CONSUMER-GENERATED ADS ON YOUTUBE: IMPACTS OF SOURCE CREDIBILITY AND NEED FOR COGNITION ON ATTITUDES, INTERACTIVE BEHAVIORS, AND EWOM

Sara Steffes Hansen
Department of Journalism, College of Letters and Science
University of Wisconsin Oshkosh
800 Algoma Blvd. Oshkosh, WI 54901, United States
hansen@uwosh.edu

Jin Kyun Lee
School of Advertising & Public Relations
Hongik University
F-405, 2639, Sejong-ro, Jochiwon-eup, Sejong-si, Korea 339-701
feature94@hongik.ac.kr

Shu-Yueh Lee
Department of Journalism, College of Letters and Science
University of Wisconsin Oshkosh
800 Algoma Blvd. Oshkosh, WI 54901, United States
lees@uwosh.edu

ABSTRACT

This study examines consumer-generated advertising (CGA) impacts on consumer attitudes, and behaviors for interacting with YouTube features and passing along electronic word-of-mouth. An online experiment with 175 subjects was conducted with a 2x2x2 factorial design. Participants viewed a video advertisement on YouTube, framed as either a consumer-generated or firm-generated advertisement, to determine effects of source credibility with different levels of product involvement. Need for cognition (NFC) also was examined. Analysis revealed consumers as source significantly enhanced advertising attitudes and interactivity behaviors. Higher NFC levels significantly increased interactivity and pass-along. Findings suggest that CGA is a trusted form of user-generated content, with one exposure prompting interactive engagement to search, rate, or comment. Practical implications show potential for online marketers to see positive consumer responses to advertisements labeled as CGA with content flexibility for broad consumer groups, and enhanced pass-along from high-NFC individuals.

Keywords: User-generated content; Advertising; Consumer-generated advertising; Source credibility; Electronic word of mouth; Need for cognition

1. Introduction

The global rise of social media has empowered consumers to create and share online videos about brands broadly with others. Previously, only corporations could create and disseminate a video advertisement. Today, on social media and video-sharing sites, consumer-generated advertising (CGA) videos may be shared with millions. CGA is defined as "publicly disseminated, consumer-generated advertising messages whose subject is a collectively recognized brand" [Campbell, Pitt, Parent and Berthon 2011, p. 88]. Nielsen [2012] research shows consumers trust peers and online reviews more than traditional ads. Some brands struggle with the power shifts of such user-generated content (UGC). This form of advertising may be solicited, such as Doritos' successful CGA contests that involve consumer voting and air annually as Super Bowl ads [Wasserman 2013], or unsolicited via consumer interest.

Consumer responses to CGA – in terms of attitudes and behaviors – offer a developing area of inquiry. In limited CGA studies, attitudinal responses vary. Consumers may trust online product information from peers more readily than corporate sources [Cheong and Morrison 2008]. CGA may persuasively impact via source effects that enhance ad and brand attitudes [Lawrence, Fournier and Brunel 2013]. Yet, CGA developed for brand-sponsored contests may draw consumer critique of source competence to create advertising [Ertimur and Gilly 2012;

Thompson and Malaviya 2013]. CGA itself may not enhance attitudes consistently, but video features may impact online consumer comments for firm-generated ads differently than CGA [Pehlivan, Sarican and Berthon 2011] and award-winning and popular CGA may be of positive influence [Steyn, Wallstrom and Pitt 2010].

Few studies have considered behavioral outcomes from CGA experiences. Consumers may use Web 2.0 interactive features, such as posting comments, and giving recommendations or ratings, which may spark opinion-sharing brand conversations on YouTube [Campbell et al. 2011; Cheong and Morrison 2008]. In turn, consumers easily may send messages involving brands, a form of electronic word-of-mouth (eWOM). Studies of eWOM show consumers provide opinions and share content with peers, or seek comments from others related to products or brands. eWOM is powerful communication that diffuses rapidly, offers easy accessibility, shows observable qualities, and provides credibility [Cheung and Thadani 2012]. Most eWOM studies focus on social network sites [Chu and Kim 2011; Jansen, Zhang, Sobel and Chowdury 2009] or virtual communities [Hennig-Thurau, Gwinner, Walsh and Gremler 2004; Hung and Li 2007; Sun, Youn, Wu and Kuntaraporn 2006]. Hung and Li [2007] noted consumers shared similar interests, or involvement – a familiarity or interest in a category [Laaksonen 1994] that may draw attention to related ads [Greenwald and Leavitt 1984].

Consumers bring different cognitive levels to interactive environments, which may impact ad responses [Sicilia, Ruiz and Munuera 2005; Zhang 1996; Zhang and Buda 1999]. A need for cognition (NFC) moderates consumer information processing [Cacioppo and Petty 1982; Haugtvedt, Petty and Cacioppo 1992]. NFC evolves from the elaboration likelihood model (ELM) [Petty and Cacioppo 1981], a highly used theoretical framework that depicts how people process persuasive messages via cognitively elaborating or using peripheral cues. The ELM shows consumers bring different orientations to marketplace information that may impact attitudes and behaviors [Cacioppo, Petty, Kao and Rodriguez 1986].

