The Means to Justify the End: Combating Cyber Harassment in Social Media

Tom van Laer

Section: Marketing and consumer behavior

Running head: The means to justify the end

Department of Marketing, ESCP Europe Business School, 527 Finchley Road, London NW3 7BG, United Kingdom
Tel.: +44 20 74 43 88 85
Fax: +44 20 74 43 88 74

E-mail address: tvanlaer@escpeurope.eu

Acknowledgments: The author gratefully acknowledges the suggestions of Katja Brunk, Ko de Ruyter, Joëlle Vanhamme, and Martin Wetzels on a previous version of this article.

NB: This paper is published in

Abstract  
Cyber harassment can have harmful effects on social media users, such as emotional distress and, consequently, withdrawal from social network sites or even life itself. At the same time, users are often upset when network providers intervene and deem such an intrusion an unjust occurrence. This article analyzes how decisions to intervene can be communicated in such a way that users consider them adequate and acceptable. A first experiment shows that informational justice perceptions of social network users depend on the format in which network providers present the decision to intervene. More specifically, if a decision to intervene is presented in the form of a story, as opposed to an analytical rendering of facts and arguments, decisions to intervene prompt more positive informational justice perceptions. A second experiment reveals that when users relate the experience to themselves, narrative transportation increases, which positively affects perceptions of the justice of decisions to intervene.

Keywords  
Cyber bullying; Cyber harassment; Identity; Justice perception; Narrative transportation; Self-referencing; Social media; Storytelling
Introduction

In the past ten years, social media have revolutionized the way people share experiences with businesses. A central characteristic of social media is that network providers encourage individuals to use their thoughts, feelings, likes, and dislikes to express their affiliation with certain content, figures, products, and brands and to construct a public or semi-public profile (Boyd and Ellison, 2007; Schau and Gilly, 2003). At the same time, these profiles open up an online avenue for people to be harassed. Cyber harassment involves a course of action in which an adult individual or groups of individuals use digital media to cause another individual to suffer emotional distress (Bocij, 2004). Many people suffer from cyber harassment. In the United States alone, estimates indicate that more than half a million people age 18 or older have been victims of cyber harassment (Baum et al., 2009). Not only does cyber harassment negatively affect social network sites, because victims tend to exit the service (Avery, 2010; Martin and Smith, 2008), but the emotional distress brought about by the online aggression can also cause victims to take their own lives (Parker, 2012). For example, an 18-year-old student at a U.S. university committed suicide after discovering his roommate electronically spied on him and gossiped about him on Twitter.

To combat cyber harassment in social media, network providers have experimented, with varying success, with monitoring technologies that enable detection and discontinuation of cyber harassment, such as Facebook’s report systems and evaluation tools (Levine, 2013). Paradoxically, users of social media often view the use of these tools as an unwarranted intervention that limits a rich expression of their online identities. Previous studies confirm that the impact of these undesired intrusions is a growing topic of debate (Reitsma et al., 2011; Sledgianowski and Kulviwat, 2009). In this debate, critics of network provider interventions frequently argue that it leads to the manifestation of an Orwellian reality and that users feel strongly about preventing such intrusions because they express their identities
through social media (Brunk, 2012; Pruitt, 2003). A case in point is Digg, a social news site on which users can evaluate articles and blogs published elsewhere on the Internet (www.digg.com). From early 2009 to late 2010, a large group of users banded together to control what appeared on the front page of the social news site. These users culled Digg’s pages to find what they considered liberal or otherwise anti-conservative users. They then used the site’s “bury” option to force those users’ stories off the front page. In response, Digg removed the possibility to bury stories, which led to anger and frustration among the general Digg audience who used both the “digg” and “bury” options to express themselves (Lowensohn, 2010). In no time, Digg visits dropped substantially (Tassi, 2012). Accordingly, users value the freedom to express their online identities without interference and therefore may oppose network provider intrusions that hinder this. As such, interventions are perceived as a violation of user identity. In this debate, however, advocates of network provider initiatives aimed to curb cyber harassment suggest that under certain circumstances, users may recognize that network providers have an obligation to take actions that protect fellow users from harm (Citron, 2009; Lipton, 2011). In these cases, they may view intervention as morally justified good stewardship and may be more tolerant of some degree of identity violation (Finn, 2004).

