The Present in-depth Scenario of Science Communication through Social Media in 7 South-east Asian Countries: a Social Impact Study

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Abstract: The purpose of this study is to identify the effects of social network sites such as Facebook, Twitter, Linkedin, WhatsApp etc regarding science communication among the people of 7 countries, mainly teenagers, college-university students, general people, scientists and science journalists. Communication is emotionally gratifying but how do such technological distraction impact on academic performance? Because of social media platform’s widespread adoption by university students, there is an interest in how those social media is related to academic performance. This paper measure frequency of use, participation in activities and time spent preparing for diffusion of science communication activities in south-east Asian countries. Moreover, the impact of social network site on academic performance also raised another major concern which is heterogeneity character of social media. How can a science journalist or scientists feel comfortable to involve and use more in social media, is to be thinking about. Social network sites were only an electronic connection between users, but unfortunately it has become an addiction for students. This paper examines the relationship between social network sites and role of science communicators.

2. In the era of internet

2.1.Internet

The Internet is the global system of interconnected computer networks that use the Internet protocol suite (TCP/IP) to link devices worldwide. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. The Internet carries an extensive range of information resources and services, such as the inter-linked hypertext documents and applications of the World Wide Web.

Internet use grew rapidly in the West from the mid-1990s and from the late 1990s in the developing world. In the 20 years since 1995, Internet use has grown 100-times, measured for the period of one year, to over one third of the world population. Most traditional communications media, including telephony, radio, television, paper mail and newspapers are being reshaped or redefined by the Internet, giving birth to new services such as email, Internet telephony, Internet television music, digital newspapers, and video streaming websites. Newpaper, book, and other print publishing are adapting to website technology, or are reshaped into blogging, web feeds and online news aggregators. The entertainment industry was initially the fastest growing segment on the Internet and the latest addition to this globalized global world of internet is social media. The world is becoming ‘glocal’ from global and is squeezing its economic, social and political boundaries thus giving it a common platform for development. The convergence of the media has expanded the usage of internet that gave birth to social media.
Table 1. World-wide use of Internet

<table>
<thead>
<tr>
<th>Total Analysis</th>
<th>2005</th>
<th>2010</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Population In billion</td>
<td>6.5</td>
<td>6.9</td>
<td>7.2</td>
</tr>
<tr>
<td>Not using Internet (%)</td>
<td>84</td>
<td>70</td>
<td>60</td>
</tr>
<tr>
<td>Using Internet (%)</td>
<td>16</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Internet use in Developing Countries (%)</td>
<td>8</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>Internet use in Developed Countries (%)</td>
<td>51</td>
<td>67</td>
<td>78</td>
</tr>
</tbody>
</table>

2.2 World Wide Web

The World Wide Web (abbreviated WWW or the Web) is an information space where documents and other web resources are identified by Uniform Resource Locators (URLs), interlinked by hypertext links, and can be accessed via the Internet. English scientist Tim Berners-Lee invented the World Wide Web in 1989. He wrote the first web browser computer program in 1990 while employed at CERN in Switzerland. The World Wide Web has been central to the development of the Information Age and is the primary tool billions of people use to interact on the Internet. Web pages are primarily text documents formatted and annotated with Hypertext Markup Language (HTML). In addition to formatted text, web pages may contain images, video, audio, and software components that are rendered in the user's web browser as coherent pages of multimedia content. Embedded hyperlinks permit users to navigate between web pages. Multiple web pages with a common theme, a common domain name, or both, make up a website.

Table 2. Internet user and population with ranking

<table>
<thead>
<tr>
<th>Country</th>
<th>Internet User</th>
<th>Rank</th>
<th>Percentage</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>69,21,52,61 8</td>
<td>1</td>
<td>50.30</td>
<td>90</td>
</tr>
<tr>
<td>India</td>
<td>34,08,73,13 7</td>
<td>2</td>
<td>26.00</td>
<td>127</td>
</tr>
<tr>
<td>Japan</td>
<td>11,81,31,03 0</td>
<td>5</td>
<td>93.33</td>
<td>9</td>
</tr>
<tr>
<td>Russia</td>
<td>10,53,11,72 4</td>
<td>6</td>
<td>73.41</td>
<td>43</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3,40,06,477</td>
<td>20</td>
<td>18</td>
<td>147</td>
</tr>
</tbody>
</table>

2.3 Social Media

Merriam Webster encyclopedia Britannica Company defines: youth is the time of life when someone is young. Youth is the time when a young person has not yet become an adult. Youth is very important for future of any nation and country’s progress and development. Now a day Social media is essential for youth in the field of education to learn new trends in education, to improve writing and communicating skills, cultural promoting, religious and political information gathering and sharing links, better living style, growth and development of society.