This study examines CGA consumer responses through an online experiment with 175 participants. Source credibility, product involvement, and cognitive needs of consumers were studied related to advertising and brand attitudes, as well as behaviors of interactivity and opinion passing, a form of eWOM. Findings attempt to aid understanding of persuasion related to the growing use of CGA online video [Steyn et al. 2010]. Specifically, findings offer a unique contribution toward seeing how UGC influences e-commerce by studying how consumers make judgments about sources of CGA persuasive information, factoring in their level of product involvement and individual cognitive differences. Further, this work considers future ways CGA may circulate, and directly examines factors in the context of an authentic CGA video separated from firm sponsorship. With theoretical and practical perspectives, impacts on attitudes and behaviors are explored and show ways brand and product information may spread online.

2. Literature Review

Previous studies pertinent to CGA and persuasion outcomes are considered. Source credibility related to UGC provides helpful CGA perspective in persuasive terms. Product involvement shows how product categories of interest, which may be in CGA content, could impact consumers. Within the broader theoretical framework of the ELM, the consumer's NFC to process persuasive messages is reviewed related to attitudes and behaviors.

2.1 Source Credibility

Previous research found that source credibility could balance information asymmetry between marketers and consumers [Hovland, Janis and Kelley 1953; Ma and Agarwal 2007; Zhang 2006]. Source credibility has two sub-dimensions: expertness and trustworthiness [Tormala, Briñol and Petty 2007; Petty and Wegener 1998]. Expertness relates to the extent to which a consumer is qualified to discuss a subject and has ability to perform subject-related tasks [Alba and Hutchinson 1987; Bettman and Park 1980]. Trustworthiness is the ability to accept or approve of something without investigation or evidence [McCole and Palmer 2002; Yoon 2002]. In particular, trustworthiness has gained attention from researchers as it plays a major role in encouraging participation and revealing consumers' private information [Han and Windsor 2011].

Source credibility for CGA relates to attitudes and behaviors within the online context, where consumers actively search, share, and comment related to product information. Nielsen [2012] findings show a decline in consumer trust of traditional advertising with a rise in trust for online media due to its ability to incorporate such consumer reviews and postings. Web 2.0, in particular with social media, has made consumers into participants rather than traditional target audiences [Lefebvre 2007]. Trust supports consumers revealing information [Han and Windsor 2011] to enhance their reputations and add credibility to ad messages viewed by peers. Consumers are likely to establish physiological and psychological screens to maintain pre-existing attitudes especially when encountering counter-attitudinal messages [Ahluwalia 2000], which peer sharing may offset.

Consumer or peer sharing is a form of eWOM, defined as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people

and institutions via the Internet" [Hennig-Thurau et al. 2004, p. 39]. eWOM is passed along by social factors related to trusting sources in friendship networks [Chu and Kim 2011]. Indeed, source credibility may be lessened when consumers cannot verify participants in online forums who pass along eWOM [Cheung, Lee and Rabjohn 2008].

CGA may appear more credible and trustworthy [Chatterjee 2011; Dou, Walden, Lee and Lee 2012; Jonas 2010; Lawrence et al. 2013, MacKinnon 2012] compared to firm-generated ads, but not in all cases. Source credibility from CGA outpaces firm-generated ads to positively influence consumer attitudes toward the ad and the brand [Lawrence et al. 2013]. Consumers show higher levels of trust for videos that review products when the perceived source is another consumer compared to the product manufacturer [Dou et al. 2012]. Similarly, Lawrence et al. [2013] saw purchase intentions associated with CGA. eWOM pass-along behaviors also may trend positively with CGA influences. Consumers have appeared more likely to recommend brand messages from other consumers compared to firm-generated messages on SNSs [Chatterjee 2011].

On the other hand, studies have found alternative outcomes for source credibility when contrasting CGA and firm-generated ads. Ertimur and Gilly [2012] found consumers critiqued CGA qualities, and viewed sources as authentic and knowledgeable though lacking expertise, or credibility, in creating advertising messages. Consumer skepticism related to not knowing about the source and potential motivations, such as participating in a brand-sponsored contest, for making CGA, which limited credibility perceptions. Thompson and Malaviya [2013], in evaluating CGA that won brand-sponsored contests, also found consumers critiquing competence of the CGA source yet identifying with the source. When no information was known about the CGA source, lower ad and brand evaluations ensued. However, skepticism was lowered when viewers were distracted and not critically thinking, or the source shared a background trait with the viewer.

Source credibility may vary in different CGA types – such as organically created by a consumer or firm-sponsored. When considering source credibility in a social network environment, without knowledge of the source or the influence of brand sponsorship, the first hypothesis suggests a positive influence:

H1: Higher levels of source credibility will be perceived for CGA compared to firm-generated advertising.