The general aim of this article is to explore how this catch-22 can be resolved by framing the ways decisions to intervene are communicated to users. To support this aim, this research focuses on informational justice perception, or the perceived adequacy of explanations for decisions (Greenberg, 1993). I turn to narrative transportation research, the central premise of which is that when consumers lose themselves in a story, their perceptions change to reflect that story (Green, 2008). This is in apparent contrast with a case for intervention following a logical line of argument, which seems more common with network provider decisions to intervene that are replete with legal and extra-legal regulatory jargon.
In particular, differences may exist in the degree to which the justification for the decision evokes reflections on the self. This research investigates these differences and makes three important contributions to extant literature.

First, I contend that a decision to intervene based on a story has a more positive effect on user perceptions than an analytical, factual format. I further distinguish two main components of identity: personal and social (Dollinger et al., 1996; Reid and Deaux, 1996). Personal identity refers to “the person’s construction and maintenance of an autobiography—a life story that is built, told to (and by) others in various contexts, and from time to time revised to fit changing experiences or preferences” (Hewitt, 2003, p. 111). In contrast, social identity is the aspect of one’s identity that is derived from participating in various interest groups on social network sites for instance (Tajfel and Turner, 2004). I explore whether the effect of the story versus the analytical format holds across both components.

Second, I advance understanding of the mechanism underlying the presentation format effect. When people process an analytical format, they examine the implications of each piece of information separately and then average these implications to form an overall perception (Fishbein and Yzer, 2003; Schellens and de Jong, 2004). However, I argue that piecemeal computational processing does not hold for justice perceptions of decisions to intervene in social media because of the characteristic story format of identity construction in social media (Kozinets et al., 2010; Van Laer and De Ruyter, 2010; Van Laer et al., 2013). Stories often cause people to become engrossed, an effect referred to as narrative transportation (Green and Brock, 2000). I examine whether the narrative transportation people experience leads to a justice perception that the story events imply.

Third, I move beyond the prediction that presentation format is associated with justice perceptions by exploring an intra-individual moderator that influences this relationship. Prior research has proposed that encouraging people to reflect on the self and to experience an
event from their own perspectives has both a positive (Escalas, 2004, 2007) and a negative (Burnkrant and Unnava, 1989, 1995) impact on perceptions. Both effects can be conceptualized as belonging to the self-referencing information-processing strategy. The current research investigates why self-referencing may lead to either less or more positive justice perceptions under the framework of the story and analytical presentation formats.

**Justice Perceptions of Decisions to Intervene across Identity Violations**

Offline harassment has a well-established body of business ethics research that includes racial harassment (e.g., Stevens, 2001), sexual harassment (e.g., Baugh, 1997; Bell et al., 2002; Wells and Kracher, 1993), and work victimization (e.g., Vega and Comer, 2005; Wornham, 2003), but the identification and investigation of cyber harassment and cyber stalking (i.e., repeated cyber harassment over a period of time) is an under-exposed research theme. In contrast, cyber harassment receives considerably more attention in the popular press. Signs of this zeitgeist include *The Economist* (2011, p. 63) warning that “the internet allows the malicious to menace their victims” and *The New Yorker* assertion that cyber harassment should be treated as a serious offense and harassers should face imprisonment (Parker, 2012).

