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SPREADING THE VIRUS: EMOTIONAL TONE OF VIRAL ADVERTISING AND ITS EFFECT ON FORWARDING INTENTIONS AND ATTITUDES

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ABSTRACT: Viral advertising has attracted advertisers in recent years, yet little is known about how exactly it works from an information processing perspective. This study extends knowledge by exploring how the emotional tone (pleasant, unpleasant, coactive) of viral video ads affects attitude toward the ad, attitude toward the brand, and forwarding intentions. Results indicate that pleasant emotional tone elicits the strongest attitude toward the ad, attitude toward the brand, and intention to forward. The effects were weaker for coactive tone and weakest for negative emotional tone. These results challenge the common approach of shocking or scaring online users to motivate them to forward a viral video.

Keywords: viral advertising, electronic word of mouth, information processing, emotional tone

Consumers are exposed to hundreds of branded messages each day through broadcast and print media, outdoor promotions, the Internet, and more. With this clutter, the rising prices of media buys, and consumers' increasing sophistication in avoiding advertisements (Manly 2005; MindComet 2006), the industry continues to investigate new ways to reach target audiences. Viral advertising is one such option and a potentially effective way to bypass growing consumer apathy (MindComet 2006). The appeal of viral campaigns is driven by peer-to-peer communication, in which receivers of the message are active participants who often volunteer to spread it further. The very act of spreading the message to one's social network constitutes an endorsement of the brand, which enhances its credibility in the eyes of the receiver (Chiu et al. 2007). A successful viral promotion can reach thousands or millions of otherwise indifferent consumers and motivate them to endorse or interact with a brand.

This potential has made viral advertising an increasingly popular promotional tool for many brands. According to some estimates, 30% of the 4100 brands worldwide have tried viral video advertising (Lindstrom 2009). In the United States, interest in viral video is strong among brands and agencies, and many agencies plan to increase their budgets for it (Feed Company 2008). Consumers are heavily engaged in all types of videos online. The majority of adult Internet users (61%) have watched a video on video-sharing websites, such as YouTube or Google Video (Purcell 2010), which host much of the viral activity.

The excitement over viral video advertising is easy to understand. However, uncertainty still exists about the exact mechanisms that make a viral campaign successful (Feed Company 2008; Lindstrom 2009). In an effort to be sensational, and thus achieve viral success, advertisers run the risk of becoming so unconventional that they trigger negative reactions from viewers (Eckler and Rodgers 2011). It seems that the common wisdom in designing viral video campaigns is to make the content surpass the standards for what is socially acceptable in traditional television advertising (Lindstrom 2009). However, research on edgier, highly emotional content, such as sex appeal and more extreme humor, in television advertising documents the risk of interfering with effective brand communication (Kellaris and Cline 2007; Severn, Belch, and Belch 1990). Thus, striking a balance between highly creative, emotionally engaging content and effective brand communication could be even more tenuous in producing viral video ads than for traditional television advertising.

Insight into designing viral video content that enhances rather than interferes with effective brand communication is most likely to come from systematic research on how people mentally process and evaluate viral videos. Ad producers, in the process of creating edgier, more emotionally arousing and intense content, may not completely understand how it affects fundamental motivational and emotional processes that, in turn, may affect brand communication effectiveness and the success of a viral video. Decades of advertising research have

demonstrated the significant impact of human motivation and emotion on the processing of advertisements that do not feature content that is as emotionally intense as viral videos (for a recent review, see Poels and Dewitte 2006). Viral videos have the potential to engage even more complex and intense motivational and emotional processes than traditional advertising, and therefore the motivated processing of viral videos is a phenomenon advertising researchers need to explore. The current study takes an initial step toward filling this need. We investigate the experience of viewing viral videos from a motivated cognition theoretical framework through an experiment that examines the impact of emotional tone on attitude toward the ad, attitude toward the brand, and intent to forward.

LITERATURE REVIEW

Viral Advertising

Watching videos online is a mainstream activity; seven in ten adult Internet users (69%) have used the Internet to watch or download videos (Purcell 2010)-including watching video clips, television shows, or movies online; visiting a video-sharing site such as YouTube and Google Video; or downloading video files. The use of sharing sites is most notable for its "exploding popularity": The share of adult Internet users who watch videos almost doubled from 33% in December 2006 to 61% in June 2009 (Purcell 2010).

Brands and their advertising agencies are increasingly adding viral videos to their strategies. In a survey of 40 executives at top U.S. ad agencies and media buying firms, the majority (72.1%) reported that their clients were interested or very interested in using viral video as part of their marketing campaigns, and 86% had created at least one video in the first eight months of 2008 (Feed Company 2008). On an international scale, Lindstrom (2009) reports that nearly one-third of all brands worldwide have tried the viral video approach. This ad format has drawn so much attention that in March 2009 Advertising Age began publishing a weekly chart of the 10 most popular viral videos.

Regardless of its growing popularity, much confusion still remains about this relatively new ad format. Perhaps the most important question is one of definition. Some researchers use the terms "viral marketing" and "viral advertising" interchangeably (Kaikati and Kaikati 2004; MindComet 2006; Shirky 2000), whereas others treat them differently (Eckler and Rodgers 2010; Golan and Zaidner 2008; Porter and Golan 2006). Golan and Zaidner (2008) consider viral marketing a

broader framework that encompasses a wide array of electronic word-of-mouth strategies aimed to encourage brand-related online peer-to-peer communication. They stipulate that this definition will continue to change as online communication platforms grow and influence more peer-to-peer communication. Conversely, Porter and Golan (2006) view viral advertising as a subset of viral marketing and define it as "unpaid peer-to-peer communication of provocative content originating from an identified sponsor using the Internet to persuade or influence an audience to pass along the content to others."