Ads labeled as CGA may enhance consumer credibility perceptions positively to influence attitudes and behaviors [Chatterjee 2011; Dou et al. 2012; Jonas 2010; Lawrence et al. 2013; MacKinnon 2012]. As such, a positive relationship is hypothesized for a CGA without firm sponsorship. Source credibility is expected to positively affect attitude toward the ad and brand, and increase the likelihood of eWOM through interactive features on YouTube and opinion passing:

H2-1: Higher levels of source credibility of the CGA will positively influence attitude toward the ad.

H2-2: Higher levels of source credibility of the CGA will positively influence attitude toward the brand.

H2-3: Higher levels of source credibility of the CGA will positively influence intention to use YouTube interactive features.

H2-4: Higher levels of source credibility of the CGA will positively influence intention for opinion passing of the ad.

2.2 Product Involvement

Product involvement, often used interchangeably with 'perceived product involvement' in the marketing literature [Laurent and Kapferer 1985], has different definitions. Cushing and Douglas-Tate [1985] described it as 'how the product fits into that person's life' [p. 243]. Zaichkowsky [1985] stated it as relevance that individuals perceive in the product's values according to their interests and needs. Product involvement also has been defined as a motivational construct [Batra and Ray 1985; Phelps and Thorson 1991], where the amount of motivation may depend on product relevance [Zaichowsky 1985]. Involved consumers are more familiar with and interested in a product category [Laaksonen 1994] and tend to pay more attention to an ad for a product [Greenwald and Leavitt 1984]. Information processing theory explains that the more consumers pay attention to an ad, the higher their comprehension and elaboration on messages [Greenwald and Leavitt 1984].

Research in this area also has investigated the relationship between involvement and other factors such as interactivity between users, consumer information processing and learning in new media, and attitudes toward messages and ads in online environments [e.g., Gao, Rau and Salvendy 2009; Liu and Shrum 2009]. For example, highly involved consumers in video games, moderated by experienced presence or immersion in the virtual environment, are likely to have favorable attitudes toward ad messages [Nicovich 2005].

Taylor, Strutton, and Thompson's [2012] study found product involvement has both direct and indirect effects on the likelihood to engage in eWOM. The more consumers were involved in the product category, the more likely they would share online ad messages. The ELM posits that motivations to process the information affect consumers' information processing strategies. When consumers are highly motivated to process information, the central route is used to engage in extensive information processing [Petty and Cacioppo 1986]. Further, in broad social network sites like YouTube, opinion passing may be heightened via easy interactive features and product category influence.

Motivations for eWOM outlined in the work of Hennig-Thurau et al. [2004] tap into product involvement, among forms including self and message involvement that evoke positive WOM in pre-Internet studies [Dichter 1966].

This examination considers the way that consumers may feel product involvement as a relevancy or motivation to know more related to the product. Given the casual pass-along nature of eWOM possible with YouTube interactive features, product involvement is expected to positively affect attitude toward the ad and brand, and increase the likelihood to use interactive features and engage in opinion passing:

H3-1: Higher levels of product involvement will positively influence attitude toward the ad.

H3-2: Higher levels of product involvement will positively influence attitude toward the brand.

H3-3: Higher levels of product involvement will positively influence intention to use YouTube interactive features.

H3-4: Higher levels of product involvement will positively influence intention for opinion passing of the ad.

2.3 Need for Cognition

The ELM has received much attention in the field of advertising, marketing, and psychology with respect to understanding human information processing. Petty and Cacioppo [1981] first introduced the ELM, identifying two routes that people use to process information: central and peripheral. Central route processing is related to resource exhaustive information processing, requiring deliberate cognitive effort, whereas peripheral route processing does not require deliberate cognitive effort [Petty, Cacioppo and Goldman 1981]. The ELM assumes that consumers with high motivation and ability tend to process messages via the central route. Attitudes formed in this way tend to be stable over time, resulting from diligent consideration [Petty et al. 1981]. Meanwhile, consumers with low motivation and ability tend to process messages via the peripheral route. Attitudes less stable over time ensue as consumers determine attitudinal positions without extensive elaboration.

In ELM studies, NFC has evolved as a personality variable conceptualized as "differences among individuals in their tendency to engage in and enjoy thinking" [Cacioppo and Petty 1982, p. 116]. NFC moderates information processing in different persuasion situations [Cacioppo and Petty 1982; Haugtvedt et al. 1992]. Generally, people with high NFC enjoy thinking intrinsically, while those with low NFC tend to avoid engaging in cognitive effort though they may be capable of it.

Studies show that NFC can significantly moderate individual evaluation of persuasive messages. Some studies focus on aspects of the message, such as product attributes [Haugtvedt et al. 1992]; message humor [Zhang 1996]; positive vs. negative message framing [Zhang and Buda 1999]; message implicitness/explicitness [Martin, Lang and Wong 2003]; and interactivity related to products on websites [Sicilia et al. 2005]. Haugtvedt et al. [1992] found high-NFC individuals showed more positive attitudes toward products after exposure to a stronger ad argument, while low-NFC individuals were not impacted by argument quality. Martin et al. [2003] found NFC moderated the ways implicit or explicit messages were evaluated. High-NFC participants more favorably evaluated implicit messages, which also linked with argument quality, and connected with enhanced brand attitudes and purchase intentions, while low-NFC individuals were not impacted by argument quality or message explicitness. Further, low-NFC individuals expressed more favorable attitudes and purchase intentions toward humorous ads [Zhang 1996]. Consistent in these studies is that low-NFC individuals appear to use peripheral processing based on cues, which impacts outcomes.