Network providers have a variety of monitoring technologies at their disposal to intervene in social networks to combat cyber harassment. I contend that users may have justice perceptions of network provider decisions to intervene. Such perceptions of network provider decisions can range from morally just to intolerable identity violation. To test this argument, this article focuses on informational justice perception, or the perceived adequacy of explanations for decisions (Greenberg, 1993). Adequate justification is a moral right that is frequently neglected in the case of dilemmas on the web, such as protecting one user from cyber harassment versus respecting another user’s freedom to construct an online identity without interference (Sama and Shoaf, 2002).
There is theoretical and empirical support for the notion that people not only value their freedom to construct an online identity but are motivated to defend their identity more generally against threats and violations. Identity violation is a defiance of one’s identity, which is more extreme than simply the potential for violation to be present in what is commonly referred to as identity threat (Mayer et al., 2009). A decision that violates personal or social identity has a negative influence on justice perceptions. Mayer et al. (2009) further note that the two components differ in the influence they exert on people’s reactions to decisions. People seem to devalue justice less when a decision violates social identity. That is, feeling part of a group can initiate a process of depersonalization, so people’s conceptualization of themselves in that context aligns with group norms (Postmes et al., 1998; Terry and Hogg, 1996). Decisions that affect group members overall are more likely to prompt evaluations based on justice concerns for the group, rather than for the individual (Leung et al., 2007). Such evaluations may cause the resulting justice perceptions to be less negative than it would have been had the decision violated personal identity. For social identity violation, “sorrow shared is sorrow halved,” so decisions may be endured more easily when shared with others.

**Presentation Format of Decisions to Intervene**

As noted previously, research suggests that decisions that violate social identity affect justice perceptions less than decisions that violate personal identity, because people consider a widespread violation more just. However, the presentation format of the decision may influence this relationship. Mayer et al. (2009) focus on decisions that are presented as a case for intervention following a logical line of argument. When people process such an analytical, factual format, they examine the implications of each piece of information separately and then average these implications to form an overall perception (Fishbein and Yzer, 2003; Schellens and de Jong, 2004). However, piecemeal computational processing may not hold for justice
perceptions of decisions to intervene in social media because of the characteristic story format of identity construction in social media. Regarding this characteristic, a story is the account of an event or a sequence of events, leading to a transition from an initial state to a later or end state, which a storyteller conveys to a recipient (Bennett and Royle, 2004). Stories often cause people to become engrossed, an effect referred to as narrative transportation, which captures the extent to which (1) a recipient empathizes with the story characters and (2) his or her imagination is activated by the story events, which leads him or her to experience suspended reality during the story reception (Van Laer et al., forthcoming). In turn, people’s empathy with the story characters may lead to a justice perception that the story events induce and that represents a shift from people’s justice perceptions before narrative transportation (Appel, 2008; Green and Brock, 2000). Social media users who read a transporting story of cyber harassment may thus empathize with the victim, which may lead to a lack of awareness of their own identity. Therefore, users should perceive a decision to intervene, which violates personal identity, as more just when it is based on a story rather than an analytical format.

Thus, I hypothesize the following:

**H1** When a decision to intervene violates personal identity, users perceive more informational justice if the decision is presented in a story format rather than an analytical format.

**H2** Narrative transportation mediates the effect of presentation format on informational justice perception.

**Self-Referencing Strategy**

A decision to intervene in a story format should cause users to empathize more with the victim than a decision in an analytical format. A self-referencing strategy could exacerbate this effect. This information-processing strategy encourages people to experience a story from their own perspectives (Burnkrant and Unnava, 1989). According to Escalas (2004), an
expression such as “Imagine yourself…” prompts a self-referencing strategy. Gross-Schaefer et al. (2000) suggest this strategy for successful ethics education.

With a self-referencing strategy, people are encouraged to use their personal identity, or their thoughts, feelings, likes, and dislikes, to process information. On the one hand, if the information is presented in an analytical format, people who use personal identity may take a more critical look at the information. Not surprisingly, several authors argue that the use of this strategy may decrease the possibility that people will perceive a decision as just (Burnkrant and Unnava, 1989, 1995; Meyers-Levy and Peracchio, 1996). On the other hand, if the information is presented in a story format, these people may imagine themselves as the main story character. Being transported into their own cyber-harassment story in this way increases the possibility that they will perceive a decision to intervene as just (Escalas, 2007).

