ROLE PLAYING FOR EFFECTIVE ONLINE HEALTH COMMUNICATION – A CASE STUDY OF INTERNET-BASED CHAT ROOMS

Joyce Yi-Hui Lee, Department of Information Management, Yuan Ze University, Chung-Li, Taiwan, R.O.C., yhl@saturn.yzu.edu.tw
Linda Lin-Lin Li, Department of Information Management, Yuan Ze University, Chung-Li, Taiwan, R.O.C., s1006221@mail.yzu.edu.tw

Abstract

The widespread use of the internet is transforming the delivery of health information and communication. In particular, the inherent socio-technical attributes of computer-mediated communication (CMC), such as online open forums, chat rooms and blogs provide a novel opportunity for offering personalized health information and social support. However, to date, little research has been carried out to assess this context and this paper is aimed at addressing this lacuna, thereby providing clearer understanding of this complicated phenomenon and its intrinsic elements. To achieve this, we conducted a case study in an online open forum composed of a number of chat rooms used for communication about health issues, mainly depression. Our early analysis has revealed that participants (i.e. healthcare professionals, web instructors and users) take on different roles in order to ensure that the online forum functions in a lively and sustainable manner.

Keywords: CMC, chat room, healthcare, social support
1 INTRODUCTION

For a number of years, the Internet has been widely available to the general public and matched with this there has been a tremendous growth in using computer-mediated communication (CMC) techniques (e.g. email techniques and chat rooms) for health purposes (Kummervold et al. 2008; Pew Internet & American Life Project 2009). Consequently, it has empowered patients to play a bigger part in managing health matters rather than merely relying on their doctors’ advice, invariably offered through face-to-face (FTF) appointments (Shaw 2009; Spence 2010). CMC in particular has been performing a key role in this context because they can be employed to deliver preventative healthcare messages (Kreps 1998; Walther, Pingree, Hawkins, & Buller 2005), and can be an opportunity to offer interactive and tailored health information and social support to participants (Neuhauser & Kreps 2010; Walther et al. 2005; Zufferey & Schulz 2010). Not surprisingly, there has been a growing body of literature that documents the importance of CMC-based health communication as a promising tool for enhancing both health and social support (Armstrong & Powell 2008; Bayliss, Ellis, & Steiner 2007; Berger, Wagner, & Baker 2005; Lasker, Sogolow, & Sharim 2005).

Whilst there has been a rise in the reliance on CMC techniques for health related communication, we know relatively little about how people use its various forms for obtaining healthcare advice and social support, and what their preconceptions are when so doing. Although some studies have considered this issue from the perspective of the interactivity afforded by CMC (e.g. Lasker et al. 2005; Walther et al. 2005), with several scholars placing much emphasis on its (a) synchronicity (e.g. Zufferey & Schulz 2010) for delivering content to users, we still require a clearer and more in-depth understanding of the course of computer-mediated health communication one that takes into account the medium’s novel attributes. Regarding this, CMC’s inherent features allow users to: foster a social identity, have their privacy protected and promote homophily, in relation to health communication (Walther et al. 2005; Zufferey & Schulz 2010). This leads to two intriguing research questions: How can users ensure effective computer-mediated health communication with appropriate social support? How does CMC influence health communication and to what extent? This study therefore aims to address these questions through exploring the potentialities and limitations of extant computer-mediated health communication carried out for the purposes of delivering health and social support. It is anticipated that the research outcomes will make an important contribution to the debate on improvement and refinement of online health communication systems.

2 UNDERPINNING THEORY

The rapid expansion of the internet has increased the ease with which the public can discover and obtain health-related information online. Whereas in the past, people may have merely consulted face-to-face, their doctors, other experts, family members or friends for health advice, nowadays
many are reading and posting comments on blogs (Kovic, Lulic, & Brumini 2008), watching and listening to podcasts (Zufferey & Schulz 2010), participating in online communities (Frost & Massagli 2008; Lasker et al. 2005), and consulting medical practitioners through chat systems (Eysenbach, Powell, Englesakis, Rizo, & Stern 2004; Zufferey & Schulz 2010). In support of this situation, while people still go to see a doctor with their medical concerns, in Europe, 52.2% of the population use the internet for health purposes (Kummervold et al. 2008), and in the USA, 61% of adult patients seek and gain health information from the internet (Pew_Internet_&_American_Life_Project 2009). In other words, it is apparent that the pursuit of health advice has been taking place not only in offline arenas, but has also drawn upon the broader field of online sources. Moreover, with regards to health advice, the internet has been recognized as having great potential for storing large volumes of information and providing interactive and evidence-based knowledge (Bayliss et al. 2007; Kerr, Murray, Stevenson, Gore, & Nazareth 2006; Zufferey & Schulz 2010).