In an experiment of ad message framing as negative or positive, source credibility and NFC levels influenced attitudes [Zhang and Buda 1999]. Message framing, particularly negative framing, was of higher impact on low-NFC individuals. These individuals also exhibited less favorable attitudes about product attractiveness, willingness to purchase, and perceived performance when related by non-expert sources. Findings suggested message framing and source credibility are of less influence on high-NFC vs. low-NFC individuals [Zhang and Buda 1999]. Related to website product information in interactive and non-interactive venues, low-NFC individuals may engage in more information processing with increased interactivity [Sicilia et al. 2005]. As well, high-NFC individuals show heightened interactive engagement online, forming positive views of websites with more hyperlinks [Amichai-Hamburger, Fine and Goldstein 2004] and interacting with more information seeking and learning on the Internet [Tuten and Bosnjak 2001].

Specific to source credibility, NFC orientations may impact perceptions of ad message cues. Priester and Petty [1995] found NFC levels moderated message elaboration. Low NFC linked with varying levels of source trustworthiness, resulting in lower scrutiny of persuasive messages when the source was perceived as honest [Priester and Petty 1995]. When faced with an incentive, such as unexpected information or insight on the source, low-NFC individuals may exert more cognitive effort [Smith and Petty 1996]. Content also may arouse consumers at the individual level. The work of Berger and Milkman [2012] found participants' internal states as influencing the spread of viral eWOM to social networks based on feelings of arousal from information that was surprising and positive, or evoking anger or anxiety.

NFC impacts information processing, and potentially consumer attitudes and behaviors when viewing CGA. Though results in previous studies are mixed, interactive environments supported high-NFC engagement with positive views and interactions. Because of the interactive nature of the YouTube setting in which CGA is viewed, the higher-NFC individuals may see enhanced positive attitude toward the video ad and the brand. Further, the research indicates high-NFC viewers will be more engaged with interactive features, which may include pass-along behavior for the ad. Hypotheses based on these proposed outcomes include:

H4-1: Higher levels of NFC will positively influence attitude toward the ad.
H4-2: Higher levels of NFC will positively influence attitude toward the brand.
H4-3: Higher levels of NFC will positively influence intention to use YouTube interactive features.
H4-4: Higher levels of NFC will positively influence intention for opinion passing of the ad.

3. Method

To test the hypotheses, the study employed an experimental design to examine levels of source credibility for consumers viewing a video ad framed as originating from a consumer or an advertising firm. Product involvement was manipulated, and NFC as an individual trait also was examined. The stimulus was an authentic CGA video that was created by a consumer and posted on YouTube. All subjects viewed the same video but with different priming in question wording to manipulate source (as consumer or firm) and product involvement (buying a smartphone next week or in two years). Dependent variables focused on source credibility and attitude toward the ad and brand, as well as behaviors of engaging in interactive features, and passing along the video as eWOM.

3.1 Research Design and Stimulus Material

The study framework was an online experiment with a 2 (consumer vs. firm as source) x 2 (low vs. high product involvement) x 2 (low vs. high NFC) factorial design. The independent variables were source, product involvement, and NFC. The dependent variables included source credibility, attitude toward the ad, attitude toward the brand shown in the ad, intention to engage in YouTube interactive features, and intention to pass along the ad as eWOM. The questionnaire used 7-point Likert scales ranging from 1 (strongly disagree) to 7 (strongly agree).

A 32-second video clip for a Nokia smartphone, created by a consumer but not affiliated with a brand contest, was obtained from YouTube. The stimulus video was chosen based on its appearance as being of a quality that may be produced by a consumer or a corporation, and not exhibiting a particularly strong or weak argument, humor, or other factors that may impact viewer perceptions beyond the study's key variables. Importantly, two other criteria were factored into the design: product category and product brand. Research has suggested that users might have biased opinions for the brand product of use or familiarity [Engel, Blackwell and Miniard 1993]. The ELM suggests peripheral information processing for the product with little knowledge or interest. To avoid this bias, a type of product was selected from a manufacturer that was of middle rank in terms of user interest and familiarity. Two pretests using 7-point scales were conducted to determine a product category and a brand. In pretest 1, subjects were asked to choose the most popular category from 17 product categories (e.g., clothing, laptops, and smartphones). Twenty-six responses were collected. Results showed smartphones were of high consumer interest (M = 6.16, SD = 1.16). In pretest 2, subjects were asked to participate in a survey listing 11 smartphone manufacturers (e.g., Apple, Samsung, HTC, and Nokia) in order to select a moderately known brand. Thirty-one samples were collected. Of 11 manufacturers, Nokia ranked sixth (M = 4.51, SD = 2.12) and was selected.

