Computers in Human Behavior 35 (2014) 61–67

Contents lists available at ScienceDirect

Computers in Human Behavior

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

Social media metrics: Third-person perceptions of health information

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ARTICLE INFO

Article history:
Available online 17 March 2014

Keywords:
Social media
User feedback
Online health
Health behaviors
Third-person perceptions

ABSTRACT

The present study investigated the role of social media metrics (i.e., number of shares and comments) displayed alongside online news stories in shaping users' perceptions of the content and its influence. In a web-based experiment ($N = 144$), participants first read a cancer news story that displayed either a high or a low level of social media metrics, then reported their perceived story influence on the self and others, as well as their behavioral intentions. In the low social media metrics condition, the general story influence was perceived to be stronger for others than for the self, indicative of the "third-person effect." This effect, however, was diminished to insignificant levels in the high social media metrics condition. Further, social media metrics had an ultimate indirect effect on behavioral intentions via the third-person effect. Theoretical and practical implications of these findings are provided in the end.

1. Introduction

With the ever-increasing rise in online news and information consumption, it has become apparent that elements specific to online content delivery (e.g., user reviews and comments, number of followers, etc.) have the ability to shape content perceptions in unforeseen ways. For example, user-generated comments have been shown to elicit perceptions of media bias (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2013; Lee, 2012) as well as increase purchase intention (Lee & Shin, 2014; Van Der Heide, Johnson, & Vang, 2013), while the number of followers on Twitter have been documented to impact content credibility (Westerman, Spence, & Van Der Heide, 2012).

Based on this evidence, it is reasonable to expect that these types of user feedback may have further bearing on perceptions of content influence. Indeed, media audiences routinely make judgments about general media impact and the ways in which messages affect others and themselves. Typically, this process results in stronger perceived media influence on others than on the self, a common perceptual bias labeled the *third-person perception* (TPP; Davison, 1983). Although this bias has been shown to be fairly stable across media and content types, as well as methodological approaches (Perloff, 2008), recent reviews have pointed out that almost all TPP research to date has been conducted in the context of traditional media, where knowledge about other audience members is practically inexistent (Tal-Or, Tsfati, & Gunther, 2009).

In an attempt to bridge this gap, the present research adds a new dimension to the study of TPP, by examining the potential role of social media metrics (i.e., number of shares and comments) in shaping users' perceived self-other discrepancy with regard to media influence. Social media metrics, typically displayed alongside online news stories, often provide cues about other users' media exposure, as well as their implicit attitudes and behaviors. We argue that this information has the potential to play an important part in how individuals form TPPs, a possibility that serves as the basis of the current investigation.

2. Literature review

2.1. Third person perceptions

A great deal of research has examined audiences' perceptions of media effects on themselves and other people. Evidence suggests that most individuals tend to see themselves as largely invulnerable to media influence, but expect that others are quite susceptible to it. This self-other discrepancy provides the foundation for the *perceptual hypothesis* of TPP (Davison, 1983), which highlights the common tendency to judge media influence, particularly the undesirable kind, as stronger on others than on the self.

Several psychological mechanisms have been offered as plausible explanations for this phenomenon. For example, scholars have argued that TPPs are a product of individuals' self-serving psychological motivations, in particular the need for self-enhancement. The need for self-enhancement pertains to individuals' motivation to portray themselves in a more positive light as compared to

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http://dx.doi.org/10.1016/j.chb.2014.02.025
0747-5632/

others when estimating the magnitude of media influence (e.g., Gunther & Mundy, 1993; Meirick, 2005), and is thought to be a result of the common misconception that one is better than average. Disputing this motivational account, other scholars have offered competing explanations highlighting cognitive mechanisms, instead. Such mechanisms typically invoke attributional approaches (e.g., Gunther, 1991)—more generally, the different ways in which individuals process information about themselves as opposed to others (e.g., Gunther, 1991; McLeod, Detenber, & Eveland, 2001), or how they view themselves in relation to others (e.g., Reid & Hogg, 2005; Schmierbach, Boyle, Xu, & McLeod, 2011).

In addition to these internal psychological mechanisms, research has further identified several external conditions that influence the magnitude of TPPs. Two of these conditions pertain to the nature of "others" (i.e., *the social distance corollary* and *the target corollary*). Specifically, the self-other discrepancy has been shown to intensify with increasing social distance (*the social distance corollary*; Cohen, Mutz, Price, & Gunther, 1988), or perceived media exposure of the target comparison group (*the target corollary*; McLeod, Eveland, & Nathanson, 1997). Just as it is the case with the internal explanatory mechanisms underlying TPPs, evidence for these moderating conditions has yielded mixed conclusions. What is increasingly clear, however, is that internal processes work in tandem with external conditions to shape how we think that the self and others are affected by the media (Schmierbach, Xu, & Boyle, 2012).

