Abstract. In this experiment, participants were presented with a prosocial message modeled from modern public health campaigns. Although the message was kept identical, the context of the message was experimentally manipulated to represent either a viral user-generated video or a government-sponsored public service announcement. The data provided evidence of an indirect relationship between media context and persuasive efficacy mediated through subjective evaluations of the message and social identification with the message producers. Results are discussed in terms of social identity theory and entertainment processing models.

Keywords: social identity, persuasion, mass communication, new media, sexting, public service announcements

Mass communication is both more and less massive than it used to be. It is more massive in the sense that media are more prolific and present in our lives than ever before, but it is also less so in that an increasing diversity of media producers has led to specialization, with specific groups producing messages in specific channels with little relevance or impact outside of their social group. This increased diversity and specificity casts a spotlight on the importance of understanding the interplay between the context of media production, message processing, and social identity.

In 2009, the US Department of Health and Human Services (DHHS, 2009) sponsored a contest on the website YouTube.com to create a public service announcement (PSA) regarding the H1N1 virus. This strategy reflected a tacit assumption that the most effective mass media messages might be produced by members of the target audience. The eventual winner of the contest, a rap about the H1N1 virus (Clark, 2009), has over 280,000 views on the YouTube community, well above the view count of PSAs with a government façade. The result of this contest lends some support to the notion that audiences’ subjective evaluations and interest in engaging with a message may increase when production information, such as the channel and creator of the message, suggests that the message comes from within their own communities. While the supposition that the source of a video matters is hardly original, the media production contexts of user-generated and viral videos represent a specific, but increasingly prolific blending of channel and source variables for which we are aware of no unifying model.

The most basic assumption of our study was that, not just the content, but also the production context of a persuasive message can have an impact on its effects. There are highly relevant theoretical models and empirical findings that suggest how identification and message processing function as mechanisms in this process. Unlike the overtly educational, persuasive, and perhaps even intrusive PSA, user-generated viral videos are popular, socially facilitated entertainment. Research has found that messages are seen as higher quality when they are endorsed by others (Sundar & Nass, 2001; Walther, DeAndrea, Kim, & Anthony, 2010) and are sometimes more effective when disguised as entertainment (Moyer-Gusé, 2008). Because user-generated viral videos contain both of these elements, we hypothesized that:

Hypothesis 1 (H1): Persuasive messages embedded in the context of user-generated viral videos will be more effective than persuasive messages embedded in the context of a PSA even when the message content is held constant.

Beyond this potential direct effect, our study examined the indirect mechanisms responsible for this effect. Following up on the themes of entertainment and social relevance that make user-generated viral videos a special context, in the sections below we will examine how changes in perceived message quality and identification with message producers might work together as part of a single process to influence the persuasive efficacy of a message (Figure 1).

Perceived Message Quality

Sundar and Nass (2001) found that when a message was perceived as coming from peers, the message was seen as higher quality and more likeable, despite not being more
credible. Similarly, explicit evaluation by peers also impacted the perceived quality of a message (Walther et al., 2010). Our study did not look at the effects of implicit or explicit peer endorsement, but rather at how audience inferences and assumptions about the message and messenger might have a parallel effect. These inferences and assumptions have the potential to arise from beliefs about the origin and purpose of the media, which we refer to as the message’s “context” for the purposes of this study. Relating to this, some research has found tentative support for the idea that educational messages are perceived as being of lower quality than entertaining ones (Albada, 2000). Although the mechanism for this is not clear, it is plausible that expectations about a message may shift attention toward information consistent with those expectations. For example, audience members expecting an entertaining message may focus more on entertainment qualities of the message such as humor, engagement, or script quality, rather than on critical evaluation of the message content, an idea supported by research that suggests audiences counter-argue less against entertaining media (Moyer-Gusé, 2008). As a result, people may be more entertained when they expect they will be entertained, which will result in a broader view that the message is of higher quality. Based on this we hypothesized that:

**Hypothesis 2 (H2):** People exposed to a persuasive message presented as a user-generated viral video will perceive the message to be of higher quality than when it is presented as a public service announcement (Figure 1).