3.2 Independent and Dependent Variables

The independent variables were source, product involvement, and NFC. Two conditions for source were created. Subjects in the CGA condition (M = 4.60, SD = .98) were informed that a consumer created the video while those in the firm-generated advertising (FGA) condition (M = 4.30, SD =.93) were informed that the video was produced by Nokia's advertising agency.

Two conditions for product involvement were created. Subjects in the high-involvement condition were asked to imagine that they were going to buy a smartphone next week with a two-year contract. Subjects in the low-involvement condition were asked to imagine that they recently purchased a smartphone with a two-year contract, and would not be purchasing a new smartphone anytime soon. Product involvement was measured on a 7-point semantic differential scale using 10 items, including 'Unimportant/Important,' 'Irrelevant/Relevant,' 'Means nothing/Means a lot,' 'Worthless/Valuable,' Boring/Interesting,' 'Unexciting/Exciting,' 'Unappealing/Appealing,' 'Not needed/Needed,' 'Mundane/Fascinating,' and 'Uninvolving/Involving' [Zaichkowsky 1985]. These 10 items showed a high degree of reliability (Cronbach's α = .95). The items were averaged to create a composite index for involvement. The mean score of the high involvement condition ($\overline{X}$ = 5.72) was found to be significantly greater than that of the low involvement condition ($\overline{X}$ = 5.35, t (173) = -2.28, $p < .05$). The result illustrates that subjects were manipulated as intended.

NFC was evaluated as an individual trait of subjects. Measures were based on the 18-item NFC scale [Cacioppo, Petty and Kao 1984] (Cronbach's α = .88). A midpoint-split-method categorized participants as high NFC (M = 5.03, SD = .53) or low NFC (M = 3.87, SD = .41).

The dependent variables were source credibility, and measured respondent attitudes following exposure to the experimental condition. Source credibility was measured with four items: 'The video is provided by a knowledgeable source,' 'The video is provided by an expert source,' 'The video is provided by a trustworthy source,' 'The video is provided by a reliable source' [Cheung et al. 2008; Wu and Shaffer 1987]. This construct was measured using a 7-point Likert scale (1 = strongly disagree and 7 = strongly agree). The four items were reliable (Cronbach's α = .92). Responses to all four items were averaged to create a composite index for source credibility.

Attitude toward the ad [Homer 1990] was measured with three items (Cronbach's α = .90). Attitude toward the brand [Homer 1990] was measured with three items (Cronbach's α = .95), as was intention to engage in YouTube interactive features (search, rate, and comment) (Cronbach's α = .84). Three items measured opinion passing, a dimension of eWOM [Chu and Kim 2011] (Cronbach's α =. 82).

Product knowledge was included in this study as a covariate. Park and Lessig [1981] found that consumer product knowledge helps product evaluation and decision-making processes. Previous studies also found that product knowledge is highly correlated with consumers' self-confidence and it affects consumer information search and choice behavior [Alba and Hutchinson 2000]. Thus, product knowledge was factored into this study. Tests of between-subjects effects showed that product knowledge significantly impacted intention to engage in YouTube interactive features ($F(1, 162) = 16.73$, $p < .00$) and opinion passing ($F(1, 162) = 10.05$, $p < .00$).

3.3 Experimental Procedures

A total of 205 undergraduate students from a large Midwestern university participated. Subjects were recruited through courses that offered extra credit for participation. After removing responses that showed inconsistent and missing values, a total of 175 subjects remained. About 56% (n = 97) was female and 45% (n = 78) was male. Age ranged from 18 – 48 years old. However, approximately 90% (n = 155) of the subjects were 23 years of age or younger.

Four online surveys were developed corresponding to four experimental conditions – consumer as source and high product involvement; consumer as source and low product involvement; firm as source and high product involvement; and firm as source and low product involvement. Two stages were involved. First, subjects entered a computer lab, where they were randomly assigned to one condition. Second, they were directed to log on to the online survey site of the condition. Once the subjects agreed to the consent form and were primed for the condition with a statement, they were asked to click the link to watch the stimulus video. After watching the video the survey was taken.

4. Results

For Hypothesis 1, an independent t-test was conducted to examine perceptions of source credibility of the same CGA video when primed as either a CGA or FGA. Source credibility was found to be significantly different between sources, with the CGA condition ($\overline{X}$ = 4.60) significantly higher than the FGA condition ($\overline{X}$ = 4.30, $t(173) = -2.06$, $p < .05$). These results support H1, indicating subjects find source credibility higher for a video when labeled as CGA compared to a traditional FGA.

A MANOVA was conducted, as there was more than one dependent variable, to test H2 through H4. Table 1 shows the results of tests of between-subjects effects of the MANOVA test.

