

# THE IMPACT OF SOCIAL MEDIA IN THE REVOLUTION OF HEALTH BEHAVIORAL SCIENCE

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**Abstract** Online social media have a significant effect on health behavior. The pervasiveness of mass media and the exposure levels of broad segments of society suggest that mass media may be an essential information source to change health attitudes and behavior. Nonetheless, research evidence indicates that most mass media campaigns oriented toward changing health care habits face lots of barrier in implications. This paper reviews the literature to ensure the importance of social media on modifying health behavior on large population and the risks facing the implications.

**Index Terms:** Social media, health behavior, impact of social media , Saudi Arabia ,Global web index

## I. INTRODUCTION

Social influences has tremendous effect in the adoption of health behaviors (Smith K, 2008) .In order minimize the risk of diseases or to reduce its complications , health behaviors modifications is necessary ,this will achieved by renovating the methods used to affect individual beliefs and sentiments about health and disease.

Social networking Web sites, such as Facebook and Twitter etc. have a marvelous effect on the revolution of health and changing health behaviors. Globally, the availability of the internet, cell phones, and video games facilitate the information gathering and communication. This capability to interact with others is the unique feature of social media which provides efficient powerful new methods for the individuals in the community to create and change their social and behavioral environments.

## II. AIM

This paper reviews the significance of emerging technologies on social media that forcing the communication to influence social and behavioral health, and the consequences risks faced the implications.

## III. LITERATURE REVIEW

The online search, Facebook , twitter , YouTube and the other innovates of online interactions has opened wide channels of communication and information flow .These

modern technology developments and progress play a very important role in changing social and behavioral health by widening the field of interaction, bringing different distinctive societies and cultures into direct or indirect contact to influence social evolution.

## IV. GROWTH OF SOCIAL MEDIA USAGE

Online social media shows rapid growth since begun .Universally, many independent studies followed the growth of internet access world-wide since its initiation in the late sixties which focus on the internet diffusion patterns across different economical, sociocultural and political aspects. In 1997, Larry Press reported many organizations that were responsible for tracking and reporting on Internet access from the perspectives of infrastructure, social influence and traffic density (Press, 1999). Besides, another extensive study on Internet growth patterns specifically in developing countries suggested towards common diffusion patterns and found the premier users of Internet technologies are usually researchers and academics (Bazar, 1997) . Furthermore, other researchers studied the purely social and cultural impact of online social media. Lenhart found people from low socioeconomic families (those earning less than \$30,000 annually) are more likely to use online social networks (80%) than high socioeconomic people (70%). Also 31% of online health search were about dieting, or physical fitness information, 17% is to gather information about health topics that are hard to discuss with others, such as drug use and sexual health (Lenhart A, 2010).

Currently , according to global web index 2013,Facebook continues to be the dominate social network globally with 69% of all internet users worldwide having a Facebook account and 43% actively using, mark in (April to June/2013). Facebook also has the highest user engagement with 62% of account holders actively using the social network on at least a monthly basis. (Facebook now has about 1.15 billion active users, that's equivalent to about 930 million people around the world) .Further, Google+ continues as the second most popular social platform in terms of active usage, with an estimated 318 million users worldwide (Hobson, 2013).

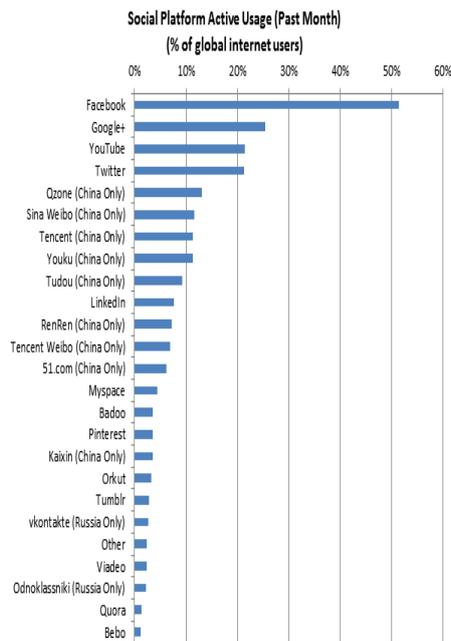


Figure 1: Social Platform Active

On the other hand, Twitter considered as the fastest-growing social platform world wide (Global Web Index Social Platform

**YouTube user Profile in Saudi Arabia :**

- 50% of users are women
- The age of the average user is 33 years old
- 36% of users have a university degree
- 65% of users access the internet via a smartphone

Source: (Mourtada, 2013).

Active Usage Dec. 2012, 2013).

Although internet in Saudi Arabia being relatively new, it was introduced in the late 1990s. Thus its effects and impact on Saudi society are still under study and few publications studied the effect of online social media on changing health behaviors (Sadiq M. Sait et al). However, with the rapid growth of online social media „Saudi Arabia has the greater user of Tweeter according to "Global web index 2013" where is 56% of regular Tweeter users are from Saudi Arabia ,12% of Saudi

population use tweeter frequently and make no less than 1.5 million tweets per day. Arabic language is the fastest growing language ever on Twitter, among 25 other different languages used on the site. Arabic language interface introduced recently in tweeter to accommodate this growth (Mourtada, 2013).

