Computers in Human Behavior 34 (2014) 219–226

Contents lists available at ScienceDirect

Computers in Human Behavior

journal homepage: www.elsevier.com/locate/comphumbeh

Research Report

"I Have AIDS": Content analysis of postings in HIV/AIDS support group on a Chinese microblog

Yanru Guo *, Dion Hoe-Lian Goh

Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore

ARTICLE INFO

Article history:
Available online 3 March 2014

Keywords:
Informational content
Online support group
People living with HIV/AIDS
Socio-emotional content

ABSTRACT

With the widespread growth and adoption of new technologies, online platforms such as social network sites (SNSs) have become a channel for health information. Online groups have been set up for communication and interaction, among which many are for people with chronic illnesses, including people with HIV/AIDS (PHA). In the study of online communication behavior, the Social Information Processing Theory (SIPT) predicted people will develop deeper interpersonal relationships in online groups over time (Walther, 1996). However, the author argued that CMC content should be examined more closely to get a dynamic picture of how people interaction and how groups develop over time. Thus this paper attempted to refine SIPT by enriching the framework with detailed components, and used directed content analysis to categorize messages posted on the *PHA Support Group* on Sina Weibo, a China-based microblog. The results showed that the percentage of socio-emotional messages saw an increase of almost 1/3 over time, taking over informational messages as the major content in all online postings. Medical related informational messages surpassed non-medical related informational messages as time went by. Intimacy relationship messages saw drastic increase in the two time periods. This study refined SIPT by providing increased granularity of its categorization scheme to examine group communication more closely.

1. Introduction

As a chronic illness, HIV/AIDS requires lifelong changes and interventions in many aspects of one's life, especially in terms of physical health, psychological functioning, and social relations (Swendeman, Ingram, & Rotheram-Borus, 2009). To cope with their illness, seek and share health information, many people with HIV/AIDS (PHA) actively participate in social groups, especially online virtual groups (Rao et al., 2012). With the increasing popularity of SNSs, online social groups on SNSs have been widely used. Over time, these virtual groups have not only become a meeting place for communication among individuals, but also increasingly, a major resource for health information. More specifically, individuals living with conditions which are considered embarrassing or stigmatizing often regard online support groups as a safer environment in which to discuss sensitive issues (Buchanan & Coulson, 2007). Moreover, patients organize themselves in groups, not only to access health information, but also, to express the emotional aspects of being sick (Colineau & Paris, 2010). Therefore, SNSs are able to provide new possibilities for enhancing the delivery of health messages.

Much research has been conducted on the virtual groups for chronic illness (e.g., De la Torre-Diez, Diaz-Pernas, & Anton-Rodriguez, 2012; Mo & Coulson, 2008). Some of the studies have focused on creating typologies of groups, by analyzing the content of the messages. For example, De la Torre-Diez et al. (2012) studied 171 colorectal cancer groups (with 36,335 members), 216 breast cancer groups (with 7,765,483 members), and 527 diabetes groups (with 564,023 members) on Facebook and Twitter in 2011. Using content analysis, they identified five main types of groups, namely, fund collecting groups (to collect money to fund free mammography services), awareness groups (to educate people about these diseases), support groups (to meet the information and emotional needs of survivors or those affected by the disease, e.g., their relatives and caregivers), prevention groups (to raise prominence of a website, sometimes by selling products or services), and disease-fighting groups (created to promote research that fights the disease).

Online support groups, among others, have received much research attention, and an abundance of literature has explored their effectiveness, especially the positive effects in mitigating

* Corresponding author. Address: Wee Kim Wee School of Communication and Information, Nanyang Technological University, 31 Nanyang Link, Singapore 637718, Singapore. Tel.: +65 94527949.
E-mail address: W120030@ntu.edu.sg (Y. Guo).

http://dx.doi.org/10.1016/j.chb.2014.02.003
0747-5632/

the psychosocial impact of dealing with disruptive events and critical diseases such as breast cancer, HIV/AIDS, and depression (Vilhauer, 2009). In addition, because online communication differs remarkably from traditional face-to-face (FtF) communication, such as the unique features of anonymity and asynchronicity, scholars have explored interpersonal relationships and group dynamics formed in such groups. Among these, one interesting theory, Walther's (1996) Social Information Processing Theory (SIPT) is used as the theoretical foundations of this paper. Briefly, SIPT argues that even without nonverbal cues, people are able to develop close relationships online. In fact, when given sufficient time, online relationships can develop to an even deeper level than that possible in FtF interactions (Walther, 1996).