Eckler and Rodgers (2010) also situate viral advertising within the larger field of viral marketing, similar to the position of traditional advertising in the marketing mix. Building on the conceptual foundations of Porter and Golan (2006) and Kirby (2006), they offer an updated definition of viral advertising, reflective of developments in the industry and technology, as "persuasive messages by an identified sponsor distributed though unpaid communication among peers on interactive digital platforms." Viral videos contain all elements of this definition: They are persuasive in nature, they come from an identified sponsor, and their content is used to motivate further distribution of the message through peer-to-peer communication.

Another question debated in the literature is what constitutes viral success. In Feed Company's (2008) survey of top executives, 27.8% said that views of one million or more would make an ad successful, but even shares of 22.2% also settled on 500,000 views, 250,000 views, and 100,000 views. Matt Cutler, vice president of marketing and analytics at Visible Measures, acknowledged the same difficulty when he discussed the reason his company teamed up with Advertising Age for the weekly viral chart. He argued that the chart would provide a common benchmark for viral video success and defined one million views as the "magic number" for success (Cutler 2009). Even within the Viral Video Chart, the top 10 weekly videos enjoy a wide range of popularity. For the week of December 29, 2010, Excentric's "The digital story of the Nativity" entered the chart at number one with 9.3 million views that week, while the bottom (10th) spot went to Blendtec's "Will it blend?" with 806,200 weekly views (Slutsky 2010).

A final question still open for discussion is what motivates consumers to forward a viral message. Prior research has linked intention to forward to greater utilitarian or hedonic content of the message (Brown, Bhadury, and Pope 2010; Chiu et al. 2007). Actual forwarding behavior has been linked to

desires for fun and social connection (Phelps et al. 2004). Emails forwarded the most are those that contain good deeds (100%), naked pictures (60%), jokes about gender (56%), jokes about work or computers (55%), crime warnings (54.5%), games (53.8%), chain letters (52.6%), and others (Phelps et al. 2004). Students are more likely to forward e-mails about free or cheaper items and jokes and games (Lindgreen and Vanhamme 2005). This finding is in line with the utilitarian and hedonic motivations discussed by Chiu et al. (2007) and the forwarding practices of adults discussed by Phelps et al. (2004). In terms of online movies, the main reason to forward or post them is that the movie was funny (44% of respondents) (Verhaeghe et al. 2007). Other motives include excitement about the message (22%), positive involvement with the brand (25%), and interest from the receiver in the message (26%); negative attitude toward the brand was less important (Verhaeghe et al 2007). This research, however, is predominantly about messages in general, not viral advertising, with the exception of Brown, Bhadury, and Pope (2010). Therefore, a more focused exploration that pertains directly to viral video ads is needed.

As is evident from this review, little experimental research has tested underlying processes and responses evoked by features of viral video ads. Arguably, the most significant content features are related to emotionality, the variable of interest in this experiment. We next offer a brief overview of emotionality as it relates to viral advertising.

Emotionality and Viral Advertising

Motivations to forward a viral message cannot be fully examined without also considering the message content and its specific features. Viral success depends on consumers' active participation in forwarding messages to others, so campaigns are often more about the emotional impact of the message than the product itself (MindComet 2006). A popular viral video could be built around a nondescript product with a "wow factor" in the message (MindComet 2006). Because emotionality of the message is what likely drives consumer participation, viral videos often employ strong emotional appeals. Prior research has found that viral ads rely more on appeals related to humor, sexuality, nudity, and violence than television ads (Porter and Golan 2006). As Mads Holman of London's Go-Viral agency advised, viral videos should contain "things you can't see on TV" to be successful (Lindstrom 2009). Thus, the common industry wisdom seems to suggest that viral videos should feature more emotionally intense content than their television counterparts to motivate forwarding behavior. However, the impact of such content has received only limited empirical attention.

Before the advent of viral video ads, ad agencies used the power of emotional content by creating buzz through forwarded text-based e-mail. In their study of pass-along email, Phelps and colleagues (2004, p. 345) conclude that "messages that spark strong emotional feelings-humor, fear, sadness, or inspiration-are likely to be forwarded." Highly emotional messages meet the standards for forwarding even of people who were infrequent senders of pass-along e-mail. Similarly, Lindgreen and Vanhamme (2005, p. 125) argue that "emotions are key drivers of viral marketing campaigns." In particular, they claim that the surprise factor is an important emotion for viral success. This pattern of results is not surprising, given the established link between human emotion and motivation as distinct but highly related concepts (Bradley and Lang 2007). It seems likely that motivational responses engaged by messages varying in emotional tone could drive attitudes and intentions to forward a viral message, an assumption rooted in the theoretical framework of this study.

