punjab state i.e. Guru Nanak Dev University and Punjab Technical University. Descriptive analysis is performed to measure environmental concern and to find out usage level of social media sites. Three statements are used for measuring usage level of social media sites and four statements are used to measure environmental concern among respondents. Modifications are made in questionnaire by taking advice from experts and on the basis of pretest of observations from respondents (Mahapatra, 2013).

A self administered questionnaire is used to analyze the research questions, which means that there is no interviewer asking or guiding the respondents throughout the questions. Questionnaire is divided into three parts. First part consists of statements related to social media usage level of respondents. Second part is based on environmental concern of respondents. Items of environmental concern are measured on five point Likert scale where the respondents are asked to express their level of agreement or disagreement on a scale of 1 to 5, [1] =strongly agree, [2] = agree, [3]= neutral, [4]= disagree, [5]= strongly disagree.

Second part of the questionnaire is designed to explore the factors of social media applications that encourage eco friendly behavior in respondents. A set of 19, self generated statements are used for analysis purpose. All items are measured on five point Likert scale ranging from [1] = strongly disagree to [5] = strongly agree.

RESULTS AND DISCUSSION:

The analysis of Research Question 1(RQ1) indentified the usage level of social media services by users. Respondents are asked to write down social media sites that they used frequently. Analysis results show that 65 respondents use “you tube” frequently. 4 respondents use “twitter” and 100 respondents use “wtsapp” frequently. All respondents have facebook accounts and they use this service very frequently and 55 respondents use “instagram”.

Table 1 shows the results of analysis. To know how many hours a day user spends on social media site, simple count method is applied. Results reveal that 13 respondents spend 0-1 hours, 68 users spend 1-3 hours, and 20 users spend 3-6 hours and 6 users use social media sites for more than 6 hours.

Table 1: Social Media Usage Level

1. Which Social Media site do you use frequently?						
Social media site	You tube	Twitter	Facebook	wtsapp	instagram	If any other
Usage level	65	4	107	100	55	-----
2. How many hours a day do you check your Social Media?						
Hours	0-1	1-3	3-6	More than 6		
Usage hours count In terms of respondents	13	68	20	6		
3. You use Social Media for:						
↓ Agreement level Statements →	SD	D	N	A	SA	
1. I use it mostly to post information.	10 (9.3%)	15 (13.9%)	26 (24.1%)	52 (48.1%)	4 (3.7)	
2. I use it to see what others are posting.	1 (.9%)	11 (10.2%)	18 (16.7%)	62 (57.4%)	15 (13.9%)	
3. I use it to get information.	1 (.9%)	1 (.9%)	10 (9.3%)	69 (63.9%)	26 (24.1%)	

Percentage analysis is performed to know basic intent for surfing social media sites. Results show that 10 users out of 107 are of strongly disagree view that they are using social media to “post information”. Their percentage

is 9.3 %. 15 (13.95%) are disagree with this statement and 26 (24.1%) have no view point about this. 52(48.1%) and 4 (3.7%) users are using social media sites for posting information with “agree” and “strongly agree” agreement level. When users are asked to tell their agreement level if they are using social media for seeing what others are posting, 1 (.9%), 11 (10.2%) level of users refuse to agree with this statement with strongly disagree and disagree levels respectively.18 (16.7%) have no agreement level with this. 62 (57.4%) and 15 (13.9%) users accepts that they surf social media site to post information with “agree” and “strongly agree” levels respectively. Table 1 represents that 69 (63.9%) (Agree) and 26 (24.1%) (Strongly agree) users agreed that they use social media site for getting information.

Analysis of RQ2 gives results as follows:

To measure environmental concern of users, descriptive analysis is performed on data. Results I table 2 shows that respondents are concerned about the environment as mean of all the items of scale are greater than 3 which is a mid point for agreement level. Highest mean score (4.11) of the item “recycled products should be used” followed by mean agreement level (4.08) of the item “environment is for us and future generations, thus must be preserved”.

Table 2: Level of Environmental Concern

Sr. no.	Statements	Mean	s.d.	Variance
1.	Environment is for us and future generations, thus must be maintained and preserved.	4.08	.741	.549
2	Natural resources are scarce so must be used wisely.	3.99	.770	.594
3	I get annoyed when someone contaminates the environment.	3.84	.646	.418
4	Recycled products must be used.	4.11	.667	.459

Scale item “Natural resources are scarce so must be used wisely” has mean score 3.99 which is approximately approaches to 4, implies that users shows greater level of agreement with this statement. Users’ agreement level mean with item “I get annoyed when someone contaminates environment” is 3.84 which also greater than midpoint (neutral) level. Variances of all items show small variations of items around mean. Thus overall respondents have general level of concern for environment.

Exploratory factor analysis

Exploratory factor analysis is performed on data to analyze RQ3 is carried out by using Statistical package for Social Sciences (SPSS). For this study KMO result value is **.716** (table 3) which is a measure of estimating the internal consistency of items in a scale. Cronbach Apha’s value shows reliable consistency in the items. Bartlett’s test of sphericity is significant at $p=.000$ which implies that data sample is appropriate for study.