Perceived message quality is important because research has shown that it sometimes predicts the actual efficacy of the message through creating positive and receptive affective states (Dillard & Peck, 2000; Dillard, Shen, & Vail, 2007). Therefore, we hypothesized that:

**Hypothesis 3 (H3):** Increased perceived message quality will predict increased message-consistent attitudes (Figure 1).

**Identification**

One of the goals of a PSA is to craft the most persuasive message possible. Although the DHHS announcement (2009) never explicitly gives a rationale for farming the PSA’s creation out to the community, one likely motivation may have been to tap the power that community and communality can have on the persuasion process. User-generated videos on YouTube.com have the power to “viral,” spreading through the community at an exponential rate, via Internet-based sharing. This social aspect of user-generated viral video is part of what makes this new communication technology a unique message context. Sharing these videos serves a social function of reinforcing culture (Lange, 2007), and people are more likely to pass along videos when their social ties are stronger (Harvey, Stewart, & Ewing, 2011). Identification with peers who view the video can also affect persuasive outcomes under some circumstances (Walther et al., 2010). Given that identification with other audience members may be important, identification with the message producers may also be an important determinant of the message’s persuasive efficacy. While a PSA may come from an external agency, viral user-generated videos are generated by an online community and distributed through it. As a result, people may expect that the creators of viral user-generated videos are more identifiable and similar to themselves; we hypothesized that:

**Hypothesis 4 (H4):** The producers of user-generated viral videos will be perceived as more similar and identifiable than the producers of PSAs (Figure 1).
Persuasion scholars have conceptualized identification either in terms of similarity with an individual (Byrne, 1997) or as a shared social identity (McGarty, Haslam, Hutchinson, & Turner, 1994), and although in the above research the hypothesized mechanism can vary from increased liking to increased trust, this previous research has found a link between both types of identification and persuasion. Consistent with this research, we hypothesized:

**Hypothesis 5 (H5):** A direct relationship will be found between identification and message-consistent attitudes, such that increased identification with the message creators will lead to more message-consistent attitudes (Figure 1).

While both types of identification can increase persuasion, they may vary in efficacy dependent on the message context. For example, when being persuaded in person, one has access not just to the content of the message, but also to information about the speaker that lets us see them as an individual. However, in the case of mass communication we might see an actor or character as the mouthpiece of a message, but the actual producer of the message remains anonymous. Research on social identity has found that when people lack individuating information they rely more heavily on group identity (Reicher, Spears, & Postmes, 1995). In the context of mass communication, people have little individuating information about the producers, who are sometimes not visible and do not necessarily interact with the audience. In addition, given that viral user-generated videos may be a way to reinforce culture and community (Lange, 2007), self-categorization theory would suggest that those group memberships are likely to be especially salient and relevant (Turner et al., 1987). Therefore, we hypothesized that:

**Hypothesis 5A (H5A):** For persuasive mass communication, identification with group-level traits (i.e., a belief that the producers are from a shared social group) will be a better predictor of message-consistent attitudes than individual similarity.

**Message Quality and Identification**

Other subtheories from the social identity perspective also provide a rationale for a direct relationship between perceived message quality and identification. Social identity theory (Tajfel & Turner, 1986) suggests that one of the primary motivating forces behind identity is a process of generating positive self-esteem. As a result we often try to think about people in our groups in the most positive light. It is possible, however, that the converse effect is also operating, and that individuals are more likely to assume that good things are created by someone from their group. The literature on “basking in reflected glory” (BIRGing) supports this idea. For instance, individuals are more likely to cognitively and publicly associate with a third party when that group has just won an athletic contest (Cialdini et al., 1976) or political victory (Boen et al., 2002). While this pattern has not been applied to media quality in the past, it could be inferred that as the quality of the media increases, audience members will be more likely to identify with the creators of the media as a way of improving their own self-esteem. This leads to the hypothesis that:

**Hypothesis 6 (H6):** As audience members perceive the quality of the media to be higher they will identify more strongly with the creators of the media (Figure 1).