In one of the two known experiments on the topic, Bardzell, Bardzell, and Pace (2008) find that emotional responses to viral videos are complex and often conflicting. Participants' self-described emotional reactions to these videos are more positive (57%) than negative. The high percentage of negative emotional responses is surprising though, because the same participants had given overall positive reviews of the videos. Thus, positive reviews do not correspond to positive emotions from viewing. The most popular emotion evoked from the videos is amusement (34 times), followed by irritation (9 times) and then dissatisfaction, interest, and pleasure (7 times each) (Bardzell, Bardzell, and Pace 2008). Findings also suggest that some emotional engagement is a necessary but not sufficient condition for viral success, such that

It is unlikely that a video lacking a certain amount of emotional engageability will spread virally, regardless of other factors. At the same time, just because a video has this emotional engageability by no means guarantees that it will go viral; other factors (e.g., word of mouth, computer-based recommendation systems, and trendy cultural topics and memes) will influence a given video's viral ability (Bardzell, Bardzell, and Pace 2008, p. 7).

In another experiment, Brown, Bhadury, and Pope (2010) test the effects of comedic violence on viral advertising effectiveness. They find that humorous ads high in violence and severity of consequences are more likely to be forwarded

to others, evoke the highest ad message involvement, and evoke the highest attitude toward the ad. They also stipulate that the ads' provocative nature may be the key reason for these results. These findings demonstrate the effectiveness of some of the features of viral video ads discovered previously, such as humor and violence (Porter and Golan 2006). The overall emotionality of these messages remains unclear though, because violence and severity appear in a humorous context, and therefore, even the ads with intense violence and severe consequences could still be experienced as pleasant.

The previously reviewed literature hints at the important impact of emotional tone on responses to viral video ads, including attitudes and intent to forward. Because this content is often edgier than traditional television ads, a thorough understanding is needed of how the emotional tone of viral ads engages the motivational and emotional responses underlying attitudes and intention to forward. Advertising research that provides such understanding must be grounded in the most recent theorizing about the nature of human emotion and how it affects cognitive and emotional processing of advertisements.

Theoretical Framework

The most extensively applied theoretical model on how the human mind processes emotional media content is Lang's (2000, 2006, 2009) Limited Capacity Model of Motivated Mediated Message Processing (LC4MP). This model is grounded in a motivated cognition perspective of the human mind, which proposes that emotion and cognition are intertwined in a way that aids the mind's primary task to evaluate the motivational significance of encountered stimuli and determine appropriate responses (Lang 2009; Lang and Bradley 2010). Lang extends basic theory about the nature of human emotion to a theoretical framework that describes emotional media content and how the human mind processes mediated messages, such as viral video ads. The model has been applied to various media content, including highly emotional health videos (Leshner, Bolls, and Thomas 2009), fear appeal-based television ads (Potter et al. 2006), online "advergames" (Bailey, Wise, and Bolls 2009), and video clips selected to evoke specific affective feelings (Lee and Lang 2009). The current study applies the framework to describe the variation in the emotional tone of viral video ads in a more nuanced fashion than previous research on the impact of emotion in advertising and as a theoretical lens for understanding the impact of emotional tone on attitudes and intention to forward a viral video.

The first step in applying LC4MP to the study of emotional tone is to consider the fundamental nature of human emotion. Prior research has conceptualized human emotion as a fleeting, object-focused, affective evaluation emerging from the activity of underlying motivational systems that are broadly organized around the dimensions of appetitive and aversive responding (Barrett et al. 2007; Lang and Bradley 2010). The appetitive motivational system activates in response to perceived pleasantness of stimuli in the environment, and the aversive motivational system activates in response to perceived unpleasantness (Lang and Bradley 2010). Thus, the appetitive system governs emotional response that motivates approach-related behavior, and the aversive system governs emotional response that motivates defensive, avoidance-related behavior (Lang and Bradley 2010). Activity within the appetitive and aversive motivational systems forms the valence dimension of emotion, while the intensity of activity within these systems forms the arousal dimension of emotion (Cacioppo and Gardner 1999). The valence dimension of emotion has most recently been conceptualized in a bivariate rather than bipolar way. According to Cacioppo, Gardner, and Berntson (1997), the appetitive and aversive systems construct independent underlying dimensions to emotional valence. Motivational and emotional activity within these systems can be reciprocal but also uncoupled (activity changes in one system with no significant change in the other) or coactive (activity increases or decreases in both systems) (Cacioppo, Gardner, and Berntson 1997). Thus, people can perceive any stimulus encountered in their complex social environment, such as viral video ads, as pleasant, unpleasant, or a mixture of both (a coactive emotional state).

This view of the nature of human emotion is known as the dimensional theoretical perspective of emotion (Bradley and Lang 2007). It is important to note that the dimensional theory of emotion draws a conceptual distinction among emotion, affective feelings (e.g., fear, guilt, happiness), and attitudes (Bradley and Lang 2007). Emotion reflects fleeting, objectfocused motivational responding along the primary dimensions of valence and arousal. Affective feelings reflect a specific cognitive interpretation of emotion. Attitudes reflect a relatively enduring, affectively valenced, object-focused evaluation. The distinction between emotion and attitudes is important in this study. Under a dimensional theoretical perspective, attitudes vary according to emotional activity, but emotion is relatively fleeting, while attitudes are relatively enduring and tend to be expressed in a more bipolar manner, describing the affective evaluation of objects ranging from

generally unfavorable to favorable (Bradley and Lang 2007; Cacioppo, Gardner, and Berntson 1997). In summary, the dimensional theory of human emotion proposes the existence of a human affect system that foundationally evaluates the motivational significance of environmental stimuli, resulting in appetitive and aversive motivational activation, which ultimately produces emotional experience, affective feelings, and attitudes (Barrett et al. 2007).