Social media are computer-mediated technologies that allow the creating and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks. The variety of stand-alone and built-in social media services currently available introduces challenges of definition. However, there are some common features.

Andres Kaplan (2010) described in his study that social media is a set of internet based application that constructs on the ideological and technological foundation of wed and that permit the design and exchange of user generated content (Chukwuebuka, 2013).

Shrestha lucky (2013) described that social media is means of connections among people in which they create, share, and exchange information and ideas in virtual communities and networks (Shrestha lucky, 2013). Alison Doyle an American Psychologist: She define Social media as, it is various online technology tools that enable people to communicate easily and people use social media to share information , text, audio, video, images, podcasts, and other multimedia communication.

Social media differ from paper-based or traditional electronic media such as TV broadcasting in many ways, including quality, reach, frequency, usability, immediacy, and permanence. Social media operate in a dialogic transmission system (many sources to many receivers). This is in contrast to traditional media which operates under a monologic transmission model (one source to many receivers), such as a paper newspaper which is delivered to many subscribers. Some of the most popular social media websites are Facebook (and its associated
Facebook Messenger, WhatsApp, Tumblr, Instagram, Twitter, LinkedIn, Baidu Tieba, Pinterest, LinkedIn, Gab, Google+, YouTube, Viber, Snapchat, Weibo and WeChat. These social media websites have more than 100,000,000 registered users.

### 3. Social Media & their Popularity

This is a list of the leading social networks based on number of active user accounts.

<table>
<thead>
<tr>
<th>Social Media</th>
<th>Active User Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>1,712,000,000</td>
</tr>
<tr>
<td>WhatsApp</td>
<td>1,000,000,000</td>
</tr>
<tr>
<td>Facebook Messenger</td>
<td>1,000,000,000</td>
</tr>
<tr>
<td>QQ</td>
<td>899,000,000</td>
</tr>
<tr>
<td>Tumblr</td>
<td>555,000,000</td>
</tr>
<tr>
<td>Instagram</td>
<td>500,000,000</td>
</tr>
<tr>
<td>Twitter</td>
<td>313,000,000</td>
</tr>
<tr>
<td>Skype</td>
<td>300,000,000</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>255,000,000</td>
</tr>
</tbody>
</table>

**Facebook:** Facebook (FB) is an American for-profit corporation and online social media and social networking service based in Menlo Park, California. The Facebook website was launched on February 4, 2004, by Mark Zuckerberg, along with fellow Harvard College students and roommates, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz, and Chris Hughes. On July 13, 2015, Facebook became the fastest company in the Standard & Poor's 500 Index to reach a market cap of $250 billion. Facebook has more than 1.65 billion monthly active users as of March 31, 2016. As of April 2016, Facebook was the most popular social networking site in the world, based on the number of active user accounts.

**WhatsApp:** WhatsApp Messenger is a freeware, cross-platform and end-to-end encrypted instant messaging application for smartphones. It uses the Internet to make voice calls, one to one video calls; send text messages, documents, PDF files, images, GIF, videos, user location, audio files, phone contacts and voice notes to other users using standard cellular mobile numbers. WhatsApp Inc., based in Mountain View, California, was acquired by Facebook in February 2014 for approximately US$19.3 billion. By February 2016, WhatsApp had a user base of over one billion, making it the most popular messaging application at the time.

**QQ:** Tencent QQ, popularly known as QQ, is an instant messaging software service developed by a Chinese company named Tencent Holdings Limited. QQ also offers a variety of services, including online social games, music, shopping, microblogging, movies, and group and voice chat. The logo and mascot is a small penguin wearing a red scarf. At the end of June 2016, there are 899 million active QQ accounts. A peak number of over 200 million simultaneous online QQ users was recorded as of April 2014.