Hypotheses 1–6 are schematically represented in Figure 1. As both the literature and figure makes clear, we are predicting that:

**Hypothesis 7 (H7):** Message context, subjective message quality, and identification will all have an individual impact on persuasion. In addition, the effects of message context on persuasion will be mediated by perceived message quality and identification both individually and jointly (Figure 1).

**Methods**

**Message Manipulation**

The topic we chose was one of particular relevance and importance to our participant pool of undergraduates. Sexting refers to the practice of sending sexually explicit pictures and language to people over a cellphone or through e-mail. Recent surveys have shown that approximately 20% of teens and young adults have sent someone a naked picture of themselves (Brunker, 2009). With a definition that included sexually explicit language as well as naked pictures, many more participants in our sample reported having either received (65%) or sent (48%) a “sext” message at least once. Sexting has become increasingly popular over the last 10 years and has led to psychological damage (e.g., suicide; Kaye, 2010) and legal consequences (e.g., child pornography charges against minors; Brunker, 2009) for its participants. Because of the growing popularity and media attention, the severity of the consequences, and the degree of relevance to a study population consisting primarily of teenagers and young adults, sexting represented an ideal proxy with which to understand the impact of identification with media message makers.

Paralleling the DHHS YouTube.com contest described earlier, participants in our study were exposed to an antisex-thing music video parody of Salt’N’Pepa’s hit song, “Let’s Talk About Sex.” In this video, originally produced by
the website CollegeHumor.com (2009), the musicians talked about sexting and its social consequences.

Pilot Study

To test whether our stimulus was believable as a viral user-generated video or a PSA we ran a pilot study. We showed our stimulus material to 37 separate participants from the same subject pool, and asked them to rate the probability that the message was a “government- or organization-sponsored” PSA, or a “grassroots” user-generated viral video. Participants made these ratings on three-item 1–7 scales for both potential message contexts (how likely it was to be a PSA/Viral Video, how surprised they would be to find out it was a PSA/Viral Video, and that it probably was a PSA/Viral Video). The scale was highly reliable: PSA (M = 4.70, SD = 1.87, α = .92), Viral (M = 4.65, SD = 1.86, α = .90). A paired-sample t test found no significant differences in probability between contexts, t(36) = .11, p = .91, d = .04, suggesting that our stimulus was equally believable as a PSA or as a viral user-generated video.

We also used the pilot to make sure that the antisexting message was seen as clear and genuine. We asked the participants to identify the producers’ genuine beliefs about sexting and whether the message in the video was prosexting or ant sexting. These two 1–7 items formed a highly reliable scale (α = .85) and the mean (M = 6.14, SD = 1.26) suggested that people found the message to be genuine and overwhelmingly ant sexting.

Finally, we used the pilot to test our assumptions about our participants’ expectations of user-generated viral videos versus PSAs. Participants rated the different media contexts on entertainment, persuasive intent, and whether the producers differed in terms of levels of similarity to the participants, each on a 1–7 scale. Paired-samples t tests showed that participants expected viral videos to be significantly more entertaining (M = 5.17, SD = 1.52) than PSAs (M = 2.22, SD = 1.15), t(35) = 9.97, p < .001, d = 2.18; that participants expected less persuasive intent from viral videos (M = 3.46, SD = 1.52) than from PSAs (M = 5.22, SD = 1.77), t(35) = -4.57, p < .001, d = 1.07; and they expected that the producers of viral videos were much more similar to them (M = 3.86, SD = 1.40) than producers of PSAs (M = 1.97, SD = 1.14), t(35) = 6.85, p < .001, d = 1.91. These assessments were made before participants were exposed to our stimulus, and supported our basic assumptions about these media contexts.