Health communication has been described as ‘the central social process in the provision of health care delivery and the promotion of public health’ (Kreps 1998, p.238) and queries are being raised regarding how this can be maintained through digital media (Snyder & Hamilton 2002) in particular in terms of social transactions between senders and receivers (Smith 1982). Walther’s review (2005) of extant studies regarding CMC systems identified a number of socio-technical attributes, including: interactivity, presence, homophily, social distance and anonymity/privacy that exist in online health communication, in that end users can find effective and attractive. Moreover, several health communication studies (Neuhauser & Kreps 2010; Rice 2001; Zufferey & Schulz 2010) have contended that interactivity is the communication attribute that has the greatest power to improve online health promotion.

Nevertheless, what aspects of online opportunities are most salient for the user are contested. Some researchers consider that the importance of interactive communication is related to the deeper value of participation (Neuhauser & Kreps 2010), whilst others consider its degree of reliability is paramount, namely, that users often decide whether or not to participate depending on the reputation of the website or communication systems (Eysenbach & Kohler 2002; Kerr et al. 2006). In a similar vein, synchronicity of communication can be perceived as a risky feature because potentially, a user could be emotionally overloaded by peer interaction and may be forced to share painful personal experiences and consequentially, may be much less enthusiastic about synchronous communication systems, as compared to asynchronous ones (Zufferey & Schulz 2010). In addition, it has been argued that asynchronous systems increase the user’s ability to store and retrieve information, facilitating what Clark and Bernana (1991) have termed reviewability.

Rice (2001) pointed out that the internet is beginning to shape and redefine health communication as well as even increasing health communication problems. Certainly, from the above it can be seen that
there is much evidence that current online health communication has room for improvement. However, although scholarly attention has begun to focus on CMC’s features in relation to health communication, this has invariably involved theoretical postulation around the relevant issues rather than practical investigation of real life scenarios. Consequently, the goal of this study is to address this gap in the literature by analyzing data collected from users experiencing CMC-based health communication and social support.

3 CASE STUDY AND PRELIMINARY ANALYSIS

For this study, the second author conducted a case study of the online open forum The Helper (a pseudonym). In order to obtain in-depth and multiple-source data from the case, she participated in nearly 86 chat rooms held by The Helper on a weekly basis and made observations of what was happening for three months.

3.1 CASE DESCRIPTION

This study was based around Helper, a non-profit foundation’s website located in Taiwan. Every week a chat topic was set, but sometimes the participants chose not to talk about this specific issue in the chat room. Each time there were approximately 15 people in total all of whom remained anonymous. The chat provided a forum for users to express their emotions and each session lasted approximately one and a half hours.

3.2 PRELIMINARY ANALYSIS AND FINDINGS

This study used qualitative content analysis which is regarded as a useful method for textual investigation into health communication matters (Cavanagh 1997; Hsieh & Shannon 2005). Some researchers have referred to content analysis as a quantitative treatment of qualitative data, but this is not our primary goal in this article as the core of our content analysis is ‘to provide knowledge and understanding of the phenomenon under study’ (Downe-Wamboldt 1992, p314). That is, by adopting qualitative content analysis, we are able to use our preliminary data analysis and findings to flesh out some of the key issues around on-line health communication as presented in the remainder of this paper.

3.2.1 PROFESSIONALS, WEB INSTRUCTORS AND USERS

This platform has been very active for the past nine years, with different role-playing forming an important feature of communications. With regards to this, three major roles were identified: professionals, web instructors and users. The roles are described as follows: the professionals help participants with professional healthcare opinions regarding the topic under discussion, clarify points when users express misinformed ideas as well as offering assistance and support. The web instructors, a role often taken in turn by different people, are responsible for maintaining order, monitoring the time and making empathetic interjections. With respect to the last category, users can be divided to
"initiators" and "participators" in the discussions and they play an important role in giving peer support in the chat room.

3.2.2 LANGUAGE PATTERNS

• PATTERNS ASSOCIATED WITH THE PROFESSIONALS

Role-playing emerges as an important feature with different language patterns being associated with each role. For instance, in the following excerpt, the professional encourages the user to talk through his (her) negative feelings by asking questions:

User A: Is falling in love really so difficult?
Professional: User A, are you being troubled by your feelings?
User A: I see the person whom I like liking others, and I feel so sad.
Professional: It must be very uncomfortable. Have you said you like him?
User A: Well ... I was very upset. He liked me at first, but then I slowly began to accept that he doesn’t anymore. I don’t want to go home now. I just want to stay out.
Professional: Why?
User A: I do not want my family to see me feeling upset and confused.
Professional: This is really hard for you. What about you finding someone else to talk to or to be with you?
User A: No ...

In this case, it emerges that User A started talking negatively using emotional language to express his (her) thoughts, and the professional continued to probe and question User A further, in order to get him (her) to talk in more detail. However, User A remained stuck with his (her) negative feelings so the professional asked yet more questions so as to encourage other users in the chat room to join the discussion and contribute advice, based on their own experiences:

Professional: …Users- what do you want to say to our User A? She says she just wants to commit suicide and her mood seems to be very low?
(Other users make recommendations and relate personal experience. User A sounds calm down)
User A: mm… I will think about it.