**Facebook Messenger:** It (sometimes abbreviated as Messenger) is a free instant messaging service and software application which provides text and voice communication. Integrated with Facebook's web-based Chat feature and built on the open MQTT protocol, Messenger lets Facebook users chat with friends both on mobile and on the main website. Facebook has reported that Facebook Messenger has reached 1 billion monthly active users. David A. Marcus heads Facebook Messenger and had joined Facebook on invitation of Mark Zuckerberg, CEO of Facebook.

**Tumblr:** Tumblr is a microblogging and social networking website founded by David Karp in 2007, and owned by Yahoo! since 2013. The service allows users to post multimedia and other content to a short-form blog. Users can follow other users' blogs. Bloggers can also make their blogs private. For bloggers, many of the website's features are accessed from a "dashboard" interface. As of January 1, 2017, Tumblr hosts over 329.2 million blogs. As of January 2016, the website had 555 million monthly visitors.

**Instagram:** Instagram is an online mobile photo-
sharing site that allows its users to share pictures and videos either publicly or privately on the app, as well as through a variety of other social networking platforms, such as Facebook, Twitter, Tumblr, and Flickr. Originally, a distinctive feature was that it confined photos to a square shape, Instagram was created by Kevin Systrom and Mike Krieger, and launched in October 2010 as a free mobile app. The service rapidly gained popularity, with over 100 million active users as of April 2012 and over 300 million as of December 2014. The service was acquired by Facebook in April 2012 for approximately US$1 billion in cash and stock. In 2013, Instagram grew by 23%, while Facebook, as the parent company, only grew by 3%.

**Twitter:** Twitter is an online news and social networking service where users post and interact with messages, "tweets," restricted to 140 characters. Registered users can post tweets, but those who are unregistered can only read them. Users access Twitter through its website interface, SMS or a mobile device app. It was created in March 2006 by Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams and launched in July, whereby the service rapidly gained worldwide popularity. In 2012, more than 100 million users posted 340 million tweets a day, and the service handled an average of 1.6 billion search queries per day. In 2013, it was one of the ten most-visited websites. As of March 2016, Twitter had more than 310 million monthly active users.

**Diagram 3: Different Social Media**

**Linkedin:** LinkedIn is a professional social network that enables employers and job-seeking workers to connect. It was created by Reid Hoffman in 2002 and was launched on May 2003. LinkedIn is now the world’s largest professional social network with over 300 million members in over 200 countries. There are over 39 million students and recent college graduates on LinkedIn, becoming the fastest-growing demographic on the site. There are many ways that LinkedIn can be used in the classroom. First and foremost, using LinkedIn in the classroom encourages students to have a professional online social presence and can help them become comfortable in searching for a job or internship. Dedicating class time solely for the purpose of setting up LinkedIn accounts and showing students how to navigate it and build their profile will set them up for success in the future. Next, professors can create assignments that involve using LinkedIn as a research tool. The search tool in LinkedIn gives students the opportunity to seek out organizations they are interested in and allow their profile will set them up for success in the future.

**4. Introduction of the real problem**

Mass media is one of the important stakeholder in regard to societies reaching the goals of development – both as a contributor and a beneficiary. It is exactly the process of developing Sustainable Development Goals (SDGs) that gives an opportunity to recognize media as a relevant actor in the development process, and to highlight
how freedom of expression is both a means to and a goal of development.

4.1 Key elements that foster development

First, in equitable and inclusive political processes. Second, in national and international governance processes that are effective, responsive and accountable. Third, in supporting engaged citizens and dynamic civil society. Fourth, in generating inclusive economic growth, sustainable livelihoods and transparent, efficient and equitable markets. Fifth, in establishing and protecting a free, pluralistic media environment in which media outputs are many and diverse but also of high quality.

Today’s college students are exposed to all types of technologies in many aspects of their lives. On a daily basis they use desktop computers, laptops, E-readers, tablets, and cell phones to actively engage in social networking, text messaging, blogging, content sharing, online learning, and much more. Users around the world, whether they are teens or college students share personal information on social media. Most people disclose personal information on their profiles. Research on social media found a paradox, a discrepancy between privacy concerns and actual privacy settings. Analyses of profiles have found that there is a large amount of personal information on public profiles. If it is the overall scenario, then what is the fate of science communication through social media?