Therefore, the best way to have social media users perceive justice seems to be through a cyber-harassment story in which they imagine themselves as the victim and are stimulated to invent a different outcome to their experience (i.e., network provider intervention). Thus, I hypothesize the following:

**H3a** When a decision to intervene is presented in a story format, users perceive more informational justice if the decision encourages a self-referencing strategy.

**H3b** When a decision to intervene is presented in an analytical format, users perceive less informational justice if the decision encourages a self-referencing strategy.

Two experiments were designed to examine boundary conditions of the communication of decisions to intervene in social media to combat cyber harassment. Specifically, the purpose of Experiment 1 was to test Hypotheses 1 and 2. Experiment 2 explored these relationships further to test Hypotheses 2, 3a, and 3b.

**Experiment 1**

**Method**
The purpose of Experiment 1 was to examine whether identity violation and presentation format of a decision to intervene interact in their effect on justice perceptions. Both identity violation and presentation format were manipulated. The study had a randomized 2 (identity violation: personal or social) × 2 (presentation format: story or analytical) full-factorial design.

Participants

Participants received course credit for participation, and confidentiality was assured. Participants were 124 graduate business students (39.5% female). The age of the participants ranged from 19 to 38 years, with an average age of 25.32 years (SD = 3.66). The average amount of hours per month spent on social media was 6.67 (SD = 2.30), with an average tenure of having a social media profile of 2.37 years (SD = 1.61). These statistics correspond to the current state of social media activity around the world (comScore, 2011). They were covaried in the hypotheses tests to increase statistical power.¹

Materials and Procedure

On entering the laboratory, participants were informed that they would be asked to take part in a study aimed to understand a decision the network provider of the business school’s social network site was in the process of making. Specifically, they were told that a major issue at the school was how the network provider planned to limit cyber harassment on the site. Participants were told that they would be asked to read a fictitious wall post² from the network provider about how he planned to handle the cyber-harassment situation. After the introduction to the study, the participants saw a fictitious wall post on the school’s social network site signed by the network provider with an e-mail address of the school’s IT service desk. The wall post began as follows:

¹ Analyses were also run without covariates. The only major differences were inflated effect sizes.
² I tested all materials with an extensive pretest.
As you may be aware, there has been considerable debate in the school regarding the issue of cyber harassment on [social network site name].

The next part of the wall post introduced the presentation format manipulation. In the story format condition, the wall post continued as follows:

To give a brief background, one cyber-harasser posted hundreds of messages in the past month, depicting a fellow student as a talentless, sex-crazed swindler. Then the harasser created a profile under the victim’s name and left obscene messages on the victim’s own wall. Now not only the victim gets daily death threats, but so do the victim’s friends and fellow students. The victim feels humiliated, helpless, and abused and the victim’s studies and social life suffer.

In the analytical format condition, the wall post continued as follows:

To give a brief background, there have been issues with stalking of certain students, insults, the creation of false profiles, obscene messages on victims’ own walls, and widespread death threats. These cause victims emotional distress, which has harmful effects on their studies and social life.

Following the presentation format manipulation, information was provided about the decision the network provider made. In the personal identity violation condition, the wall post continued as follows:

As the network provider, I believe something must be done to address this problem. I have decided that not intervening in your personal conversations would result in you continuing to behave inappropriately. Thus, I have decided to delete insulting, obscene, or threatening messages from your personal wall and to discontinue false profiles as well as your personal profile if your conversations are deemed inappropriate.

In the social identity violation condition, the wall post continued as follows:
As the network provider, I believe something must be done to address this problem. I have decided that not intervening in peer-to-peer conversations would result in users continuing to behave inappropriately. Thus, I have decided to delete insulting, obscene, or threatening messages from user walls and to discontinue false profiles as well as user profiles if their conversations are deemed inappropriate.

In all conditions, the wall post concluded with the following statement:

I hope this decision will help our social network regain its status as a social medium with users that make us proud.