Table 3: Reliability Statistics

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.716	
Bartlett's Test of Sphericity	Approx. Chi-Square	585.725
	Df	171
	Sig.	.000

Exploratory factors analysis is a method of data reduction and it is performed on 19 items to extract factors affecting awareness level of environmental issues and promoting pro-environmental behavior. As indicated in table 3 that KMO of analysis result is .716 which is more than threshold value 0.6 (Kaiser H. , 1974) that implies sample size of data is sufficient and appropriate for factor analysis. Bartlett’s test of sphericity value indicates that correlation matrix has significant correlation among variables (Bartlett, 1954). In this analysis result is significant “.000” ($p>.05$) that supports factorability of the correlation matrix.

Table 4: Communilaties

Sr. no.	Items	Extraction
¹ V1	I find social media sites as reliable resource of information for environmental issues.	.566
V2	Information related with environmental issues on the social media sites is authentic and appropriate.	.735
V3	I find social networking sites as a valid source of information on different environmental issues.	.670
V4	I find it easy to use social media sites for getting information on climate changes.	.706
V5	It is very easy for me to explore social media sites to get aware about challenging issues of environmental degradation.	.711
V6	I pay attention to contents (videos/posts/blogs) of environmental issues on social media.	.733
V7	I have joined a page or group that has interest on environmental issues by watching contents on social media sites.	.694
V8	I could not stop myself form pressing “like” button while seeing post of climate issues.	.696
V9	I usually feel encouraged to search the link provided with contents (e.g. wall posts) of climate issue on social media.	.638
V10	I find social networking sites as more powerful tool than other platforms to provide awareness regarding environmental issues.	.512
V11	I feel more personal with environmental issues when surfing on social media sites than print ads.	.584
V12	Content on environmental issues on social media sites encourages me to take action against environmental problems than contents of other media.	.578
V13	I discuss with my friends/family about environmental issues that I have seen on social media sites.	.575
V14	Videos of climate issues on social media sites increase my overall understanding of environmental problems.	.532
V15	I trust on social media sites for getting environmental knowledge.	.723
V16	I usually pay attention to green blogging on social media sites.	.619
V17	I often participate in environmental friendly blogging to spread awareness of environmental knowledge.	.720
V18	I share videos and posts concerning environmental issues.	.650
V19	Contents related with environmental issues on social media sites seem to be persuasive to raise my consciousness to do something for saving the planet.	.601

Sources: IBM SPSS Statistics 19 version

It is observed from table 4 that extraction value of communalities all variables is significantly high from the cut off rate 0.50. So, all variables are considered for further analysis.

Table 5 represents the summary of factor analysis. Factors were extracted using maximum likelihood method, followed by Varimax rotation. The Kaiser criterion (Eigen values>1) was employed. As discussed earlier, as per the Kaiser_s Criterion, the particular factor should have the Eigen values higher than 1 to be considered for further analysis. In case of perception variables 6 factors were extracted, who have Eigen value more than 1 for each of the 6 factors extracted, consisting of 19 variables. The data of attributes shows that 64.445% of their variance is explained by these six factors.

Table 5: Exploratory Factors Results

Extraction method : Principal Component Analysis
 Rotation method: Varimax with Kaiser Normalization
 Rotation converged in 11 iterations.

Factor	Item no.	Items	Factor loadings	Mean	s.d.
Comparative Persuasive Power	V12	Content on environmental issues on social media sites encourages me to take action against environmental problems than contents of other media.	.727	3.85	.732
	V13	I discuss with my friends/family about environmental issues that I have seen on social media sites.	.709	3.79	.749
	V10	I find social networking sites as more powerful tool than other platforms to provide awareness regarding environmental issues	.640	3.81	.753
	V14	Videos of climate issues on social media sites increase my overall understanding of environmental problems.	.566	3.75	.737
	V11	I feel more personal with environmental issues when surfing on social media sites than print ads.	.537	3.77	.850
Persuasive Power	V18	I share videos and posts concerning environmental issues	.777	3.77	.804
	V17	I often participate in environmental friendly blogging to spread awareness of environmental knowledge.	.697	3.64	.897
	V19	Contents related with environmental issues on social media sites seem to be persuasive for raising my consciousness to do something for saving the planet.	.647	3.96	.725
Perceived Reliability	V2	Information related with environmental issues on the social media sites is authentic and appropriate	.773	3.73	.743
	V3	I find social networking sites as a valid source of information on different environmental issues	.751	3.60	.749
	V1	I find social media sites as reliable resource of information for environmental issues	.547	3.76	.623
Ease of Accessibility	V5	It is very easy for me to explore social media sites to get aware about challenging issues of environmental degradation.	.823	3.73	.743
	V6	I pay attention to contents (videos/posts/blogs) of environmental issues on social media	.676	3.76	.771
	V4	I find it easy to use social media sites for getting information on climate changes	.659	3.77	.634
	V8	I could not stop myself from pressing “like” button while seeing post of climate issues	.527	3.96	.738
Perceived Trust	V15	I trust on social media sites for getting environmental knowledge.	.822	3.78	.777
	V16	I usually pay attention to green blogging on social media sites.	.677	3.65	.802
Promptness of activism	V7	I have joined a page or group that has interest on environmental issues by watching contents on social media sites.	.745	3.64	.954
	V9	I usually feel encouraged to search the link provided with contents (e.g. wall posts) of climate issue on social media.	.745	3.71	.786