Media content, particularly the highly emotional content found in most viral video ads, fundamentally consists of a range of motivationally significant stimuli. Thus, the dimensional theoretical perspective on human emotion is a particularly useful framework for understanding mental processes and effects associated with emotional media content (Bolls 2010). The LC4MP extends the dimensional view of emotion to describe motivated cognitive processing of media content (Lang 2009). A major assumption of this model is that media content is mentally processed and initially responded to in the same way as "real-world" stimuli. Thus, motivated cognitive processes are also engaged when people view viral video ads. Lang (2009) further proposes extending the nature of motivated cognitive processing to define media content conceptually as a stream of sensory information varying in motivational significance. In this conceptual definition, media content can fundamentally be described and categorized according to the presence and absence of appetitive and aversive sensory stimuli. This approach results in a scheme for categorizing emotional media messages as appetitive/pleasant, aversive/unpleasant, and coactive (featuring content likely to engage both motivational systems). These categories of emotional content significantly affect how people mentally process and respond to media messages (Lang et al. 2007). The current study applies these categories to conceptualize the emotional tone of viral video ads as content that engages patterns of appetitive and aversive motivational activation and results in the distinct emotional tone categories of pleasant, unpleasant, and coactive.

Emotional tone is a critical feature in determining how people process ads, including viral video ads, and, ultimately, how they form attitudes and behavioral intentions (Brown, Homer, and Inman 1998). According to the LC4MP, variation in the emotional tone of messages significantly affects the allocation of cognitive resources to forming memory representations of a message. During message exposure, cognitive resources are simultaneously allocated to the memory processes of encoding, storage, and retrieval (Lang 2009). Encoding involves the formation of a short-term memory representation

of the message. Retrieval results in the activation of a relevant existing long-term memory representation that helps form the short-term memory of the message. Storage involves linking information from the message to existing long-term memory representations. Appetitive activation results in more resources allocated to encoding, and aversive activation increases resources allocated to encoding up to a point at which resources are defensively withdrawn from processing the message and shifted to storage (Lang 2009).

Motivated cognitive processing-as described in the LC4MP-of viral video ads varying in emotional tone has the potential to affect attitude toward the ad, attitude toward the brand, and intent to forward a video. As reviewed previously, patterns of appetitive and aversive motivational activation engaged by emotional message content affect how the message is processed in memory. This pattern in turn results in a distinct long-term memory representation of the message that likely varies according to the emotional tone of an advertisement. Fazio (2007) conceptualizes attitudes as evaluative information associated with the representation of an object in long-term memory. Thus, it seems likely that motivated cognitive processing evoked by viral video ad content could result in an emotional experience that mirrors the emotional tone of ad content, leading to significantly different representations of attitudes and behavioral intentions in memory, dependent on whether the ad is pleasant, unpleasant, or coactive. As one of the few existing experiments on the impact of emotional tone in viral video ads, this exploratory study is designed to test the simple main effects of emotional tone on the dependent variables of interest. After these effects have been established, further research could explore the dynamics of underlying mental processes and other potentially important mediators of observed effects. The majority of advertising research on the impact of emotional tone has not used the bivariate conceptualization of emotional tone applied herein, so there is little theoretical research from which specific hypotheses can be derived. Instead, we explore the following specific research questions:

RQ1. How does the emotional tone of viral video ads affect attitude toward the ad?

RQ2. How does the emotional tone of viral video ads affect attitude toward the brand?

RQ3. How does the emotional tone of viral video ads affect intent to forward the ad?

METHOD

Design

The proposed research questions were addressed with an experiment that incorporated a 3 (emotional tone) \times 4 (ad) within-subjects repeated measures design. All participants viewed 12 video ads, or 4 ads in each level of emotional tone (pleasant, unpleasant, and coactive). The order in which ads were viewed was random for each participant.

Independent Variable: Emotional Tone

The emotional tone of the viral video was conceptualized as a concrete feature of message content that portrays emotional valence. Consistent with recent conceptualizations of emotional valence as a multidimensional construct, emotional tone consisted of overall message content, categorized as positive, coactive, or negative. Emotional tone was manipulated by pretesting a pool of viral video ads for both pleasantness and unpleasantness of their overall message content and selecting stimuli ads that were clearly rated as pleasant, unpleasant, or coactive. The "Stimuli" section describes the procedure for the pretest in more detail.

Dependent Measures

Attitude Toward the Ad

Participants indicated their attitudes toward the viral video ads on a seven-point semantic differential scale anchored by "badgood," "negative-positive," "unfavorable-favorable," and "dislike-like" (Choi, Miracle, and Biocca 2001; Muehling 1987).

Attitude Toward the Brand

Participants indicated their attitude toward the brand shown in the videos on a seven-point semantic differential scale anchored by "bad-good," "negative-positive," "unfavorable-favorable," and "dislike-like" (e.g., Coulter and Punj 2007; Nan and Heo 2007).