Main Study: Participants and Exclusion Criteria

Undergraduate students (N = 101) from a Southwestern university in the United States were recruited from a variety of communication courses and were given extra credit in exchange for their participation. Participants who had previously encountered the experimental materials were excluded, as were participants who could not answer two of three posttest questions about the content of the experimental materials. Together these criteria eliminated 6 participants. For the final sample (N = 95), 32% of the population were male, and 68% were female. The ages of the participants ranged from 19 to 48 years (M = 20.9).

Main Study: Manipulation

Participants were randomly assigned to have the target video presented to them in the guise of either a PSA campaign or a viral Internet video. This, our message context variable, was manipulated by a short introductory text at the start of the video in which the video was explicitly stated to be a user-generated video that had recently gone viral or part of a government-sponsored public service campaign (coded: 0 = PSA, 1 = user-generated viral video).

Main Study: Measures

After watching the video, respondents answered questions about the subjective quality of the message, identification with the message creators, and attitudes toward sexting. All scales were developed for use in this study and were calculated using the average of the scale items. Subjective message quality was assessed by having participants judge how likely it was to be a PSA/Viral Video, how surprised they would be to find out it was a PSA/Viral Video, and that it probably was a PSA/Viral Video.

Two scales were developed to assess identification. The first represented personality similarity and was based on the 5-factor model of personality (McCrae & Costa, 1987). It asked participants to rate how similar the media producers were to them in terms of intelligence, extroversion, agreeableness, emotional stability, openness, and conscientiousness on a 1–7 scale (M = 4.13, SD = 1.10, α = .86). The second represented social similarity and asked participants to rate how similar the media producers were to them in terms of four social groupings (age, ethnicity, gender, and social standing; 1–7 scale; M = 4.10, SD = 1.24, α = .75). Attitudes towards sexting were measured using a three-item scale assessing the extent to which the experience of sending a sext would be very negative (positive), very bad (good), or make them unhappy (happy) on a 5-point semantic differential; high scores indicated more positive attitudes about sexting (α = .91). Descriptive statistics suggested relatively negative attitudes toward sexting (M = 2.17, SD = 1.03).

Results

Before testing our larger model we examined the results regarding H5A to see which type of identification (individual
or social) was most related to persuasion in our study. We entered the individual similarity and group similarity scales simultaneously as predictors of attitudes toward sexting in a multiple regression. The overall model was significant, $R^2 = .09$, $F(2, 92) = 4.32$, $p < .016$, and supporting H5A, only group similarity remained a significant predictor of message-consistent attitudes, $b = -.28$, $t = -2.73$, $p < .01$, such that as identification increased, attitudes toward sexting became less positive. Individual level similarity approached significance, $b = .18$, $t = 1.70$, $p = .09$, but the relationship was in the wrong direction, with more individual identification leading to more positive attitudes about sexting, inconsistent with the message.

Although H1–7 are presented separately, we were interested in the way in which all of the effects worked together in the larger model (Figure 1). To accomplish this we conducted the analyses for H1–7 simultaneously using Preacher and Hayes’ (2008) MEDTHREE SPSS macro to examine the direct and indirect effects between our variables (see Figure 2). Given the results for H5A, we only included social identification as the second mediator in our model. In terms of specific pathways, this analysis found a significant pathway between context and perceived quality, such that the viral video was seen as being of higher quality ($b = .67$, $t = 2.75$, $p < .01$), supporting H2. Video quality significantly and positively influenced level of identification with the message producers ($b = .21$, $t = 2.14$, $p < .05$), supporting H6. Finally, greater social identification with the message producers was related to less positive attitudes about sexting ($b = -.26$, $t = -2.75$, $p < .01$), supporting H5. While none of the other paths demonstrated significant effects in the context of the larger model, there was a significant two-part mediation effect along the top of the model, such that condition indirectly led to more message-consistent attitudes through subjective perceptions of the message’s quality and identification with the message creators, providing support for H7.