In March 2012, LinkedIn provides the world’s largest professional social network on the Internet with 161 million members in over 200 countries, of which 61% percent are located outside of the USA. LinkedIn members did nearly 4.2 billion professionally oriented searches on the platform in 2011. LinkedIn is currently available in 17 languages not including Arabic. Students and recent college graduates are the fastest growing demographic on LinkedIn (Mourtada, 2013). Usage of social media as a whole is growing fastest among the 35 to 44 year-old. Smart mobile phones are motivating much of the usage (Hobson, 2013).

#### V. THE IMPACT OF ONLINE SOCIAL MEDIA ON SOCIAL AND BEHAVIORAL HEALTH

*A. Impact on identity: Social media extend the social network that already exist from previous social relationships (school , religious organizations , and sport activities etc.) and to build a new relationships with others having the same interest ,thus it provide great opportunities to learn ,share and influence their opinions and experiences across the globe (Ito M., 2008).*

*B. Impact on cultural attitudes: social media usage is not just perceived to bring about change within communities, but within people themselves .Online searches and the other tools of online communications like twitter and Facebook used to get directs answers for many of health concerns sharing the health update from the professionals and people sharing the similar interest (Lenhart, 2010). Many claim that social media usage and, by association, its ability to expose people to a variety of ideas and opinions, has led them to become more open and tolerant of these views.*

*C. Impact on society: Social networking sites offers an online support that they may not available in traditional relationships, with people sharing their interests make them explore their needs and feelings freely specially to whom are often marginalized, such as the people with prohibited sexual desired, those who are living with an illness or disability, or those who may feel physically unattractive or socially rejected (McKenna, 2000) .*

#### VI. THE EFFECTIVENESS OF SOCIAL MEDIA THAT USED TO ALTER HEALTH BEHAVIORS

Currently, Health care researcher used online social media to conduct their research or to disseminate health messages to

target people in the community (Centola D, 2007). The use of online social media holds the potential to deliver interventions designed to promote healthy lifestyle habits to large sections of the population, that used the internet and online communications (tracker) (Centola, 2010). Research has shown that social influences by using the new innovated online social media can improve health outcomes in many aspect of health concerns such as dieting ,exercising that reduce epidemic obesity to smoking and alcohol consumption behaviors (Luke DA, 2007). The remarkable growth of Internet-based health communities on Facebook, Tweeter, and intentionally designed social networks allows patients from different social and geographic backgrounds to share information about health resources, ranging from information about diet and nutrition to opportunities to learn about patient support, preventive health screenings, and new treatment technologies ( Erickson T., 1997) .

- The risk of Online Social Media that used to change health behaviors.

The global Internet diffusion with the availability of online social communications facilities (smart cellphones, I pad and similar devices, laptop and personal computers) which are hard to control their access to different sites had raised the casern for the unavoidable cultural and moral conflict.

The exposure to undesirable online contents

Worldwide, censorship applications that implemented to control online social media by all governments often failed.Opponents toward the use of online social media to promote health behaviors have convincing justifications because of the risk of exposure to prohibited sexual behaviors specially or undesired adult content material on the net in additions to the risk of involvement to the abuse or violence (Postrel, 1998) (Benson, 1988) (Ybarra, 2004) .Saudi Arabia has extensive effort to implement online social media restrictions following religious, cultural, legal and traditional norms to block sites that carry offensive content and services such as pornographic media, online gambling, dating, etc. .Thus all Internet communications are directed through a central server proxy that filters both incoming and outgoing traffic based in Riyadh (Al-Furaih, June 18-21,2002) .

The addiction to Internet activities and spending long time without the development of constructive skill.

The risks to individuals and to society include ‘diminution of social and intellectual skills, loss of motivation for more constructive activities, loss of jobs and livelihood’ (Neumann, 1998)

Decline in real-life social relationships.

It can lead to the individual’s isolation and overall depression (Turkle, 1996) .On the other hand; other researchers believe that the Internet improves social contribution and social functions by release the constraints of geography or isolation .The online social media allows people to join groups on the basis of common interests rather than convenience (Katz, 1997) which result in a more healthy mental development (Rideout, 2010).

## VII. RECOMMENDATIONS

- Resources and incentives are needed for professionals to extend their expertise to online spaces and work with other members of the community to share their knowledge.
- Public health providers, provisional health organizations and educational organizations need to update media literacy and increase the capability of users to share information.
- Steps must be taken through legislations guided by governments and professional organizations for controlling quality of the media and the standard of content.

## VIII. CONCLUSION

The impact of online social media on changing health behaviors in the society discussed in this paper through literatures review.

Social media forms have altered the society education. It is a significant means for health education and promotion and changing health behavior. Research is needed to evaluate the effect of social media-based interventions, particularly those focusing on urban and rural communities with different demographic backgrounds.