Table 5 gives results of explored factors from 19 items. The variables were grouped together based on their factor loadings and best correlated to the extracted factors. Six factors of social media are explored that effect users’ environmental awareness level. Factor loadings represent correlation between factor and original variable. Criteria for selection of factor loading into a factor are adopted from Hair, 1995. According to given criteria, factor loadings are selected on the basis of sample size. For sample 100, factor loading .5 or more is considered significant. All the factors are given appropriate names on the basis of variables. From rotated factor matrix it is derived that v12 (Content on environmental issues on social media sites encourages me to take action against environmental problems than contents of other media), v13 (I discuss with my friends/family about environmental issues that I have seen on social media sites.),v10 (I find social networking sites as more powerful tool than other platforms to provide awareness regarding environmental issues), v14 (Videos of climate issues on social media sites increase my overall understanding of environmental problems.) and v11 (I feel more personal with environmental issues when surfing on social media sites than print ads.) have factor loadings of .727, .709, .640, .566, .537 on factor 1(Comparative Persuasive Power) which is a combination of these original variables. Variable v18 (I share

videos and posts concerning environmental issues), v 17(I often participate in environmental friendly blogging to spread awareness of environmental knowledge), v 19(Contents related with environmental issues on social media sites seem to be persuasive for raising my consciousness to do something for saving the planet) with factor loadings .777, .697, .647 respectively contribute for factor 2 (Persuasive Power). Similarly variables v2 (Information related with environmental issues on the social media sites is authentic and appropriate), v3 (I find social networking sites as a valid source of information on different environmental issues), v1 (I find social media sites as reliable resource of information for environmental issues) with factor loadings .773, .751, .547 respectively combined to form factor 3 (Perceived Reliability). Factor 4 (Ease of Accessibility) is the combination of v5 (It is very easy for me to explore social media sites to get aware about challenging issues of environmental degradation), v6 (I pay attention to contents (videos/posts/blogs) of environmental issues on social media), v4 (I find it easy to use social media sites for getting information on climate changes), and v8 (I could not stop myself from pressing “like” button while seeing post of climate issues) having factor loadings of .823, .676, .659, .527 respectively. Factor 5 named “Perceived Trust” is combinations of original variables of v15 (I trust on social media sites for getting environmental knowledge) and v16 (I usually pay attention to green blogging on social media sites) with factor loadings of .822 and .677 respectively. Variables v7 (I have joined a page or group that has interest on environmental issues by watching contents on social media sites.) and v9 (I usually feel encouraged to search the link provided with contents (e.g. wall posts) of climate issue on social media) with factor loadings of .745 each combined to form factor 6 (Promptness of activism).

DISCUSSION AND CONCLUSION:

Research findings of the present study support the hypothesis that there is strong connection between social media sites usage and change in environment issue awareness level. Study first examined the social media usage level and descriptive analysis explains that most of the users spend above 1-3 or 3-6 hours daily on surfing social media sites. Users show quite strong agreement level with statement that they use social media for “posting information”, “getting information”, and “to see what others are posting”. Findings reveal that users use social media for satisfying their urge to get information on different topics and to share their experiences with others. Environmental concern level of users is quite satisfactory according to study results. Target sample of the study shows their concern level with environmental issues and they want to make contributions to preserve the natural habitat for future generations. The main research question of this study is to explore the different factors of social media that increases users’ environment issue awareness. Exploratory factors analysis results gives six factors, “Competitive Persuasive Power”, “Persuasive Power”, “Perceived Reliability”, “Ease of Accessibility”, “Perceived Trust” and “Promptness of Activism”.

Competitive power of social media helps in persuade users to bring change in attitude towards environmental issues than any other media type. Users’ involvement in social media networking increases because of increase trust on social media contents. By virtue of this perceived trust, users get motivated to rely on information pertaining to environmental issues. So, social media is serving as powerful media tool to spread awareness regarding environmental issues among users. Users’ involvement in social networking sites although don’t fully leverage green practices adoption but extensively usage of social media sites by environmental groups to share their concern on different environmental issues with authenticate information may motivate users to change their attitude towards environmental and sustainability issues.

LIMITATIONS AND FUTURE RESEARCH:

Present study finds the factors of social media that encourages users to get involved in environmental issues and develop attitude to protect natural resources. However study suffers from some limitations. Limitations of this paper include that the sample population of 18 to 30 years old is chosen from two universities only. Second limitation of this study is that only well known social media sites (facebook, twitter, whatsapp and instagram) are used for study.

Future research should examine other factors of social media that effects users’ perceptions. Confirmatory factor analysis can be conducted to find out whether the explored factors are reliable or not. Respondents of different age group can be included into analysis to know differences in perceptions and difference in usage of social media sites that can bring very insightful results.

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