

Social Media Use as Health Awareness Tool: A Study among Healthcare Practitioners

Tha'er Majali, Malek Alsoud, Azizah Omar, Ibrahim Alhassan

Article Info	Abstract
<p>Article History</p> <p>Received: December 12, 2020</p> <p>Accepted: February 01, 2021</p> <hr/> <p>Keywords : Social Media, Healthcare, UTAUT</p> <p>DOI: 10.5281/zenodo.4487282</p>	<p><i>The role of social media has increased dramatically in different context such as business, politics, and healthcare promotion. Though, the factors enhancing the adoption of social media as a tool of health promotion in Malaysia have not been embraced practically. This article aims to identify conceptual framework for social media adoption by Malaysian healthcare practitioners (MHPs) as a health platform promoter in Malaysia. It helps to deliver an effective message on the available social media at the lowest costs and timely manner, to improve government performance in facing healthcare challenges. The study framework is based on the unified theory of acceptance and use of technology (UTAUT) proposing that performance expectancy, effort expectancy, social influence, and facilitating conditions have a significant positive effect on the adoption of social media platforms. This study provides an important consideration of the current global healthcare orientation and the trends innovation that should be adopted by the government or any MHPs which might help of optimizing the use of limited resources. The expected resulted would also highlight the effective factors on health practitioners to adopt social media as a communication tool that can be used to enhance people awareness about diseases prevention and staying healthy.</i></p>

Introduction

Social media is online sources that facilitate individuals' engagement with different types of content exchange, easy access to information and reach the public. Almost 24 Million social media active user in the Malaysia, across age, genders, races, geographies area, and income levels, this accessible huge number gives the opportunity for caregivers, and healthcare providers to deliver a health-related message effortlessly and seamlessly. The platforms such as Facebook, YouTube, Instagram and Twitter have improved healthcare by enabling users to take a much more active and knowledgeable role in managing their personal health. Although, Malaysian government had allocated 29 RM billion, economic uncertainties and budgetary limitations continue to put weighty financial pressures on healthcare provision (The Star Online, 2019). People who are aware to stay healthy by practicing regular exercise, maintaining an appropriate weight, keeping vaccinations, avoiding smoking, and alcohol consumption, avoids the need for healthcare. According, Jane, Hagger, Foster, Ho, and Pal (2018) social media is an emerging field of investigation in terms of health promotion, and it provide a cost-effective tool, thus there might be a valuable outcome of people or caregivers engagement in this online environment for healthcare purposes.

Prior research, stated that the increasing use of social media by health practitioners support the exchange of information in real time which might lead for better clinical outcomes (Shaw et al., 2017), and the efficient use of these platforms significantly lessen the challenges might be raised in the traditional healthcare settings (Hazzam&Lahrech, 2018). Researchers also pointed that despite the disparity of interests of using social media among MHPs, they showed a great interest of engagement and use of these online platforms. For instance, Alkhateeb, Clauson, and Latif (2011) indicated that pharmacists' extreme use of social media is to expand their network rather than for the purpose of professional development, as well the increasing adoption of social media among doctors which is utterly for personal and reference purposes (Von Muhlen& Ohno-Machado, 2012). The new online channels changed the communication manners among many stakeholders such as healthcare professionals, public and government. Health practitioners can benefit from the significant and functional features of social media to generate health content that can be diffused faster than traditional channels, as this practice help in optimizing the expenditure the allocated budget of healthcare.

The main factors that influence professionals' intention to adopt social media as health promoter tools still an emerging question. The identification of the issues that enhance the practical use of these platforms by MHPs represents a gap in knowledge and needs further research (Hazzam&Lahrech, 2018; Moorhead et al., 2013). The investigation of practitioners' effort expectancy, perceived usefulness, social influence, and facilitating conditions represent the potential to extend knowledge on the optimal incorporation of social media in

healthcare practice. This study attempts to understand the relationships between the primary factors and the usage of social media by MHPs in Malaysia. The research presents theoretical backgrounded, conceptual framework and the implication of social media adoptions as healthcare platforms.