## BIBLIOGRAPHY

Erickson T. (1997). Social interaction on the net: virtual community as participatory genre. *Proceedings of the Thirtieth Annual Hawaii International Conference on System Sciences; Maui, Hawaii:* (pp. 6:13–21). University of Hawaii at Manoa: Shidler College of Business .

*Social Media in the ArabWorld: Influencing Societal and Cultural Change* . (2012, 7). Retrieved 9 25, 2013, from Arab social media report: <http://www.arabsocialmediareport.com/UserManagement/PDF/ASMR%204%20updated%2029%2008%2012.pdf>

*Global Web Index Social Platform Active Usage Dec. 2012.* (2013, 1). Retrieved 9 25, 2013, from <http://www.searchenginejournal.com/google-plus-surpasses-twitter-to-become-second-largest-social-network/57740/graph2/>

Al-Furaih, I. S. (June 18-21,2002). Internet Regulations, The Saudi Arabian Experience., *In Proceeding of The Internet Society's 12th Annual INET Conference*, . Washington, D.C. USA.

Bazar, B. &. (1997). A preliminary model of internet diffusion within developing countries. . *AusWeb97 Third Australian World Wide Web Conference*. Australia.

Benson, S. (1988). Village people? The Net Generation. *IEEE Communication Magazine*, vol. 36, (1) (pp 32 – 35).

Centola D, E. V. (2007). Cascade dynamics of complex propagation. *Physica A.*, pp. 374:449–456.

Centola, D. (2010). The spread of behavior in an online social network experiment. *Science.*, pp. 329:1194–1197.

Epton et al. (2013). *A theory-based online health behavior intervention for new university students: study protocol*. Retrieved 9 26, 2013, from <http://www.biomedcentral.com/1471-2458/13/107>

Hobson, N. (2013, 9). *The state of the social web according to GlobalWebIndex*. Retrieved 9 25, 2013, from <http://www.nevillehobson.com/2013/09/09/the-state-of-the-social-web-according-to-globalwebindex/>

Ito M., H. H.-S. (2008). *Living and Learning With New Media: Summary of Findings From the Digital Youth Project*. Retrieved 9 24, 2013, from MacArthur Foundation Reports on Digital Media and Learning: [http://www.macfound.org/atf/cf/%7BB0386CE3-8B29-4162-8098-E466FB856794%7D/DML\\_ETHNOG\\_WHITEPAPER.PDF](http://www.macfound.org/atf/cf/%7BB0386CE3-8B29-4162-8098-E466FB856794%7D/DML_ETHNOG_WHITEPAPER.PDF)

Katz, J. E. (1997, December). A Nation of Strangers. . *Communications of the ACM*, pp. Vol. 40(12), pp 81-86 .

Lenhart A, P. K. (2010). *Social media & mobile internet use among teens and young adults*. Retrieved 9 24, 2013, from Pew Internet & American Life Project: <http://www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx>

Lenhart, A. R. (2010). *Teens & mobile phones*. Retrieved 9 24, 2013, from Pew Internet & American Life Project : <http://www.pewinternet.org/Reports/2010/Teens-and-Mobile-Phones.aspx>

Luke DA, H. J. (2007). Network analysis in public health: history, methods, and applications. *Annu Rev Public Health*, pp. 28:69–93.

McKenna, K. &. (2000). The implications of the Internet for personality and social psychology . *Personality and Social Psychology Review*, 4, 57-75. .

Mourtada, F. S. (2013, 6 4). *Social Media Usage in Middle East – Statistics and Trends [Infographic]*. Retrieved 9 24, 2013, from Go-gulf.com: <http://www.go-gulf.com/blog/social-media-middle-east/>

Neumann, P. (1998, March). Are Computers Addictive. . *Communications of the ACM*, p. vol 41(3) pp 128.

Postrel, V. (. (1998). *A net of plenty*. Forbes ASAP Supplement.

Press, L. F. (1999). Surveying the global diffusion of the Internet. *Proceedings of INET99*.

Rideout, V. U. (2010). *Media in the lives of 8-18 year olds*. Retrieved 9 24, 2013, from Kaiser Family Foundation: <http://www.kff.org/entmedia/upload/8010.pdf>

Sadiq M. Sait et al. (n.d.). *Impact of Internet Usage in Saudi Arabia: A Social Perspective*. Retrieved 9 24, 2013, from KFUPM: Impact of Internet Usage in Saudi

Smith K, C. N. (2008). Social networks and health. *Annu Rev Sociol*, pp. 34:405–429.

tracker, I. M. (n.d.). *researchpublications/publications/1522/Ipsos-MediaCT-Tech-Tracker.aspx*. Retrieved 9 26, 2013, from <http://www.ipsos-mori.com>

Turkle, S. (1996). Virtuality and its Discontents, Searching for community in cyberspace. . *The American Prospect*, pp. Vol. 7(24), pp 50-57.

Ybarra, M. &. (2004). Youth engaging in online harassment Association with caregiver-child relationships, Internet use and personal characteristics. . *Journal of Adolescence*, 27(3), 319-336.