Intent to Forward

Two items constituted the measure intent to forward: "This ad is worth sharing with others" and "I will recommend this ad to others." Previous research has demonstrated a Cronbach's alpha of .89 for these items (Chiu et al. 2007). Participants indicated their agreement with the two statements on a seven-point scale anchored by "strongly agree" and "strongly disagree."

Stimuli

The study used 12 real-life viral ads: four in each category of pleasant, unpleasant, and coactive emotional tone. The ads were selected from a larger sample of 18 viral videos ranging in length from 25 to 75 seconds. During the pretest, 38 undergraduate students rated the videos for pleasantness or unpleasantness, and a final score for each ad was calculated. The four ads with the highest, lowest, and middle scores were selected for the experiment. (See the appendix for the exact ads used.)

Pretest

For the pretest, 38 participants, who did not take part in the final experiment, rated 18 videos. The ads were chosen from industry publications and reviews of popular viral videos. Care was taken to select videos with similar length to limit the variability of this possible confound and to constrain the duration of the entire experiment. Thus, the final 12 videos ranged in length from 25 to 75 seconds. Research has demonstrated, however, that the length of viral videos does not correlate with the dependent variables (Bardzell, Bardzell, and Pace 2008).

The goal was to select 12 videos, four in each of the three categories of emotional tone: pleasant, unpleasant, and coactive. Participants in the pretest received an e-mail message with the links to each video. They watched and then rated each video on how pleasant or unpleasant it was on a nine-point scale, then sent their responses back through e-mail. Half the participants (n=19) rated the pleasantness of each video, and the other half (n=19) rated the unpleasantness. The final score for each video was obtained by subtracting the mean score for unpleasantness from the mean score for pleasantness. Thus, each video received one final score for its emotional tone.

Pleasant videos had a high positive final score, and unpleasant videos had a negative final score. Coactive videos appeared in the middle because their mean scores for pleasantness and unpleasantness were closer to each other than the other two categories of emotional tone. This result indicated that in the coactive condition, students perceived the ads as both pleasant and unpleasant at the same time, which is in accordance with the motivated cognition LC4MP theoretical framework used herein.

For the experiment, the four videos with the highest positive scores, the four videos with the lowest negative scores, and the four videos in the middle were selected and served as stimuli. Table 1 includes the mean difference scores of the three categories of emotional tone, averaged across the four ads in each category.

Table 1. Results of the Paired Samples t-test on Videos in Pretest

Emotional Tone (A)	Emotional Tone (B)	Mean Difference (A - B)
Pleasant	Coactive Unpleasant	2.35* 5.78*
Coactive	Pleasant Unpleasant	-2.35* 3.43*
Unpleasant	Pleasant Coactive	-5.78* -3.43*

Notes: N = 38.

A paired samples *t*-test showed that the differences between the means were significant for all three categories. This finding indicated a successful manipulation of overall message content in terms of pleasant, unpleasant, and coactive emotional tone.

Participants and Procedure

Participants were 42 students enrolled at a large Midwestern U.S. university who received course credit. Participants came to a campus computer lab and completed the study on Dell desktop computers with 22-inch monitors. The experiment was controlled by MediaLab software, which enables participants to complete the study at their own pace. Informed consent was obtained before launching the study. Participants first saw an instruction screen that explained the purpose of the study in general terms, viewed the videos, and then completed the self-report measures of attitudes and intent to forward immediately after each video. On completing the measures for the last video, participants were debriefed, thanked, and dismissed.

RESULTS

Data Analysis

A 3 (emotional tone) \times 4 (ad) repeated measures analysis of variance tested the research questions on the impact of a viral video ad's emotional tone on attitude toward the ad, attitude toward the brand, and intent to forward the ad. Because the

stimuli were real-life ads, participants' familiarity with each ad was also measured. No significant differences occurred between participants who were familiar and unfamiliar with the ads.

Attitude Toward the Ad

The first research question investigated the main effect of emotional tone on attitude toward the ad. There was a significant main effect of emotional tone on attitude toward the ad $(F(2, 82) = 6.17, p = .002, partial \eta^2 = .14)$. Pleasant viral video ads evoked the most positive attitude toward the ad (M = 4.77), followed by coactive (M = 4.35) and then unpleasant (M = 4.16) emotional tone.

Attitude Toward the Brand

The second research question investigated the impact of emotional tone on attitude toward the brand. Data analysis revealed a significant main effect of emotional tone on attitude toward the brand (F(2,82) = 16.3, p=.000, partial $\eta^2 = .28$). A pattern similar to that obtained for RQ1 resulted. Viral video ads with pleasant emotional tone seemed to evoke the most favorable brand attitude (M = 4.98), followed by ads with coactive emotional tone (M = 4.57) and unpleasant emotional tone (M = 3.84).

^{*}p < .01.

Intent to Forward

The third research question investigated how emotional tone affects people's intent to forward the viral video ad. The results revealed a significant main effect of emotional tone on intent to forward the ad (F(2, 82) = 7.23, p = .001, partial $\eta^2 = .15$). Participants indicated the strongest intent to forward viral video ads with pleasant emotional tone (M = 4.65), followed by ads with coactive emotional tone (M = 4.24), and then ads with unpleasant emotional tone (M = 3.8).

