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To comment or not to comment?: How virality, arousal level, and commenting behavior on YouTube videos affect civic behavioral intentions

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ABSTRACT

An experiment investigated the effects of commenting behavior, virality, and arousal level on anti-cyberbullying civic behavioral intentions. Participants ($N = 98$) were exposed to cyberbullying-related YouTube videos that varied in arousal level (low vs. high), number of views (low vs. high), and commenting behavior where they either commented on the video or did not comment after watching it. Participants expressed greater Civic Behavioral Intentions (CBI) upon exposure to highly than lowly arousing videos. Additionally, they expressed greater CBI when instructed to comment on highly arousing videos with high than low views, while those who did not comment on highly arousing videos expressed greater CBI upon exposure to videos with low than high views. As for lowly arousing videos, participants who were instructed to comment expressed greater CBI when the video had low than high views, while those who did not comment did not differ in CBI as a function of the number of views. Viral behavioral intentions (VBI) were the strongest predictors of CBI with degrees that varied as a function of commenting behavior, virality, arousal level, and the interactions among them. Results are discussed within the framework of the relationship between online engagement and offline civic action.

1. Introduction

Bullying and cyberbullying have been characterized as phenomena that prevail in schools. Between a third and a half of adolescents report having been cyberbullied, and 80% of them observe others being cyberbullied (BullyingStatistics.org, 2013; Hinduja & Patchin, 2010; i-SAFE, 2004; Lenhart, 2007; National Crime Prevention Council, 2010; Patchin, 2010; Statistics Brain, 2013; Webster, 2010). A recent study found that about one-fifth of college students have been bullied and cyberbullied and about 70% of students observed others being cyberbullied, indicating the problem's prevalence on college campuses (Alhabash, McAlister, Hagerstrom, Quilliam, Rifon, & Richards, 2013).

Cyberbullying refers to the use of information communication technologies (ICTs) to perform repeated intentional acts of direct (e.g., repeated direct attacks) or indirect (e.g., posting harmful messages) aggression that reflect a power imbalance between the offender and the victim (Langos, 2012; Patchin & Hinduja, 2006; Wade & Beran, 2011). Compared to offline bullying, cyberbullying is often facilitated by anonymity or the perception of anonymity, has less parental oversight, lacks time and space restrictions, is accessible by large audiences, is maintained online, and has severe consequences (Patchin & Hinduja, 2006; Raskauskas & Stoltz, 2007; Strom & Strom, 2005). While the prevalence of offline bullying declines with age, cyberbullying happens among older youth. Because cyberbullying allows one to be anonymous and, unlike offline bullying that is space- and time-constrained, it lives longer in the online sphere, resulting in more devastating consequences in relation to depression, psychosomatic problems, lowered self-esteem, suicidal behavior, and poor school performance; such consequences are often underestimated by bullies, parents, school administrators, and victims themselves (Kiriakidis & Kavoura, 2010; Nunnally, 1967; Patchin & Hinduja, 2006; Strom & Strom, 2005; Wade & Beran, 2011).

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While much of the research on offline bullying and cyberbullying focuses on middle and high school students (e.g., Kiriakidis & Kavoura, 2010; Nunnally, 1967; Patchin & Hinduja, 2006; Strom & Strom, 2005; Wade & Beran, 2011), little research explores this phenomenon among college students, and much more scarcity is found in relation to intervention programs addressing this issue. Past research shows that between two to three in every 10 students report being cyberbullied during college, with about one in every 10 students reporting they have cyberbullied others (Kowalski, Giumetti, Schroeder, & Reese, 2012; MacDonald & Roberts-Pittman, 2010). Zalaquett and Chatters (2014) found high associations between offline bullying and cyberbullying victimization in high school and college; where those bullied in college also reported being bullied during high school. Offline bullying and cyberbullying among college students is associated with negative psychological and health outcomes. College students who are victims of cyberbullying report greater levels of anxiety; depression; suicidal ideation, planning, and attempts; lower self-esteem; poorer health indicators; and poorer academic performance compared to non-victims (Kowalski & Limber, 2013; Schenk & Fremouw, 2012).

A growing number of offline bullying and cyberbullying victims and sympathizers have resorted to social media to discuss such incidents. Last year, a YouTube video by Amanda Todd became viral as she talked about being bullied and cyberbullied leading up to her suicide. YouTube and other social media are platforms where cyberbullying takes place, yet they can also be used to raise awareness and change users' attitudes and behaviors in relation to cyberbullying. Because college students who are cyberbullied often cope with the effects of cyberbullying on their own without utility of community resources, understanding how to effectively advocate against cyberbullying through social media platforms is an essential intervention strategy. Moreover, while dealing with psychological and physical health consequences of cyberbullying is essential to the individual, community awareness and civic actions are needed to realize social change regarding the prevalence of bullying and cyberbullying.