Theoretical Backgrounded

The primary objective of the study is to understand the underlying factors that enhance MHPs' intention of using social media. The research suggests considerable variables that boost or inhibit the adoption which could inform future research to explore the involvement strategies that support dynamic usage of social media to improve health outcomes. Numerous models and theories occur to predict individuals' intention to adopt or reject a specific technology. The unified theory of acceptance and use of technology is utilized due to the high level of prediction in accepting new technology (Venkatesh, Morris, Davis, & Davis, 2003).

Social Media Adoption

The technology acceptance or adoption is a well-researched concept in the information systems discipline. This study has typically concentrated on adoption of social media by health practitioners as the key dependent variable. According the UTAUT model, four key constructs performance expectancy, effort expectancy, social influence, and facilitating conditions that influence intention to use of new technology. Many studies have been conducted using the UTAUT model to examine the adaption and use of technology, specifically social media, in different setting such as marketing (Dahnil, Marzuki, Langgat, & Fabeil, 2014), education (Esteve Del Valle, Gruzd, Haythornthwaite, Paulin, & Gilbert, 2017), public relations (Curtis et al., 2010) and public health (Hanson et al., 2011; Thackeray, Neiger, Smith, & Van Wagenen, 2012). The UTAUT model combines several user acceptances models such as the theory of planned behaviour theory of reasoned action, technology acceptance model, and innovation diffusion theory into one combined theory, this variety of perspective would result in more accurate and concise explanation of adoption due the different characteristics of social media compare to other technology.

Performance Expectancy

According Venkatesh et al. (2003) performance expectancy is "the degree to which an individual believes using the system will help him or her to attain gains in job performance". Performance expectancy is expected to enhance individual intention to adopt a new innovation. When MHPs believe that adoption of a particular technology would improve their capability to deliver health message, they are more likely to adopt it. The greater belief that social media can improve to deliver health message, the higher engagement and adoption of these platforms. In this study, performance expectancy is the degree to which MHPs believe that adoption of social media as a healthcare promotion platform improves public health outcomes.

Previous research found that performance expectancy is positively associated with social media usage (Humaid & Ibrahim, 2019; Nawi, Nasir, & Al Mamun, 2016; Serben, 2014). For instance, Escobar-Rodriguez, Carvajal-Trujillo, and Monge-Lozano (2014), stated that performance expectancy influence the perceived advantages of Facebook which is significantly associated with students' behavioural intentions to use Facebook as a learning tool, another studies testing the performance expectancy construct of the adoption of social media on small business owner as business platforms found that performance expectancy is the strong predictor (Humaid & Ibrahim, 2019; Serben, 2014). Social media has emerged also as a new platform for information exchange, and interpersonal communication for healthcare professionals and the underlying behaviours and attitudes toward social media use of social media for a sustainable healthcare system still ambiguous. In a study by Hanson et al. (2011) found that performance expectancy of health educator is strongly with their behavioural intention to use social media for health promotion. Therefore, it can be stated that performance expectancy has a positive effect on adoption of social media as a health promotion platform by MHPs'. Hence, this study hypothesizes that:

H1: performance expectancy positively associated with adoption of social media as a health promotion platform

Effort Expectancy

Effort expectancy defined as "the degree of ease associated with the use of the system" (Venkatesh et al., 2003), and it is repetitively recognised as a strong indicator of users' compliance to a specific behaviour (Chua, Rezaei, Gu, Oh, & Jambulingam, 2018). Prior studies stated that effort expectancy plays a vital role in intention to use a new technology (Attuquayefio & Addo, 2014; Wu, Tao, & Yang, 2008). The less effort to learn and how to use a new technology the higher level of adoption. For example, Nawi et al. (2016) pointed that effort expectancy is a key factor that contribute to the acceptance of social media as a business platform, also Humaid and Ibrahim (2019) found that effort expectancy is essential determinant of using social media as business platforms.