DISCUSSION

This experiment sheds light on the role of emotion in obtaining desired advertising outcomes with viral video advertising through an exploratory study of the direct effect of emotional tone on attitudes and intentions. The results indicate that in the context of product viral video advertising, emotional tone has a simple linear relationship with both attitudes and intentions. Responses on scales measuring attitude toward the ad, attitude toward the brand, and intent to forward the viral ad were most favorable for ads with positive emotional tone (i.e., those viewed as pleasant). Responses turned less favorable as the emotional tone became more mixed and were least favorable for ads with negative tone (i.e., unpleasant). This pattern of results mimics findings from traditional advertising on the relationship between emotion and attitudes, suggesting that positive emotional tone often results in positive attitudes and negative emotional tone often results in negative attitudes (e.g., Du Plessis 2008; Faseur and Geuens 2006).

These results replicate previous research in traditional advertising and theoretically indicate that the simple direct relationship between emotional tone and attitudes and intentions may be similar for viral video advertising. The study makes a theoretical contribution to research on emotion and attitudinal responses to advertising by conceptualizing emotional tone according to a multidimensional perspective that allows for not only positive or negative but also mixed coactive emotional tone. Few advertising experiments investigate mixed emotional tone in messages. This study indicates that as emotional tone becomes more mixed, viewers evaluate these messages as both pleasant and unpleasant and become less favorably oriented toward the message and less willing to forward it. Attitudes and pass-along intentions form using limited processing, and therefore, when viewers infer a general sense of pleasantness (approach), it facilitates a positive attitude and the desire to share the feeling with others. A worthwhile question for further research would be to determine whether this decrease in favorable attitudes and intent to forward is driven by decreased positive emotion, increased negative emotion, or both. Regardless, this exploratory study illustrates the utility of adopting a motivated cognition theoretical framework to examine the impact of emotional tone in advertising in a way consistent with the embodied nature of emotion and motivation in the human brain, which is the actual "processor" of advertising. Further research also should investigate mediators of the main, direct effects found herein. For example, type of advertising could matter. Although this study reveals a general pattern suggesting that attitudes and intention to forward are driven primarily by pleasant emotional tone and, by extension, emotional experience, unpleasant tone may have a more significant impact for health messages, in which the communication of physical threats may more powerfully drive attitudes and intentions.

The practical implications of these findings for the creation of viral video ads are significant. They challenge the common advertising approach that often tries to shock or scare online users to motivate them to forward a viral ad. Industry experts suggest that viral ads must contain elements that are not on television to be successful (Lindstrom 2009). And they do. Viral ads rely on appeals of sex, violence, and nudity much more often than television ads (Porter and Golan 2006). However, the findings of this study point to the opposite conclusion-that is, ads that viewers find pleasant rather than unpleasant or coactive are the most effective in terms of attitudes and forwarding intentions. Because of the mainstream nature of their content, of the four ads in the pleasant category, three could be shown on television (Skoda Cake Car, Carlton Big Ad, and Cadbury Gorilla); of the four ads in the unpleasant category, only one could (Xbox). This suggests that the provocative and controversial content that advertisers ascribe to their audiences may not actually be what those users want. Moreover, study participants were college students, the prototypical audience for viral advertising. Although further research is needed, creative directors should reconsider their choice of unpleasant emotions and negative messages, given the evidence thus far. Some industry analysts have reached a similar conclusion. In commenting on the most popular viral videos of 2009, Klaassen (2009) notes a "general sense of light-heartedness" and that the videos "definitely instilled a sense of wonder or invoked a smile."

The limitations of this experiment are threefold. First, all test participants were between the ages of 18 and 22. For future testing, research should use other age groups as the field of

viral advertising matures and ads move beyond the young adult target audience. Second, this study included viral ads from real life, which creates a greater possibility for unknown confounds in the messages and offers only a wide emotional range of the messages. Third, the measured attitudes were somewhat neutral and had relatively small mean differences.

Further studies should attempt to narrow the emotional scope of the stimuli and explore specific emotional appeals, similar to Brown, Bhadury, and Pope (2010). Differences in effectiveness of viral video ads between men and women and among people of different ages and cultures should also be explored because these factors may influence perception of the ads and the decision to pass them along. In general, these groups engage in different online activities (Horrigan 2007), so they may react differently to this online ad type. Brand recall is another outcome variable that should be studied, because recall is an important aspect of memory, which could affect continuous electronic word-of-mouth about the ad and buying behavior. Examining actual forwarding behavior, versus forwarding intentions, would also provide a more precise indication of the viral effects of different message features. Finally, purchase intent is another important outcome variable for exploration. The current study did not examine purchase intent because its purpose was to explore the stage of attitude formation as a first step, toward both the ads and the brand. Thus, exploring purchase intent would be a logical next step in the research agenda on viral advertising.

REFERENCES

Bailey, Rachel, Kevin Wise, and Paul D. Bolls (2009), "How Avatar Customizability Affects Children's Arousal and Subjective Presence During Junk Food-Sponsored Online Video Games," *Cyber Psychology & Behavior*, 12 (3), 277-83.

Bardzell, Jeffrey, Shaowen Bardzell, and Tyler Pace (2008), "Emotion, Engagement and Internet Video," report, One to One Interactive. http://www.scribd.com/doc/8948430/emotion-engagement-and-internet-video (accessed February 28, 2011)

Barrett, Lisa F., Batja Mesquita, Kevin N. Ochsner, and James J. Gross (2007), "The Experience of Emotion," *Annual Review of Psychology*, 58, 373-403.