5. Literature Review

Ozkan and McKenzie (2008) contend that educators need to engage students with a more 21st century approach to teaching and social networking technologies can provide such a venue. As both distance education and SNSs continue to grow, it is becoming increasingly more important to examine how distance education and SNSs can be combined most effectively.

College students have great interest in social media. For the purpose of this study, social media was defined as Facebook, YouTube, Blogs, Twitter, MySpace or LinkedIn. Although, providing a detailed perspective on social media use among university students and underscoring that such use can produce both positive and negative consequences, according to a Nielsen Media Research study, in June 2010, almost 25 percent of students’ time on the Internet is now spent on social networking websites. Facebook is the most used social network by college students, followed by YouTube and Twitter. Moreover, Facebook alone reports that it now has 500 active million users, 50% of whom log on every day. In addition, according to a study by Online PhD, students spend roughly 100 minutes per day on Facebook. In 2007, the number of students who used Facebook was already enormous: 92 percent of college students had an account. By 2008, 99 percent of students had an account on Facebook. That is quite a large amount considering the service was only opened in 2006 to everyone.

On one hand, the positive aspect of online communities is that youths can utilize them for academic assistance and support (Lusk, 2010). Due to the ability of social media to enhance connections by making them easily accessible, social media can yield many benefits for the young, including providing a virtual space for them to...
explore their interests or problems with similar individuals, academic support, while strengthening online communication skills and knowledge. Students who may be reluctant to speak up in class are participating in book discussion blogs and writing for real audiences. There are new Web tools emerging all the time that are enhancing learning.

Online social networks (OSNs) have permeated all generations of Internet users, becoming a prominent communications tool, particularly in the student community. Thus, academic institutions and faculty are increasingly using social networking sites, such as Facebook and LinkedIn, to connect with current and potential students and to deliver instructional content.

On the contrary, some authors and researches disagree with the previous statement, such as Lenhart, et al., 2010; Tiryakioğlu & Erzurum, 2010; Chen & Bryer, 2010 says that despite the popularity of social media for personal use only a low percentage of students and faculty use them for academic practice. Online social networking (OSN) sites, such as Facebook, Twitter and Myspace, are used on a regular basis by many millions of people. The majority of this online networking community is made up of college students. In fact, a recent survey of 3000 students from across the US revealed that 90% of college students use Facebook and 37% use Twitter.

6. Objective of the study

Although it is going to be focussed primarily on the harms of social media, it is important to recognize that there are numerous positive aspects associated with social media usage. Social media offers the ability to form a group for like-minded people to work together throughout the world and this is one of the best ways to increase science movement through media.

1. To evaluate the relevance of the social media in sustainable development through science communication
2. To analyze the influence of social media on youth social life
3. To study whether social media as an educational tool or not
4. To evaluate the attitude of youth towards social media and measure the spending time on social media.
5. The need to include innovative teaching methods in the universities/colleges.
6. Whether depression and psychological pressure creates problem to use social media for science communication
7. To evaluate the relevance of use of social media as the ultimate medium of science communication.

7. Methodology

First of all, respondents’ characteristics are considered as an important domain of research within social networking sites literature. Profiling their age, gender, religion, marital status and academic level, would help us to identify and evaluate their time spent online. Today’s college students, i.e. Gen-Y, are exposed to all types of technologies in many aspects of their lives. On a daily basis they use desktop computers, laptops, E-readers, tablets, and cell phones to actively engage in social networking, text messaging, blogging, content sharing, online learning, and much more. The descriptive method was used to carry this study. And survey type research was conducted, through the questionnaire public opinion and perception was discriminate about the impact of social media on youth and statements was developed related to the various aspect of life and society.

Hence for this study, various reports and research papers were taken as secondary data.

7.1 Population and Sample Space

The population of the study is the youths and general people of different ages and professional backgrounds, of 7 countries of South-east Asia viz. China, India, Thailand, Japan, Russia, Bangladesh and Pakistan. 100 people are chosen from each country, i.e. total of 700 people is the total sample space. Among them, 55 are male and 45 are female. We divided the total sample into 4 different age group, viz. 15-25, 25-40, 40-70 and 70+. As the teenagers and college-university students use social networking sites more, 37 people (M=20, F=17) were chosen from age group 15-25, 30 people (M=17, F=13) were chosen from age group 25-40, 21 people (M=11, F=10) were chosen from age group 40-70 and 12 people (M=7, F=5) were chosen from age group of 70+ from each country.