H2 predicts that higher levels of source credibility will positively affect attitudes toward the ad, attitudes toward the brand, interactivity, and opinion passing, respectively. Tests of between-subjects effects showed that source credibility indeed significantly affected attitudes toward the ad ($F(1, 162) = 3.26$, $p = .07$) and intention to use interactive features ($F(1, 162) = .00$, $p = .09$) at a marginal level. Specifically, independent samples t-tests further showed that subjects in the CGA condition ($\overline{X}$ = 4.16) showed significantly higher attitudes toward the ad than those in the FGA condition ($\overline{X}$ = 3.78, $t(173) = -1.99$, $p < .05$). Also, it was found that subjects in the CGA condition ($\overline{X}$ = 2.67) showed higher attitudes toward using interactive features than those in the FGA condition ($\overline{X}$ = 2.39, $t(170) = -1.44$, $p = .15$). These results illustrate that the outcome showed consistent patterns as predicted, even though they are not statistically significant. Attitude toward the brand and willingness to engage in opinion passing were not affected by the CGA vs. FGA condition. Source credibility did not significantly impact attitude toward the brand ($F(1, 162) = 2.46$, $p = .12$) and opinion passing ($F(1, 162) = 2.46$, $p = .12$).

Table 1. Between-subjects Effects of MANOVA Test

	Dependent Variables	*Df*	η^2	*F*	*P*
Source	Attitude toward ad	1	4.94	3.26	.07*
	Attitude toward brand	1	4.01	2.46	.12
	Interactivity	1	4.53	2.96	.09*
	eWOM	1	2.65	2.46	.12
Product Involvement	Attitude toward ad	1	.41	.27	.61
	Attitude toward brand	1	1.11	.68	.41
	Interactivity	1	0	0	.99
	eWOM	1	0	0	.99
NFC	Attitude toward ad	1	.43	.28	.60
	Attitude toward brand	1	.63	.39	.54
	Interactivity	1	4.78	3.12	.08*
	eWOM	1	6.64	6.16	.01**
Error	Attitude toward ad	162	1.52		
	Attitude toward brand	162	1.63		
	Interactivity	162	11.53		
	eWOM	162	1.08		
Total	Attitude toward ad	171			
	Attitude toward brand	171			
	Interactivity	171			
	eWOM	171			

Notes: * $p < .10$, ** $p < .05$

In H3, product involvement was predicted to positively affect attitude toward the ad, attitude toward the brand, interactivity, and opinion passing, respectively. Tests of between-subjects effects showed that product involvement did not significantly affect attitudes toward the ad ($F (1, 162) = .27$, $p = .61$), attitudes toward the brand ($F (1, 162) = .68$, $p = .41$), intention to use interactive features ($F (1, 162) = .00$, $p = .99$), and opinion passing ($F (1, 162) = .00$, $p = .99$).

H4 hypothesized that NFC will positively influence attitude toward the ad, attitude toward the brand, interactivity, and opinion passing, respectively. Tests of between-subjects suggest that NFC significantly affects use of interactive features ($F (1, 162) = 3.12$, $p = .08$) at a marginal level. Also, NFC significantly impacts opinion passing ($F (1, 162) = 6.16$, $p = .01$). Independent samples t-tests further presented that subjects with higher NFC ($\overline{X} = 2.25$) showed significantly higher attitudes toward opinion passing than those with lower NFC ($\overline{X} = 1.93$, $t (172) = 1.99$, $p < .05$). The results are not statistically significant but align with our expected direction in that subjects with higher NFC ($\overline{X} = 1.35$) showed positive attitudes toward the interactivity than those with lower NFC ($\overline{X} = 1.21$, $t (170) = 1.12$, $p = .26$, n.s.). These results suggest that consumers with higher NFC are more likely to pass along information and interact with YouTube features when watching the ad. However, NFC did not significantly affect attitude toward the ad ($F (1, 162) = .28$, $p = .60$) and attitude toward the brand ($F (1, 162) = .39$, $p = .54$).

Interaction effects between NFC and source on attitude toward the ad, attitude toward the brand, interactive features, and opinion passing were not significant. Interaction effects between NFC and product involvement on the dependent variables were not significant. There also were no significant interaction effects between source and product involvement with the dependent variables, and no significant three-way interaction effects among source, product involvement, and NFC.

5. Discussion

An increasingly social and mobile web empowers UGC and a role for CGA as an expanding advertising trend. Theoretical perspectives from these findings offer insights to extend knowledge about ways consumer responses to CGA develop within the context of source credibility to influence attitudes and behaviors, and show effects of cognitive processing on interactive and eWOM activities. Practical insights for advertisers considering potential CGA outcomes for consumer attitudes, and behaviors in the UGC setting, also are discussed.

5.1 Theoretical Implications

Results from H1 suggest that consumer exposure to an online video ad labeled as CGA will influence perceptions of source credibility in a positive direction. The ad included a consumer brand, but was not aligned with brand-sponsored contests or comments from YouTube viewers. This work shows the consumer as source in CGA as more credible than a firm in traditional ads. This higher source credibility, in H2 findings, emerged as a key factor for consumers viewing CGA, evident in the study manipulation, to not only perceive the ad as more credible. Consumers showed a more positive attitude toward the ad and expressed a likeliness to engage in YouTube features connected to the CGA video, such as to search for related videos, rate the video, or comment about the video. With the rise of Web 2.0, UGC has become a primary information source for consumers. Findings of this study suggest that consumers trust UGC more than advertiser-generated content [Lawrence et al. 2013; MacKinnon 2012]. However, the empirical evidence to recognize the strength of UGC is still limited. After merely watching a 32-second video one time, the participants in the CGA condition demonstrated a better attitude toward the ad than those who thought the ad was created by an advertising agency. The traditional top-down advertising process appears less justified as CGA could provide advertisers an alternative route to reach active and selective consumers.