Bolls, Paul D. (2010), "Understanding Emotion from a Superordinate Dimensional Perspective: A Productive Way Forward for Communication Processes and Effects Studies," *Communication Monographs*, 77 (2), 146-52.

Bradley, Margaret and Peter J. Lang, (2007), "Emotion and Motivation," in *Handbook of Psychophisiology*, 3d ed., John T. Cacioppo, Louis G. Tassinary, and Gary G. Berntson, eds., New York: Cambridge University Press, 581-607.

Brown, Mark R., Roop K. Bhadury, and Nigel K. Pope (2010), "The Impact of Comedic Violence on Viral Advertising Effectiveness," *Journal of Advertising*, 39 (1), 49-65.

Brown, Steven P., Pamela M. Homer, and Jeffrey Inman (1998), "A Meta-Analysis of Relationships Between Ad-Evoked Feelings and Advertising Responses," *Journal of Marketing Research*, 35 (1), 114-26.

Cacioppo, John T. and Wendi L. Gardner (1999), "Emotion," *Annual Review of Psychology*, 50 (1), 191-214.

---, ---, and Gary G. Berntson (1997), "Beyond Bipolar Conceptualizations and Measures: The Case of Attitudes and Evaluative Space," *Personality and Social Psychology Review*, 1 (1), 3-25.

Chiu, Hung-Chang, Yi-Ching Hsieh, Ya-Hui Kao, and Monle Lee (2007), "The Determinants of Email Receivers' Disseminating Behaviors on the Internet," *Journal of Advertising Research*, 47 (4), 524-34.

Choi, Yung Kyun, Gordon E. Miracle, and Frank Biocca (2001), "The Effects of Anthropomorphic Agents on Advertising Effectiveness and the Mediating Role of Presence," *Journal of Interactive Advertising*, 2 (1).

Coulter, Keith S. and Girish N. Punj (2007), "Understanding the Role of Idiosyncratic Thinking in Brand Attitude Formation," *Journal of Advertising*, 36 (1), 7-20.

Cutler, Matt (2009), "How to Make Your Online Video Go Viral," *Advertising Age*, 80 (March 30), 42.

Du Plessis, Erik (2008), *The Advertised Mind: Groundbreaking Insights into How Our Brains Respond to Advertising.* London and Philadelphia: Millward Brown and Kogan Page Limited.

Eckler, Petya and Shelly Rodgers (2010), "Viral Advertising: A Conceptualization," paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Denver, CO.

--- and --- (2011), "Viral Marketing on the Internet," in *Wiley International Encyclopedia of Marketing*, Vol. 4, Jagdish Sheth and Naresh K. Malhotra, eds., West Sussex: John Wiley & Sons.

Faseur, Tine and Maggie Geuens (2006), "Different Positive Feelings Leading to Different Ad Evaluations," *Journal of Advertising*, 35 (4), 129-42.

Fazio, Russell H. (2007), "Attitudes as Object Evaluation Associations of Varying Strength," *Social Cognition*, 25 (5), 603-37.

Feed Company (2008), Viral Video Marketing Survey: The Agency Perspective. Los Angeles: Feed Company.

Golan, Guy J. and Lior Zaidner (2008), "Creative Strategies in Viral Advertising: An Application of Taylor's Six-Segment Message Strategy Wheel," *Journal of Computer-Mediated Communication*, 13 (4), 959-72.

Horrigan, J. (2007), *A Typology of Information and Communication Technology Users*. Washington, DC: Pew Internet & American Life Project.

Kaikati, Andew M. and Jack G. Kaikati (2004), "Stealth Marketing: How to Reach Consumers Surreptitiously," *California Management Review*, 46 (4), 6-22.

Kellaris, James J. and Cline, Thomas W. (2007), "Humor and Ad Memorability: On the Contributions of Humor Expectancy, Relevancy, and Need for Humor," *Psychology and Marketing*, 24 (6), 497-509.

Kirby, Justin (2006), "Viral Marketing," in *Connected Marketing: The Viral, Buzz and Word of Mouth Revolution*, Justin Kirby and Paul Marsden, eds., Oxford, UK: Elsevier Science & Technology Books, 87-106.

Klaassen, Abbey (2009), "What We Can Learn from the Top Viral Videos of 2009," *Advertising Age*. (December 30), <a href="http://adage.com/article/viral-video-charts/viral-video-chart-top-campaigns-2009/141235/(accessed January 15, 2010).

Lang, Annie (2000), "The Limited Capacity Model of Mediated Message Processing," *Journal of Communication*, 50 (1), 46-70.

--- (2006), "Using the Limited Capacity Model of Motivated Mediated Message Processing to Design Effective Cancer Communication Messages," *Journal of Communication*, 56, 57-80.

--- (2009), "The Limited Capacity Model of Motivated Mediated Message Processing," in *The Sage Handbook of Media Processes and Effects*, R.L. Nabi and M.B. Oliver, eds., Thousand Oaks, CA: Sage Publications, 193-204.

---, Byungho Park, Ashley N. Sanders-Jackson, Brian D. Wilson, and Zheng Wang (2007), "Cognition and Emotion in TV Message Processing: How Valence, Arousing Content, Structural Complexity, and Information Density Affect the Availability of Cognitive Resources," *Media Psychology*, 10 (3), 317-38.