As, this research is on science communication, 2 people from 37 persons, 5 people from 30 persons, 5 people from 21 persons and 2 people from 21 persons were consider as journalists associated with media i.e. 14 people from each country, irrespective of any gender. Also, 1 person from 37 persons, 2 people from 30 persons, 2 people from 21 persons and 1 person from 12 persons i.e. 6 people in total from each country were taken as scientists irrespective of any gender.

8. Research Question

1) Do you have an account in Social Media? (Y/N)
2) Do you have more than one account in Social Media? (Y/N)
3) How much time you are online in Social Media? (24 hours/15 hours+/7-15 hours/3-7 hours/less than 3 hours/occasionally)

4) How much you have posted science news in Social Media in 2016? (everyday/occasionally/rare/never)

5) Do you think that Social Media is most useful medium of teaching? (Y/N)

6) Do you think Social Media in future, in our society, is the ultimate media and television, radio, newspaper will be obsolete? (Y/N/Don’t know)

7) What is the most favourite Social Media to you? (Facebook/Twitter/Linkedin/ QQ/ WhatsApp/Skype/Instagram)

8) Do you think Social Media create awareness in a vast scale for sustainable development? (Y/N)

9) How you use your Social Media? (chatting/shopping/uploading the selfie/use mainly for scientific info)

10) Do you think in present day, Social Media can explain complicated scientific matter understandable by a layman? (Y/N/Don’t know)

11) Do you think scientists and science journalists should depend only Social Media to evaluate research findings? (Y/N)

12) Internet means only access of Social Media. Do you think so? (Y/N)

13) Have you found any scientific information regarding sustainable development as breaking news in Social Media? (Y/N/Sometimes)

14) Do you think Social Media is only for post, like, comment, share and have no relevance of the society? (Y/N/Don’t know)

15) Do you consider any information uploaded in Social Media, especially on science is taken as authentic by any authentic person? (Y/N/Don’t know)

16) Social media, particularly on a subject is homogeneous or heterogeneous. Do you think so? (Y/N)

17) Media is the 4th pillar of democracy and watchdog of the society. Do you think that Social Media play similar role? (Y/N)

18) What type of science news you find most in Social Media? (Medicine and Health Science/Physical Science/Earth Science/Agricultural Science/Space Science/Computer Science and IT/Awards and Conference)

19) Do you think, science communication through Social Media, in the present era, develop global scientific temperament and culture? (Y/N)

20) It is said that, use of Social Media by youth is the hobby to kill time only. Do you think so? (Y/N)

9. Result

RQ-1 Ans: In response to this answer, figure shows that Indian people supersede China, in having social media account.

Table 4: People having social media account

<table>
<thead>
<tr>
<th>Country</th>
<th>15-25</th>
<th>25-40</th>
<th>40-70</th>
<th>70+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>F</td>
<td>M</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>1</td>
<td>8</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8</td>
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<td>Japan</td>
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<td></td>
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<td>Russia</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
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<td></td>
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<tr>
<td>Bangladesh</td>
<td>8</td>
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<tr>
<td></td>
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<td></td>
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<td></td>
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<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>394</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ-2 Ans: In China, 58 percent have more than one account. In India, it is 65 percent. In Japan, it is 54 percent. In Russia, it is 44 percent. In Pakistan, it is 29 percent. In Thailand, it is 25 percent and in Bangladesh, it is 15 percent.

RQ-3 Ans: In response to the question, it is found that 12 percent are always online in social media. 14 percent are online or 15+ hours. 12 percent are online for 7-15 hours. 32 percent for 3-7 hours, 21
percent for less than 3 hours and rest 9 percent are occasionally online.

RQ-4 Ans: In response to the question, how much you have posted science news in Social Media in 2016, as it one of the most important question, it is found that, only 3 percent use social media everyday for science news, 15 percent use occasionally, 37 percent use it rare and 45 percent never use social media for science news post or share or comment!

RQ-5 Ans: Overall analysis shows that, 41 percent think, that social media is the most useful medium of teaching and 59 percent think, social media is not useful.