In light of this discussion, it is apparent that what we make of "others" is a central component of TPPs. One common aspect to almost all available TPP research to date, however, is provided by the context of study—i.e., traditional media such as radio, film, or television (Tal-Or et al., 2009). Considerably less attention has been devoted to exploring TPPs in the context of new media, despite the fact that attending to media content online often enables individuals to gain at least some knowledge pertaining to how many other users actually attend to the same content and how they might receive and respond to it. This ability to learn more about other audience members in new media environments is mostly due to the increasingly interactive and social nature of online platforms in the last decade. Indeed, many online news and information platforms routinely incorporate user feedback tools for specific stories and articles (Knobloch-Westerwick, Sharma, Hansen, & Alter, 2005), as well as aggregate social media feedback pertaining to how liked or shared an article is, or the number of comments it receives. The knowledge one gains about "others" via these tools may profoundly alter how TPPs form.

Examining the role of social media metrics in shaping TPPs is precisely the purpose of the current investigation. Specifically, this study explores the influence of high versus low levels of social media metrics (i.e., number of comments and shares—via Facebook, Google+, Twitter, and email) on TPP and, ultimately, on behavioral intentions in the context of health news, in particular. According to the Pew Research Center's *Health Online* 2013 project (Fox & Duggan, 2013), as of September 2012, 81% of U.S. adults are Internet users and 72% of those report they have looked online for health information in the past year. This recent surge in consumption of online health information, along with the potentially problematic health outcomes of judging oneself as immune to health news influence, render health news a particularly relevant site for research implicating social media metrics and TPPs.

First, consistent with previous studies pertaining to perceived risk (e.g., Cho, Lee, & Chung, 2010; Wei, Lo, & Lu, 2008), we expect that the threat to one's health embedded in health news is likely to be viewed as unpleasant and lead to the classic TPP pattern—others are more affected by it than the self.

H1. The overall influence of the news story about cancer risk will be perceived to be stronger for others than for the self.

2.2. Social media metrics and third-person perceptions

Social media metrics are mainly intended to increase audience feedback and, indirectly, web traffic (Lee, 2012). Recent studies, however, have highlighted their significant psychological implications, particularly concerning their ability to alter content perceptions. For example, mere awareness of various popularity metrics has been shown to affect users' perceptions of content credibility (Westerman et al., 2012) and to dictate their patterns of selective exposure to news (Knobloch-Westerwick et al., 2005). In view of these findings, it is further plausible that the more readily noticeable aggregates of social media metrics displayed alongside online news articles affect not only perceptions of content, but also perceptions of content influence.

Fundamentally, the numerical specificity of these metrics (often expressed as number of likes, shares and comments) provides observers with a straightforward means for inferring other people's level of exposure to a particular news story or article. At the same time, these metrics may also serve as a proxy for inferring others' attitudes towards media content; sharing and commenting on an article may communicate a certain degree of endorsement of the message. Based on the two corollaries concerning the nature of others discussed above—the social distance and the target corollary—we propose several competing mechanisms underlying the potential impact of social media metrics on TPPs.

To begin with, it is possible that high levels of social media metrics serve to diminish TPPs. Specifically, drawing from the social distance corollary, we argue that awareness of high levels of social media metrics play a role in *decreasing* the perceived social distance between the self and others and, as a result, lead to similar ratings of media influence for the self and others. The *bandwagon effect*, a long-documented social influence technique, provides a particularly fitting framework to support this expectation. Validated in a variety of contexts, the bandwagon effect concerns the modeling of one's attitudes and behaviors based on others' endorsements, or social proof (Cialdini, 1993). For example, products that receive the highest recommendations are likely to entice consumers the most (Sundar, Oeldorf-Hirsch, & Xu, 2008). Similarly, voters (especially independent voters or those who have weak party affiliations) are more likely to vote for the party candidate who is widely expected to win (Goidel & Shields, 1994). Said to be driven by two interrelated human needs—the need to belong and the need to conform—the bandwagon effect is a reflection of others' normative influence; "if others do it, so should I." In the context of the present study, high levels of social media metrics may indeed function as "injunctive norms", or norms involving what one should do (Cialdini, Kallgren, & Reno, 1991) by communicating that the cancer news story is widely endorsed. From this perspective, high levels of social media metrics are likely to increase the normative appeal of the story and foster users' desire to "jump on the bandwagon," effectively minimizing the social distance between the self and others (i.e., increasing perceived similarity). This reduced social distance, then, may well undermine observers' self-enhancement motivations, leading to similar estimates of media influence for the self and others.

Alternatively, it could be that high levels of social media metrics serve to exacerbate, rather than diminish, TPPs. Building on the *target corollary* of TPPs (McLeod et al., 1997), awareness of social media metrics may lead observers to infer others' degree of exposure to the cancer story. From this perspective, high levels of social media metrics may not necessarily translate to lower perceived social distance between the self and others, but to higher perceived likelihood of exposure to the article among others. This perception would ultimately render the others simply more susceptible to media influence in observers' eyes (i.e., "exposure-is-effect heuristic"; Sun, Shen, & Pan, 2008, p. 260); as a result, observers are likely