On other hand, Hanson et al. (2011) argued that effort expectancy is not as critical as performance expectancy in predicting health educator's intention to use social media as health promotion tool. Even though, various empirical studies have agreed that effort expectancy is a positive predictor of the adoption and use of social media (Carlos Martins Rodrigues Pinho & Soares, 2011; Rauniar, Rawski, Yang, & Johnson, 2014), as the users measuring criteria of effort expectancy in using these platforms is the ease of reaching other people and

interacting with them (Alsaleh, Elliott, Fu, & Thakur, 2019). In fact, most of the prior studies proved that ease of using social media enhance individual's acceptance and adoption for different purposes such as learning and business (Escobar-Rodriguez et al., 2014; Nawi, Mamun, Nasir, & Muniady, 2019). In the same vein social media can be an effective tool for MHPs to deliver useful and timely manner health message. Hence, this study hypothesizes that:

H2: effort expectancy positively associated social media adoption media as a health promotion platform

Social Influence

Many studies have investigated the impact of social influence on intention or technology usage behaviour. According to Venkatesh et al. (2003) social influence is "the degree to which an individual perceives that important others believe he / she should use the new system". In this study social influence is described as the degree to which HP perceive that significant parties, such as peers or government, believe they should use social media as a health promotion tool. Previous research found that social influence is a significant predictor of engagement in online environment, specifically social network sites, suggesting that social pressure from others users would result in favorable attitude toward these platforms (Kaba& Touré, 2014; Pelling & White, 2009). For instance, a study by Escobar-Rodriguez et al. (2014) demonstrated significant effect between social influence and students perceived advantages of Facebook as a learning tool. Similarly, social influence was found to affect business entrepreneurs to adopt social media as a business platform (Nawi et al., 2019; Nawi et al., 2016).

Even though, a prior study indicated that social influence has no relationship with intention to adopt social media as business tool (Mandal & McQueen, 2012), recent researches stated that social influence undoubtedly plays an essential role in one's intention to use these online platforms (Akgül, Yaman, Geggil, & Yavuz, 2019; Gruzd, Staves, & Wilk, 2012). Moreover, in healthcare context, Hanson et al. (2011) found that social influence is the most significant factor on health educator to adopt social media as health promotion tool. Accordingly, this study proposing that social influence would enhance the adoption of social media as a health promotion tools among MHPs, as they believe that these platforms would improve their communication capability. Hence, this study hypothesizes that:

H3: social influence positively associated with social media adoption as a health promotion platform

Facilitating conditions

Venkatesh et al. (2003) define facilitating conditions as the 'degree to which an individual believes that an organizational and technical infrastructure exists to support the system'. It is a certain condition that either facilitates or constrains individuals to perform specific behaviours. For instance, this condition could be in the form of system infrastructure, age differences, experience or familiarity with the system, which reflect individual's acceptancy to utilize or reject (Al-Qeisi, Dennis, & Abbad, 2015). In social media regard, facilitating conditions considered as key factors of adoption (Nawi et al., 2016), and defined in terms of resource and knowledge (Curtis et al., 2010). Likewise, Gruzd et al. (2012) argued that time consuming and information overload are the biggest individuals' concerns which might constrain social media adoption, assuming negative association with decision to use these platforms. Embracing a new technology does not goes naturally with everyone, it may include different characteristics that people need guidance to understand the effective and beneficial purpose of this technology.

Previous studies provide empirical evidences that facilitating conditions affect social media adoption as a business platform (Escobar-Rodriguez et al., 2014; Nawi et al., 2019). It can be concluded that if facilitating conditions do not meet user's expectations, it will have negative effects on adoption of these platforms. Additionally, a study on the adoption of social media as health promotion tools revealed that there is no significant effect of facilitating conditions on health educators as they consider these platforms non-productive, non-essential and waste of time (Hanson et al., 2011). Based on the aforementioned literature, this study assumes that facilitating affect the adoption of social media as a health tool promotion among MHPs. Hence, this study hypothesizes that:

H1: facilitating conditions negatively associated with social media adoption as a health promotion platform

Conceptual Framework

The adoption of social media as health promotion tool among MHPs is a critical issue since there is limited research related the adoption of these platforms in health context. This study proposes that performance expectancy, effort expectancy, social influence, facilitating conditions, and perceived enjoyment are key adoption factors of social media as health promotion tool among MHPs. The unique characteristics of social media such as time, cost, audience, and relation present a new opportunity for MHPs which urge the need to investigate the acceptance and use of such technology.