RQ-6 Ans: In response to this answer, is is found that, 51 percent don’t think that other media will not be obsolete and 41 percent said that they don’t know. Only 8 percent think, only social media will survive and others are not.

RQ-7 Ans:

<table>
<thead>
<tr>
<th></th>
<th>Fb</th>
<th>Twe</th>
<th>Lkd</th>
<th>QQ</th>
<th>Whtap</th>
<th>Skyp</th>
<th>Insta</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>20</td>
<td>5</td>
<td>2</td>
<td>66</td>
<td>3</td>
<td>3</td>
<td>1</td>
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<td>India</td>
<td>71</td>
<td>9</td>
<td>11</td>
<td>2</td>
<td>4</td>
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<td>0</td>
</tr>
<tr>
<td>Japan</td>
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<td>16</td>
<td>54</td>
<td>1</td>
<td>5</td>
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<td>Russia</td>
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<td>Pak</td>
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<td>18</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Thalnd</td>
<td>21</td>
<td>21</td>
<td>9</td>
<td>1</td>
<td>43</td>
<td>49</td>
<td>1</td>
</tr>
<tr>
<td>Banglad</td>
<td>56</td>
<td>29</td>
<td>8</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 5. Popularity of different social media in 7 countries

It has been found from the figure that, in China, maximum people use QQ for the social media, whereas in India, Pakistan and Bangladesh, facebook is most popular. LinkedIn in Japan, Skype in Russia and Thailand.

Diagram 6. Popularity of different social media in 7 countries

RQ-8 Ans: In response to this question, 63 percent think it as positive and the rest think that, it does not create social awareness in a vast scale for sustainable development.

RQ-9 Ans: In response to this question, it is found that, 70 percent opt social media for chatting, 52 percent opt for online shopping, 91 percent use social media to upload selfie only. But alarming percentage is, only 11 percent use social media for any scientific information.

RQ-10 Ans: Only 19 percent people think that, in present day, Social Media can explain complicated scientific matter understandable by a layman. 76 percent think that, it can never explain complicated scientific matter to layman. Only 5 percent said, they did not know in this regard.

RQ-11 Ans: 77 percent think that, scientists and science journalists should not depend only Social Media to evaluate research findings. 23 percent think, they should depend on it only, in future.

RQ-12 Ans: 71 percent people think that, internet does not mean only access of Social Media. Others think that, internet means only social media.

RQ-13 Ans: 81 percent opined that, they found no scientific information regarding sustainable development as breaking news in Social Media. Only 15 percent said they found scientific information in their social media. 4 percent said, they do not know.

RQ-14 Ans: It is found that, 41 percent think Social Media is only for post, like, comment, share and have no relevance of the society. 49 percent responded that they do not think so. 10 percent said, they don’t know.
RQ-15 Ans: More than two-third people i.e. 31 percent consider any information uploaded in Social Media, especially on science is taken as authentic by any authentic person whereas 69 percent think it is not the situation.

RQ-16 Ans: 94 percent think that, social media is heterogeneous i.e. they have no special characteristics on a special subject.

RQ-17 Ans: Social Media is the 4th pillar of democracy and watchdog of the society! 96 percent think it is wrong to be considered. Only 4 percent think that it is correct.

RQ-18 Ans: To respond this research question, 31 percent found medicine and health science, 7 percent physical science, 5 percent in earth science, 15 percent in agricultural science, 3 percent in Space Science, 13 percent in computer science and IT and 26 percent on awards and conference related news in social media.

RQ-19 Ans: 38 percent think that, science communication through Social Media, in the present era, develop global scientific temperament and culture. Others do not.

RQ-20 Ans: 62 percent think that, use of Social Media by youth is the hobby to kill time only.

10. Conclusion

This study provides the important feedback that; social media has no magic properties on its own to increase scientific temper. Digital information and communication technologies are only novelty tools that can be used to reinforce scientific temper. More participation means more digital library, more human modernization, more technological mediation and obviously, more literacy. It also appears that, science communication through social media can also be characterized as relying on reductive analysis and depending statements on another’s liking and drawing caustic and petty commentary. Finally the study would benefit those readers, who follow the content only, but do not post comments.

Reference