It is worth noting that though subjects in the CGA condition expressed positive ad attitudes, those attitudes did not transfer to the brand. This finding is not encouraging but aligns with previous research. Even though the research results for effective frequency in advertising are inconclusive, consumers are rarely to be affected by just one exposure [Krugman 1972; Pechmann and Stewart 1988]. Tellis [1997] suggested that other factors including brand familiarity, message complexity, and message novelty play more important roles in the effectiveness of advertising. This study intentionally chose a brand of low recognition to avoid biased information processing. Thus, it is not surprising that the attitude toward the ad was not transferred to attitudes toward the brand. However, previous research has shown that attitude toward the ad is one of the important mediators for advertising effectiveness [Lutz, Mackenzie and Belch 1983]. These findings recognize the limited effect of CGA but at the same time demonstrate the potential of CGA in the early stages of advertising campaigns.

In addition, this study found increased user interactions online with messages because of the CGA label. But, to take the action further, and spread such messages to peers – via sharing or posting on social network sites – requires additional attributes. Research has suggested that several factors, such as involvement, knowledge base, and motives affect consumers' use of interactive features and engagement in eWOM [Gao et al. 2009; Kim 2011]. Even though CGA is not necessary to generate eWOM, findings indicate CGA has great potential to engage consumers in searching or commenting related to brands online. In particular, younger age groups are heavy Internet users, and frequent creators and viewers of user-generated content. Younger users may be more influenced by this content than other groups, such as baby boomers [Bazaarvoice 2012]. Thus, CGA could be of key appeal for integrated advertising campaigns for particular demographics.

While CGA source credibility was enough to impact attitude toward the ad, it was not enough to support the brand or product and eWOM pass along. Potentially, the consumer did not know enough about who made the ad or recommendation, and his or her motivations. Similarly, Cheung et al. [2008] found not knowing the person who posted online content may lessen source credibility. Lack of knowledge may increase skepticism about source identity and motivations [Ertimur and Gilly 2012; Thompon and Malaviya 2013]. Findings show that source credibility for the CGA was enough to persuade consumers to like the ad and intend to interact with YouTube features, but not enough to persuade them that the product and opinion-passing about the product were justified.

H3 predicted that product involvement would positively impact attitude toward the ad, attitude toward the brand, interactivity, and opinion passing, respectively. However, involvement did not significantly affect any of these variables. A possible interpretation is that when consumers in an interactive situation are evaluating an ad and brand, their involvement with the product category does not impact the decision-making process. In other words, regardless of the levels of how they feel about the product being advertised, consumers are able to judge the persuasion message for the product independently. In fact, other studies have found that involvement did not show a significant relationship with attitude toward the ad, attitude toward the brand, and purchase intention [Goldsmith and Newell 1995]. Also, Phelps and Thorson [1991] found that product involvement did not significantly affect the attitude toward the ad and brand relationship. They predicted the attitude relationship under high involvement would be significantly weaker than under low involvement. However, under both conditions only 18% of attitude toward

the brand variance was explained by attitude toward the ad.

Alternatively, it could be explained that product involvement was not impactful in this interactive context for other reasons. Sun et al. [2006] theorized that potential reasons of no involvement effects regarding eWOM in a virtual music community for their study were that the sample of college students was too homogenous, a small variance of samples produced a ceiling effect, or that involvement was not impactful in eWOM.

Related to H4, NFC significantly influenced intention for use of interactive features and opinion-passing behavior. However, higher levels of NFC did not influence attitude toward the ad or brand. Subjects who tended to cognitively engage may not have expressed attitude changes, but were more likely to interact on YouTube regarding the ad, and ultimately, share content with others.

From an ELM perspective, these findings reinforce behavioral intentions seen in Cacioppo et al. [1986], but not attitudinal changes evident in that same study. Attitudes may see impact from critical thinking that heightens skepticism [Thompson and Malaviya 2013]. In terms of behaviors, the high-NFC participants appeared to engage in higher levels of processing, which led to a continued engagement or interaction with the CGA for intention to respond, comment, and pass along the video. High-NFC participants may be predisposed toward engaging in information presented interactively [Tuten and Bosnjak 2001], which contributed to their behaviors. Of interest, the NFC attitudes in this study did not reflect those related to the type of argument or content in the CGA, as tested in other studies [Haugtvedt et al. 1992; Martin et al. 2003; Zhang 1996; Zhang and Buda 1999]. Findings did support the positive nature of interactivity for the high-NFC individual.

However, that lacking manipulation element – of argument quality or humor, for example – may limit the way attitudes toward the CGA and its brand are formed. Possibly, a strong attitude did not emerge from viewing the benign CGA in this experiment – intended to focus on source in the study design. These elements may have limited NFC effects. If the ad showed more argument strength or humor, participants may have been pushed toward more central or peripheral processing. Further, high-NFC individuals tend to form attitudes over time from extensive engagement [Petty et al. 1981], which was not afforded in one CGA interaction through the study design.