Lang, Peter J. and Margaret M. Bradley (2010), "Emotion and the Motivational Brain," *Biological Psychology*, 84 (3), 437-50.

Lee, Seungjo and Annie Lang, A. (2009), "Discrete Emotion and Motivation: Relative Activation in the Appetitive and Aversive Motivational Systems as a Function of Anger, Sadness, Fear, and Joy During Televised Information Campaigns," *Media Psychology*, 12 (2), 148-70.

Leshner, Glenn, Paul D. Bolls, and Erica Thomas (2009), "Scare 'Em or Disgust 'Em: The Effects of Graphic Health Promotion Messages," *Health Communication*, 24 (5), 447-58.

Lindgreen, Adam and Joelle Vanhamme (2005), "Viral Marketing: The Use of Surprise," in *Advances in Electronic Marketing*, Irvine Clarke and Theresa B. Flaherty, eds., Hershey, PA: Idea Group Publishing, 122-38.

Lindstrom, Martin (2009), "Essential Elements of Viral Video Success," *Advertising Age*, (September 19).

Manly, Lorne (2005), "The Future of the 30-Second Spot," *The New York Times*, March 1. http://www.nytimes.com/2005/03/27/business/yourmoney/27dvr.html (accessed February 28, 2011).

MindComet (2006), "Viral Marketing: Understanding the Concepts and Benefits of Viral Marketing," white paper, http://cmginteractive.com/uploads/viral marketing.pdf (accessed February 26, 2011).

Muehling, Darrel D. (1987), "An Investigation of Factors Underlying Attitude – Toward – Advertising – In - General," *Journal of Advertising*, 16 (1), 32-40.

Nan, Xiaoli and Kwangjun Heo (2007), "Consumer Responses to Corporate Social Responsibility (CSR) Initiatives," *Journal of Advertising*, 36 (2), 63-74.

Phelps, Joseph E., Regina Lewis, Lynne Mobilio, David Perry, and Niranjan Raman (2004), "Viral Marketing or Electronic Word-of-Mouth Advertising: Examining Consumer Responses and Motivations to Pass Along Email," *Journal of Advertising Research*, 44 (4), 333-48.

Poels, Karolien and Siegfried Dewitte (2006), "How to Capture the Heart? Reviewing 20 Years of Emotion Measurement in Advertising," *Journal of Advertising Research*, 46 (1), 18-37.

Porter, Lance and Guy Golan (2006), "From Subservient Chickens to Brawny Men: A Comparison of Viral Advertising to Television Advertising," *Journal of Interactive Advertising*, 6 (2).

Potter, Robert F., Michael S. LaTour, Kathryn A. Braun-LaTour, and Tom Reichert (2006), "The Impact of Program Context on Motivational System Activation and Subsequent Effects on Processing a Fear Appeal Message," *Journal of Advertising*, 35 (3), 67-80.

Purcell, Kristen (2010), *The State of Online Video*. Washington, DC: Pew Internet & American Life Project.

Severn, Jessica, George E. Belch, and Michael A. Belch (1990), "The Effects of Sexual and Non-Sexual Advertising Appeals and Information Level on Cognitive Processing and Communication Effectiveness," *Journal of Advertising*, 19 (1), 14-22.

Shirky, Clay (2000), "The Toughest Virus of All," *Clay Shirky's Writings About the Internet: Economics and Culture, Media and Community, Open Source*, July 11, http://www.shirky.com/writings/toughest-virus.html (accessed September 2, 2009).

Slutsky, Irina (2010), "'Digital Story of the Nativity' Is Viral Gift That Keeps on Giving," *Advertising Age*, December 29, http://adage.com/digital/article?article_id=147911 (accesse d February 1, 2011).

Verhaeghe, Annelies, Niels Schillewaert, Steven Van Belleghem, Christophe Vergult, and Dennis Claus (2007), "A New Approach For Measuring 'Buzz' Word of Mouth and Word of Mouse," paper presented at the ESOMAR World Research Conference 2007.

APPENDIX

Viral Ad Stimuli for the Experiment

Pleasant Videos

Skoda Cake Car, 60 seconds <a href="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watch?v="http://uk.youtube.com/watc

Bud Swear Jar, 60 seconds http://www.youtube.com/watch?v= <u>EJJL5dxgVaM</u>

Carlton Big Ad, 60 seconds http://www.youtube.com/ watch?v=Mv5U0W8FDDk

Cadbury Gorilla, 50 seconds http://www.youtube.com/watch?v=ZVpg7nWXk8Q

Coactive Videos

Coca Cola, 32 seconds http://www.youtube.com/watch?v=ZivEvKuMFbc

Blendtec, 56 seconds http://www.youtube.com/watch?v=30mpnfL5PCw

Axe, 46 seconds http://www.youtube.com/watch?v=leYilqL1A-M

ZaZoo condoms, 45 seconds http://www.youtube.com/watch?v=6NvJs3KNdkw

Unpleasant Videos

Xbox, 51 seconds http://www.youtube.com/watch?v=uswvZul1Z2s

Cossacks.com 25 seconds http://www.youtube.com/watch?v=zpUpkg9TI

Ford SportKa, 40 seconds http://www.youtube.com/watch?v=5dzi-8Rscfs

Gamesbreakout.com, 70 seconds http://www.youtube.com/watch?v=2jwGrInrfYQ

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