From the theoretical viewpoint, SIPT only examines online group dynamics under the two broad categories of task-oriented content and emotion-oriented content (Walther, 1996). However, these two general categories deserve closer examination to better understand the content of online group communication. Specifically, each category could be broken down into more detailed components, and the relative composition studied to see whether it changes over time as the online group interaction evolves. For example, under the category of positive emotional messages, positive messages posted on online support groups could take many different forms, such as network support (to introduce new social contacts), tangible support (to provide financial and material aid), emotional support (to provide comfort and companionship), and esteem support (to tell others that they are accepted and valued).

From the methodological viewpoint, as one objective of social research is to study the character of human behavior in natural setting, and not merely from what the respondents say in interviews about what they do elsewhere (Genzuk, 2003), this paper will use an unobtrusive method to generate findings by analyzing PHA's postings online, and thus conducts the research from the perspective of PHA. Such a method is also closer to the naturalistic paradigm. While surveys and interviews focus on individual perspective without social context, this paper will take into consideration of group dynamics in a social setting. Directed content analysis method will be used to create a more suitable coding frame based on components in Interaction Process Analysis (IPA) from Bales (1950) and Social Support Behavior Code (SSBC) categorization system from Suhr, Cutrona, Krebs and Jansen (2004).

Thus after carefully reviewing extant literature, it could be gleaned that researchers have separately studied different aspects of online support group communication, such as positive socio-emotional content of social support, or negative socio-emotional content of stigmatization, without considering the change of group dynamics as suggested by SIPT. However, SIPT only offered broad categorization in the lack of detailed components, namely, positive emotional content, negative emotional content, and informational content. Therefore, this paper attempts to bridge the gap between the two lines of research, by synthesizing them into a new coding frame which is more granular and comprehensive, and use that to examine the *PHA Support Group* communication dynamics. The coding frame will also draw from IPA (Bales, 1950) and SSBC (Suhr et al., 2004) as they enable a detailed study of the group interaction process. The two specific research objectives are proposed below:

1. To study the changes in the composition of socio-emotional content in the *PHA Support Group* over time; and
2. To study the changes in the composition of informational content in the *PHA Support Group* over time.

2. Literature review

This research draws mainly upon Walther's (1996) Social Information Processing Theory (SIPT). Therefore, the first part of this section will offer detailed explanation of SIPT, while the remaining will review some other studies that focused on positive and negative emotional communications in CMC.

2.1. Social Information Processing Theory (SIPT)

Prior to Walther, many researchers pointed out the "leanness" of CMC for different reasons. Some of these researchers claimed CMC too lean for task-related communication, while others regarded CMC too lean for social communication. Walther (1996) tried to reconcile two lines of research by arguing that the leanness (or impersonality) has been attributed to a lack of nonverbal cues (leading to reduced social presence) and reduced interactivity (leading to reduced immediacy). Additionally, scholars claimed that "friendly" or "intimate" interactions could only be achieved through FtF interactions. However, Walther pointed out two things: (1) there are occasions in which less friendly communication is desirable; and (2) there are occasions in which the interpersonal aspects of CMC interactions are equal or surpass those in FtF interactions. As a result, Walther proposed the SIPT as an explanation to understand CMC. Here is a brief summary of his theory.

First of all, SIPT assumes that all communicators are motivated to develop social relationships. In CMC, this formation of simple impressions is achieved by sending textual information. At the same time, communicators also test their assumptions about others using knowledge-generating activities. So over time, interpersonal knowledge about the other communicators is refined, and this manifests itself in "warmer" relational communication among CMC users. In addition, because less social information per message is exchanged in CMC, the rate of social information exchanged is slower than that in FtF communication. As a result, interpersonal impressions on CMC would develop at a slower pace than that in FtF. However the final amount of social information exchanged would be the same in both FtF and CMC. This means that when given time, CMC can be used to develop rich interpersonal relationships.

Walther (1996) postulated that what affects our perceptions about CMC is the way such research had been conducted. He stated that CMC experiments on groups tended to be one-time-only, and time-limited. The time intervals provided for in the experiments are simply too short for the participants to manage their task concerns, let alone the relational ones. In addition, the participants were assembled for a one-off experiment, and had no expectation that they would ever meet again. The anticipation of future interactions motivates communicators to enact more relationally positive communication. Interpersonal communication on CMC is shaped by whether or not participants expect on-going interaction. Walther (1996) noted that some CMC groups outperformed FtF groups interpersonally. He called such communication hyperpersonal communication. Drawing upon existing theories, he explained how, in the absence of social presence, such intimate interpersonal communication could have come about.

So put simply, Walther (1996) proposed that given enough time, CMC was rich enough to form social relationships, just as well as FtF communication is. To test his theory, Walther collected empirical data, and the results supported his claim. The study found that the informational communication content would give way to emotional content as trust was formed via CMC, and positive emotional communication would surpass negative emotional communication. He offered a unique insight into CMC research by taking time into consideration; therefore, this paper will use Walther's SIPT as overarching structure of the coding frame and research discourse.