Discussion

In this study we found that presenting an antisexting message as a user-generated viral video resulted indirectly in less positive attitudes toward sexting than when audience members were exposed to an identical message presented as a PSA. Although the direct effect between our independent and dependent variable was nonsignificant, this study and our model were focused on how context can impact persuasion indirectly through improving subjective message quality and increasing identification with the messenger. Both of these mechanisms were related to the persuasive outcome in that both were required in order to persuade the audience to hold more message consistent attitudes. To better understand this larger process, we first look at each of the simple effects in our model and discuss how they fit, or fail to, the theoretical models invoked in making our predictions. Then, we will discuss conclusions that can be drawn about this model in light of the study’s strengths and limitations.

Direct Effect of Context on Persuasion

In our final model there was no direct effect of message context on persuasion. In hindsight this is unsurprising for both theoretical and methodological reasons. Theories like the entertainment overcoming resistance to persuasion model (EORM; Moyer-Gusé, 2008), which suggest that specific message contexts may be more persuasive than others, also suggest a variety of indirect effects that may be responsible for this effect, including narrative engagement and parasocial relationships with characters, both resulting in less counterargument. Our study looked at a different, non-mutually exclusive set of mechanisms, but also made it clear that message context serves as a cue that...
relates to a variety of cognitive processes, and that it is those processes that lead to persuasive outcomes. Methodologically, we manipulated a 10-sec text introduction in a 3-min video clip. This was a highly minimal and, in many ways, unrealistically controlled experimental manipulation. Real PSAs and viral videos coming from different groups of producers would feature different content, production choices, and a host of additional substantive differences. Those differences would involve much more diverse outcomes, including a greater likelihood of direct effects. In our pilot study, we found that people have very specific expectations about PSAs and user-generated viral videos. PSAs are expected to be pushier, and made by outsiders trying to enforce their opinions. User-generated viral videos on the other hand are expected to be entertaining and made by the same types of people as the audience. It makes sense that shifting expectations influence message processing and only change the persuasiveness of the message via those indirect routes.

**Direct Effect of Context on Perceived Message Quality**

The ways in which expectations can alter message processing are complex and can be related to both message context (Moyer-Gusé, 2008) and individual differences (Dutta-Bergman, 2006). Our results showed that the user-generated viral video context led directly to more positive subjective evaluations of the message. We did not measure expectations in direct relationship to subjective evaluations, a limitation we discuss later, but we believe that expectations have a logical role here. Expectations form the basis of self-fulfilling prophecies especially when they are negative (Madon, Jussim, & Eccles, 1997). Though self-fulfilling prophecies are rarely applied to empirical work on entertainment and mass communication, the idea suggests that those who expect themselves to be entertained will find themselves entertained, and perhaps even more powerfully those who expect themselves to not be entertained will not, and will view the message negatively as a result. In our case, the PSA frame would lead to lower expectations of entertainment, and those expectations would therefore result in reduced subjective message quality.

**Effect of Perceived Message Quality on Persuasion**

While we did not find that being more entertained had a direct relationship with attitudes, there is a theoretical explanation for the lack of a direct effect. Research on PSAs has found that perceived message efficacy tends to be a better predictor of persuasion than perceived message quality (Dillard & Peck, 2000). While this research suggests that both are predictors of persuasion, in some cases they may in fact represent orthogonal factors. Research on advertising suggests that arousing and entertaining commercials may draw people’s attention away from the message (Bushman & Bonacci, 2002), which may lower perceptions of message efficacy. Considering that our video was humorous and featured scantily clad men and women, it may have been too distracting to have a direct impact on attitudes. If we simultaneously consider the mechanisms through which entertainment impacts message processing we can start to understand how our model works more broadly. Dual process models of persuasion (e.g., the elaboration likelihood model: Petty & Cacioppo, 1986), explain that individuals can process information centrally by considering the logic of the argument. They do this when they have high motivation and ability, both of which may be reduced by entertainment (Slater & Rouner, 2002). Under such conditions, audience members process the message peripherally, relying on heuristic cues from the message’s context that may foster a sense of identification with the message producers.