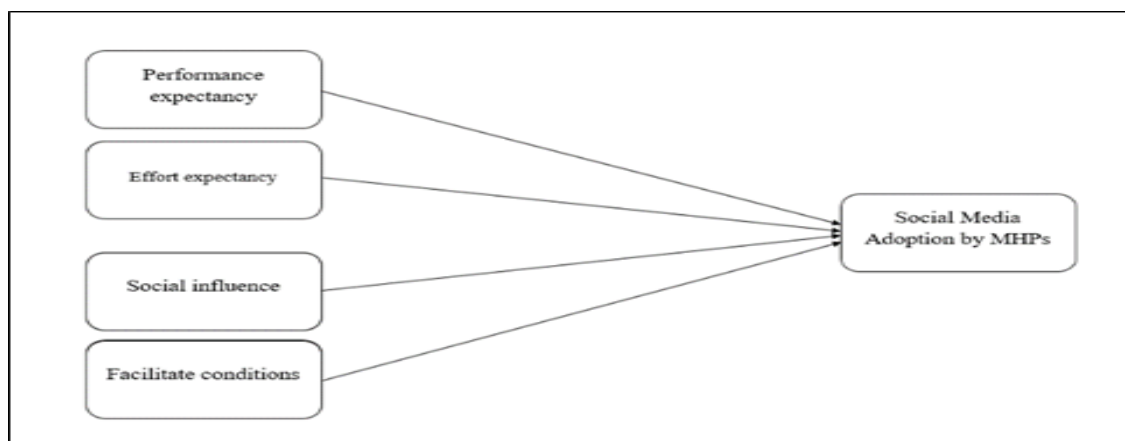


Figure 1. The Unified Theory of Acceptance and Use of Technology

Conclusion

In conclusion, the aim of this study is to identify the factors contributing to the acceptance of social media as a healthcare promotion tools among MHPs. According the review of previous related literature, it was found that the factors contributing to the acceptance of social media as a healthcare promotion tools are Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Condition. The findings will assist this research in understanding the acceptance of social media as a healthcare platform among MHPs. practically, this paper will guide the policy makers and health practitioners to refine the current strategies on improving citizens' self-health awareness. Delivering a highly professional and trusted health message through these platforms would achieve brilliant outcomes such as avoiding potential treatment cost, and sources allocation competency.

References

- Allan, Akgül, Y., Yaman, B., Geçgil, G., & Yavuz, G. (2019). The Influencing Factors for Purchasing Intentions in Social Media by Utaut Perspective Structural Equation Modeling Approaches to E-Service Adoption (pp. 254-267): IGI Global.
- Al-Qeisi, K., Dennis, C., & Abbad, M. (2015). How viable is the UTAUT model in a non-Western context? *International Business Research*, 8(2), 204-219.
- Alkhateeb, F. M., Clauson, K. A., & Latif, D. A. (2011). Pharmacist use of social media. *International Journal of Pharmacy Practice*, 19(2), 140-142.
- Alsaleh, D. A., Elliott, M. T., Fu, F. Q., & Thakur, R. (2019). Cross-cultural differences in the adoption of social media. *Journal of Research in Interactive Marketing*, 13(1), 119-140.
- Attuquayefio, S., & Addo, H. (2014). Using the UTAUT model to analyze students' ICT adoption. *International Journal of Education and Development using ICT*, 10(3).
- Carlos Martins Rodrigues Pinho, J., & Soares, A. M. (2011). Examining the technology acceptance model in the adoption of social networks. *Journal of Research in Interactive Marketing*, 5(2/3), 116-129.
- Chua, P. Y., Rezaei, S., Gu, M.-L., Oh, Y., & Jambulingam, M. (2018). Elucidating social networking apps decisions: performance expectancy, effort expectancy and social influence. *Nankai Business Review International*, 9(2), 118-142.
- Curtis, L., Edwards, C., Fraser, K. L., Gudelsky, S., Holmquist, J., Thornton, K., & Sweetser, K. D. (2010). Adoption of social media for public relations by nonprofit organizations. *Public Relations Review*, 36(1), 90-92.
- Dahnil, M. I., Marzuki, K. M., Langgat, J., & Fabeil, N. F. (2014). Factors influencing SMEs adoption of social media marketing. *Procedia-social and behavioral sciences*, 148, 119-126.
- Escobar-Rodrguez, T., Carvajal-Trujillo, E., & Monge-Lozano, P. (2014). Factors that influence the perceived advantages and relevance of Facebook as a learning tool: An extension of the UTAUT. *Australasian Journal of Educational Technology*, 30(2).
- Esteve Del Valle, M., Gruzd, A., Haythornthwaite, C., Paulin, D., & Gilbert, S. (2017). Social media in educational practice: Faculty present and future use of social media in teaching. Paper presented at the Proceedings of the 50th Hawaii International Conference on System Sciences.
- Gruzd, A., Staves, K., & Wilk, A. (2012). Connected scholars: Examining the role of social media in research practices of faculty using the UTAUT model. *Computers in Human Behavior*, 28(6), 2340-2350.
- Hanson, C., West, J., Neiger, B., Thackeray, R., Barnes, M., & McIntyre, E. (2011). Use and acceptance of social media among health educators. *American Journal of Health Education*, 42(4), 197-204.