This approach leads to User A gradually expressing fewer negative comments in his (her) responses, eventually concluding with: "mm… I will think about it.” By the end of the session the atmosphere in the chat had become calm. Moreover, when users started using more positive words, the professional offered warm words of encouragement that allowed them to be more assured of their own confidence and share stories and ideas from their own lives:
User B: Back to the clinic tomorrow and I want to tell the doctors about my recent developments and share my progress, I feel so good emotionally!

Professional: User B expects to meet with the physicians! You can think about what he wants to say.

... 

Professional: User B’s experience is a very good example. Having people who you can trust to talk to about things is a very important part of it!

... 

Professional: User B, I can also believe that a lot of people just like you are getting better and better! Sometimes it requires some patience, but all your efforts will be rewarded with progress!

... 

Professional: You can feel good about yourself and that you are getting more and more confidence!

... 

Professional: This is a great experience! Your courage and efforts help to make yourself better and better!

... 

Professional: User B, I hope your story can give a lot of other people cause for hope!

• PATTERNS ASSOCIATED WITH WEB INSTRUCTORS

During the course of the chat, the web instructors, as an aside, encouraged users to speak in a light-hearted manner, so that the chat room atmosphere remained relaxed. For example, User C mentioned in the dialogue that a particular prescribed medication makes him (her) feel thirsty and every day he (she) drinks four cups of black tea. Later, when he (she) told the chat room members that the following day he (she) had a hospital appointment for blood tests, the web instructor interjected teasingly:

Web instructor: Yeah, how will you do the tests? By now all your blood is tea!

Another example of banter is the web instructor’s reminder to complete the questionnaire when users left the chat room and, as an encouragement, he (she) promised that all returns would be entered in a raffle for a small gift the following year. The web instructor however mistakenly wrote "tomorrow" and on realizing this error adopted a humorous tone by way of resolving the misunderstanding:

Web instructor: Next year! Whoops! I made a mistake; if I tried to do it by tomorrow I think I would have a heart attack!

• PATTERNS ASSOCIATED WITH USERS
It has emerged that users have created a special friendship in this chat room. This friendship is based on sharing because the words spoken by other people demonstrate that: they have had similar experiences and feelings, that their ideas resonate, one with another, and that mutual support and encouragement are freely given. Moreover, each user can take the initiative to open a topic for discussion or to express personal emotions, as evidenced in some conversations:

*User C:* Alone is my friend. Loneliness is my best friend ....
*User D:* I’m your good closest friend!! Ha ha. We are best friends.

Furthermore, other exchanges indicate that communication between users can bring about change in their negative thought patterns. In the dialogue given below, initially User E’s negative language is apparent regarding his (her) poor examination results, as would be expected, but then Users F and G give words of encouragement to E: "Open your mind and make the decision to take control of your life" and “the results cannot speak for all your efforts!” Subsequently User F referenced his own experiences to encourage E to modify his (her) thinking. Examples of their messages are as follows:

*User E:* In the preparation for each exam I work very seriously as I do not want to let the teachers and my parents be disappointed, but what I get in the results is always much worse than I expect–there is always a big difference.
*User F:* Open your mind and make the decision to take control of your life.
*User G:* The results cannot speak for all your efforts!
*User E:* I hate myself, what things do I do that are done well? The test scores are not ideal and even my grandmother called me to encourage me but to no avail.
*User F:* User E, at the moment all you have is angry words, and it is difficult to control the wounding things that people say. But you can take control by not listening. I used to think that they were very discouraging, but in the end no matter how frustrating it is, these things don’t help, so I try to stick to my own thoughts and I must try to focus on them clearly.
*User G:* If you are very depressed, others will be very frustrated to see you like this. I do not know whether it’s right for them to think this, but can verify that they do!
*User F:* So some people see I am very happy and ask why is he so happy? Others cannot give me happiness, but I can give them happiness!
*User E:* Thank you, I worked really hard at it, but they seem not to notice that. Only one of my secondary school teachers and you recognize it and give me encouragement, thank you.

4 DISCUSSION AND CONCLUSION

It is acknowledged that the internet is becoming a much relied upon source of information and succor to many patients and caregivers in their struggles with a wide range of medical issues. Moreover, the
use of CMC in developing novel forms of health and social support continues to grow. Previous studies regarding the potential opportunities that this innovation can offer have produced varied results, with some scholars indicating strongly that there are many benefits to be gained whilst others have not been so positive. In sum, there is still a long way to go and much to learn about the potentialities of interactive CMC systems and their application to health matters. Currently, the data analysis pertaining to this study is work in progress. Nevertheless, we are confident that by the time of the conference we will be in a position to offer more in-depth analysis of the rich findings that the research has generated.

References


Lasker, J. N., Sogolow, E. D., & Sharim, R. R. (2005). The Role of an Online Community for People With a Rare Disease: Content Analysis of Messages Posted on a Primary Biliary Cirrhosis Mailinglist. *Journal of Medical Internet Research, 7*(1), N.PAG.