**Effect of Perceived Message Quality on Identification**

We started by differentiating how individuals perceived that the message producer was similar to them — in terms of group memberships or individual characteristics — in the context of persuasive mass communication messages. Given the lack of individuating information about media message producers, similarity along personality dimensions would be hard for audience members to derive. However, media messages and contexts contain rich cues for making inferences about producers’ social group memberships, even in anonymous situations (Reicher et al., 1995). Our manipulation focused on message context and the effects of context on perceived message quality, as described above. Social identity theory suggests that the primary reason to belong to groups is to bolster self-esteem (Tajfel & Turner, 1986). When message producers manage to create an entertaining and esteem-worthy message, becoming affiliated in some way to the producers provides an opportunity to improve consumers’ own esteem. This is in line with social identity literature surrounding the “basking in reflected glory” phenomena (Boen et al., 2002; Cialdini et al., 1976). Perhaps more interesting, however, the ability to entertain may actually be a heuristic cue from which audiences infer social similarity. The ability to effectively satirize, use slang, or comment upon shared information and social memes does logically reflect a common understanding, and entertainment requires a common perspective. In our case, PSA producers might be seen as using an “outdated” mode of communication, doomed to be non-entertaining, and hence casting them as outsiders from the “get go” (start).

**Direct Effect of Identification on Persuasion**

Identification was a key component in our model and led directly to attitude change. We found social, rather than individual level, identification drove this effect. This
finding is in line with other research findings that a shared social identity can make a persuader more persuasive (McGarty et al., 1994). The people with whom we share significant social identities are more likely to share our perspective, and to know things that are useful to us because they inhabit the same social world that we do. Shared social groups also imply trust: If you and I constitute a “we,” this implies a shared interest which decreases the probability that you will give me unreliable or false information. For these reasons (and undoubtedly others), shared social identity is directly associated with persuasion.

**Limitations and Future Directions**

While this research provides preliminary information on how expectations, message processing, and social identity might be applied to persuasive mass communication messages, research could improve this body of knowledge by examining more micro and macro perspectives on how these variables relate. The idea that expectations about messages influence message processing was supported by our pilot study, although not directly tested in our experiment. Future studies should directly measure expectations and incorporate them into the analysis, or even treat expectations as the independent variable and manipulate them directly. While this study has focused on how identification affects and is affected by different message contexts, there are other peripheral cues (e.g., source credibility) that may be useful to study in future research. In addition, while our model focuses on increased persuasion through heuristics, there are other central persuasion processes (e.g., reactance) that are more related to reducing resistance by altering cognitive frames (e.g., EORM; Moyer-Gusé, 2008). In all likelihood the process we are describing in this study occurs either in concert with, or as a part of, these other resistance-reducing processes. Tying together these different programs of microlevel research will be important if we wish to fully understand the mechanisms and impact of these new media contexts on persuasion.

Although we believe our findings have external validity, other research may wish to take a more macro perspective, examining more realistic and comprehensive manipulation of these messages. While we combined the ideas of viral videos and user-generated content in our study for a very specific purpose, they represent only one possible combination of media factors in a sea of new possibilities. The mechanisms we have described here likely apply to many of these possibilities, but practitioners who wish to leverage the power of entertainment and social identity will want to examine potential interactions between the content, style, and delivery system of the messages, by using actual messages endemic to those contexts rather than experimentally created ones.

**Conclusion**

Our model represents how the context of a message can change the way we evaluate it, and how social identification with message creators can change the way we internalize a message. Separately, these are important findings, but considered together they integrate disparate theories into a model that combines message processing with social identity considerations. The model highlights how processes of evaluation and internalization can be linked as heuristics to be utilized in peripheral message processing. As such, to understand the impact of entertaining, persuasive, prosocial messages in the “new media” landscape we must consider elements of evaluation and internalization simultaneously.

The data showed that small changes in a message’s context have meaningful effects. In the real world, differences between messages are not so minimal, and hence we would expect that the effects of message context on entertainment, social identification, and persuasion would likely be both larger and more complex. But this finding in and of itself suggests that practitioners should be aware of how the context of their message and the channels through which they present it will fundamentally alter how people process the message, the messenger, and the conclusions that they take away from both.

**References**


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