The current study investigates the effects of user-generated YouTube videos on anti-bullying/cyberbullying Civic Behavioral Intentions (CBI), as a means for reducing the prevalence and effects of offline bullying/cyberbullying. Civic behavioral intentions are defined as intentions to perform civic actions geared toward raising awareness and affecting policy changes in relation to cyberbullying (see Appendix A). Using persuasion models and theories of emotional and excitation transfer, the study explores the effects of the intensity of emotional tone (level of arousal), video virality (number of views), and commenting behavior on CBI.

2. Literature review

2.1. YouTube and virality

YouTube is the third most-visited website in the United State and worldwide, with over one billion monthly visitors who watch more than six billion hours of video monthly, upload 100 h of new video every minute, and are highly engaged in liking, sharing, and commenting on videos on YouTube and other social networking sites (Alexa, 2013; Cheng, Liu, & Dale, 2013; Glenn, 2013; Thelwall, Sud, & Vis; 2012; YouTube, 2013). Young adults (18–34 years old) are the highest adopters and most frequent users of YouTube, who comprise two-thirds of YouTube and watch YouTube videos more than any cable TV channel (Glenn, 2013; Lenhart & Madden, 2007; Purcell, 2013; YouTube, 2013).

YouTube is only but one platform for video sharing and viewing. On websites like YouTube, users can upload videos, interact with video content by sharing videos with their online and offline social networks, like, dislike, and comment on videos. These online behaviors can be understood through the framework of virality. While the number of views is the most common indicator of a YouTube video's virality, Alhabash and McAlister (2014, p. 3) argue for a tripartite approach to defining virality:

> *Affective evaluation* is defined as the explicit emotional responses visible to other users (e.g., likes, dislikes).
> *Viral reach* refers to both sharing and viewership of content (e.g., views, shares).
> *Message deliberation* refers to discussions and comments on online content, which can also entail affective evaluation.

Past research argued that emotional engagement plays a critical role in driving virality (e.g., Hagerstrom, Alhabash, & Kononova, 2014; Eckler & Bolls, 2011; Kirby, 2004; Phelps, Lewis, & Mobilio, 2004). While positive messages have a greater chance of virality than negative ones, emotional intensity in both negative and positive messages increases the likelihood of virality as well as other persuasion outcomes like attitude and behavior changes (Hagerstrom et al., 2014; Eckler & Bolls, 2011; Kirby, 2004; Phelps et al., 2004). In the following sections, we provide three theoretical explanations for how and with what effects online content goes viral, using theories of limited capacity, excitation transfer, and social norms.

2.2. Virality: a limited capacity take

Berger and Milkman (2011) found that the presence of intense emotions in *New York Times* news articles (e.g., anxiousness, awe, anger, and surprise) positively correlated with the number of times they were shared. This is supported by other studies, where emotionality of content predicted virality (Hagerstrom et al., 2014; Eckler & Bolls, 2011). The question, therein, lies in attempting to explain why emotional content, both positive and negative, has a greater likelihood of virality than neutral content.

Eckler and Bolls (2011) suggested that forwarding intentions – which we term as viral behavioral intentions – are sensitive to activation of appetitive and aversive motivational systems. Appetitive motivation deals with an individual's motivation to approach external stimuli (e.g., approaching food and sex), while aversive motivation refers to withdrawal of resources to maintain survival and escape danger (e.g., running away from a roaring lion) (Lang, 2000, 2006). The two motivational systems work in parallel to guide our central nervous system's responses to external stimuli (Lang, 2000, 2006). The limited capacity model of mediated motivated message processing (LC4MP; Lang, 2000, 2006) builds on past research in cognitive psychology to explain how humans respond to mediated communication.

LC4MP rests on five major assumptions (Lang, 2000, 2006). First, Lang argues that humans are information processors with a limited cognitive capacity. Second, information processing is pertinent to activation of the appetitive and/or aversive motivational systems. Third, humans receive media messages in different formats (words, still pictures, moving pictures, etc.) through sensory channels of message reception (eyes, ears, touch). Fourth, information processing takes place over time (as little as seconds and milliseconds). Finally, humans interact with the communication message in multiple ways.

These assumptions provide an understanding of how selective we, as human beings, are when we are faced with external stimuli, thus the description of humans as cognitive misers (Fiske & Taylor, 1984). We employ shortcuts to information processing tasks that minimize the use of cognitive resources. Environmental factors trigger uncontrolled, automatic information processing due to