High-NFC vs. low-NFC individuals tend to process information via the central route. The CGA in this study did not have many aesthetic features to manipulate the processing effort. Interactivity for high-NFC consumers was seen in "asking" if they would interact or pass along the video. This online experimental situation of viewing a "YouTube" video within a survey is different than the high-NFC consumer actually interacting on YouTube. Also, the literature frequently studies NFC as a moderator, which was considered in this study as an independent variable.

5.1 Practical Implications

Practically, marketers and advertisers considering UGC options like CGA must weigh a lack of control of brand message and treatment, with perceived benefits from the consumer source. Those benefits, heightened via sponsored contests and unsolicited consumer interactions in UGC, may increase popularity of a viral video or brand perceptions online. However, marketers must ask if the trade-off is worth these benefits. Findings in this study show that there are particular benefits in terms of emphasizing source credibility and providing the interactive video options of YouTube or similar new media platforms for consumers. Source credibility elicits positive attitudes toward CGA. The consumer as source contributed to viewer intentions to search, rate, and comment about CGA on YouTube. However, these positives did not aid brand attitudes or opinion passing in this study. Of note, the YouTube CGA used in this study was simple and generally positive. It did not have a complicated product message, strong argument, or humorous appeal – factors that may impact how individuals process ads – to focus more on source effects.

Findings suggest that marketers can expect generally positive responses in consumer attitudes when viewing positive CGA direct from the consumer source on SNSs. Further, this work focused on video views within a social media context of YouTube, which means participants expected it to be a YouTube video – and this may have impacted attitudes. The positive CGA influence on attitudes supports online efforts to encourage CGA labeled as such to inform viewers about source directly, and to use CGA early in campaigns to contribute to extended interactions that support the brand.

Involvement served as a non-factor, which means in a sense for CGA purposes, marketers may potentially place less concern on content that appeals to consumer needs. However, content and advertising appeals certainly impact the viral nature of videos. This study shows that high-NFC individuals will search, rate, and comment regarding such videos and share opinions with others online based on tendencies in interactive environments. A lack of individual involvement with the product category allows flexibility with brand messages that may appeal to broader consumer groups.

Interactivity on the YouTube platform may offer strong appeal to the high-NFC individual who may have more experiences with online processing of product and brand information. As seen in Sicilia et al. [2005], interactivity is embedded in the YouTube video experience and supports more positive dispositions toward eWOM. Taken

together, the high-NFC individual may be more active in interactive platforms and therefore more willing to interact with ease on YouTube. Indeed, this finding supports the pass-along of eWOM as a way to disseminate information among less loyal or involved consumers [Godes and Mayzlin 2009]. Marketers could expect the high-NFC individuals to not only use YouTube, but also willingly engage in comments and other interactive factors. These individuals may pass along videos, such as CGA, as part of their interactive behaviors on YouTube and potentially other social media platforms.

Online campaigns that leverage social platforms like YouTube may engage with higher-NFC individuals savvy toward online interactive behaviors, which may increase online displays and pass-along related to CGA. Ultimately, advertisers may embrace CGA – with its lacking control but heightened interactive appeal – as a way to generate viewers of product and brand messages. As well, the credibility of the source for CGA appears to drive positive attitudes toward the ad broadly. This credibility appeal appears within a context of simple content of ad message within the YouTube interactive platform.

6. Limitations and Future Study

This study shows limitations and insights helpful for future CGA study. First, among the limitations was the experimental condition that required participants experience CGA that was referenced as a YouTube video but was not actually viewed on YouTube. Also, even though the manipulation check indicated successful involvement, participants may have not felt involved with the product. In other words, the manipulation was not strong enough for subjects to feel involved. This may be an aspect of study design, as source and involvement statements appeared together in the survey.

Second, the results may have differed depending on appeal types of the CGA (e.g., emotional, rational appeals) and product category. Study design held constant the ad appeals and product category of smartphone in all four conditions. However, often CGAs use humor appeals to enhance viral qualities and sharing. Also, some product categories may be gender-specific. Future studies may consider other ad appeals and product categories in the CGA context.

Third, the concepts of eWOM and interactivity need to be clearly delineated in future study. Interactive behaviors (e.g., search, rate, comments) on the YouTube website could be related to eWOM behavior such as opinion passing, opinion giving, and information seeking. Although this study defined the interactive behaviors within the scope of the YouTube interface, the consequence of interactivity may go well beyond it. For example, rating the CGA may impact other consumers' attitudes toward the ad and brand. It would be interesting to further examine the relationship between interactivity and eWOM behaviors.

Fourth, participant demographics skewed toward younger ages, which may have impacted outcomes. Future studies could evaluate other dimensions related to these limitations. Examples of variations could include video content, knowledge of the source, and additional interactivity and eWOM factors. Ample room for future study aligns with CGA's growth within the increasingly interactive web, and its potential influences on consumer persuasion outcomes.

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