- Hazzam, J., & Lahrech, A. (2018). Health Care Professionals' Social Media Behavior and the Underlying Factors of Social Media Adoption and Use: Quantitative Study. *Journal of medical Internet research*, 20(11), e12035.
- Humaid, A. B., & Ibrahim, Y. M. (2019). The Examination of Factors Influencing Saudi Small Businesses' Social Media Adoption, by Using UTAUT Model. *International Journal of Business Administration*, 10(2), 96-114.
- Jane, M., Hagger, M., Foster, J., Ho, S., & Pal, S. (2018). Social media for health promotion and weight management: a critical debate. *BMC public health*, 18(1), 932.
- Kaba, B., & Touré, B. (2014). Understanding information and communication technology behavioral intention to use: Applying the UTAUT model to social networking site adoption by young people in a least developed country. *Journal of the Association for Information Science and Technology*, 65(8), 1662-1674.
- Mandal, D., & McQueen, R. J. (2012). Extending UTAUT to explain social media adoption by microbusinesses. *International Journal of Managing Information Technology*, 4(4), 1.
- Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A., & Hoving, C. (2013). A new dimension of health care: systematic review of the uses, benefits, and limitations of social media for health communication. *Journal of medical Internet research*, 15(4), e85.
- Nawi, N., Mamun, A. A., Nasir, N. A. M., & Muniady, R. (2019). Factors Affecting the Adoption of Social Media as a Business Platform: A Study among Student Entrepreneurs in Malaysia. *Vision*, 23(1), 1-11.
- Nawi, N., Nasir, N. A. B. M., & Al Mamun, A. (2016). Factors contributing to the acceptance of social media as a platform among student entrepreneurs: A review. *Mediterranean Journal of Social Sciences*, 7(2), 42.
- Pelling, E. L., & White, K. M. (2009). The theory of planned behavior applied to young people's use of social networking web sites. *CyberPsychology & Behavior*, 12(6), 755-759.
- Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2014). Technology acceptance model (TAM) and social media usage: an empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6-30.
- Serben, D. F. (2014). The examination of factors influencing social media usage by African American small business owners using the UTAUT model. Capella University.
- Shaw, T., McGregor, D., Brunner, M., Keep, M., Janssen, A., & Barnet, S. (2017). What is eHealth (6)? Development of a conceptual model for eHealth: qualitative study with key informants. *Journal of medical Internet research*, 19(10), e324.
- Thackeray, R., Neiger, B. L., Smith, A. K., & Van Wagenen, S. B. (2012). Adoption and use of social media among public health departments. *BMC public health*, 12(1), 242.
- The Star Online. (2019). An outlook on the Malaysian healthcare scene for 2019. Retrieved from <https://www.star2.com/health/2019/01/09/malaysian-healthcare-scene-2019/>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.

Author Information

Tha'er Majali

Azizah Omar

Malek Alsoud

Ibrahim Alhassan