After reading the wall post, participants responded to narrative transportation, informational justice perception, and control measures; manipulation check items; and demographic measures. At the conclusion of the study, participants took part in a funneled debriefing procedure, in which they answered seven open-ended questions, starting with general questions (“What do you think the purpose of this experiment was?”) and ending with more specific questions (“What were you trying to do while reading the wall post on the computer monitor? Did you have any particular goal or strategy). Participants were then thanked and dismissed.

Measures

Dependent Measures

Informational justice perception was measured with a five-item scale ($\alpha=.89$) adopted from Colquitt (2001). The 7-point Likert-type scale ranged from “strongly disagree” to “strongly agree.”

The measure of narrative transportation was based on the scale that Green and Brock (2000) developed. Twelve items were measured ($\alpha=.89$). The 7-point Likert-type scale ranged from “strongly disagree” to “strongly agree.”

Control Measures

See the Appendix for all complete scales.
Mayer et al. (2009) suggest that people’s social identification influences their justice perceptions. People with a lower level of identification with their social group may be less likely to perceive a decision to intervene as just even when the decision violates their social identity. To ensure that participants’ social identification is a separate construct from the justice perception measure, I used social identification as a covariate in the analyses. I measured this variable using Mayer et al.’s scale, which consists of three items ($\alpha=.86$). The 7-point Likert-type scale ranged from “strongly disagree” to “strongly agree.”

Furthermore, I controlled for personality traits that could covary with processing information in different presentation formats. Fantasy absorption (Tellegen and Atkinson, 1974) and need for cognition (Cacioppo et al., 1996) were measured. The fantasy absorption scale includes three items ($\alpha=.95$). The need-for-cognition scale includes 18 items ($\alpha=.79$). Both 7-point Likert-type scales ranged from “strongly disagree” to “strongly agree.”

**Manipulation Checks**

I adapted Mayer et al.’s (2009) identity violation measure for the purpose of this study. The identity violation measure contained eight items ($\alpha=.92$). The 7-point Likert-type scale ranged from “strongly disagree” to “strongly agree.”

Presentation format manipulation checks were adapted from Woodside et al.’s (2008) article on storytelling for the purpose of this study. The presentation format manipulation check had nine items ($\alpha=.96$). The 7-point Likert-type scale ranged from “strongly disagree” to “strongly agree.”

**Results**

During the funneled debriefing, no participant indicated awareness of the manipulations during the experiment. Table 1 lists the means, standard deviations, and intercorrelations of the key variables.

[Insert Table 1 about here]
Manipulation Checks

Before testing the hypotheses, I examined whether the manipulations were successful by conducting independent-samples t-tests. The results revealed that participants in the personal identity violation condition reported their personal identity as being more violated ($M = 5.10$, $SD = 1.59$); in contrast, participants in the social identity violation condition reported their social identity as being more violated ($M = 2.86$, $SD = 1.56$; $t_{(122)} = 7.94$, $p < .001$). In addition, the presentation format manipulation had a significant effect on participants’ reported storytelling ($t_{(122)} = 11.92$, $p < .001$). The results indicated that participants in the story format condition reported more storytelling ($M = 5.69$, $SD = 1.66$) than participants in the analytical format condition ($M = 2.25$, $SD = 1.56$).

Hypotheses Tests

Informational justice perception was analyzed with a $2 \times 2$ analysis of covariance (ANCOVA), with identity violation (personal or social) and presentation format (story or analytical) as between-subjects factors and the demographic (sex, age, time spent online, and social media tenure) and control (social identification, fantasy absorption, and need for cognition) variables as covariates. The results revealed main effects of identity violation ($F_{(1,113)} = 11.10$, $p < .01$, $\eta^2_p = .089$) and presentation format ($F_{(1,113)} = 11.39$, $p < .01$, $\eta^2_p = .092$) and an interaction between identity violation and presentation format ($F_{(1,113)} = 10.06$, $p < .01$, $\eta^2_p = .082$). Tests of simple effects on the adjusted means indicated that in the personal identity violation condition, the difference in informational justice perception was significant for presentation format (see Figure 1). The story format resulted in greater informational justice perception than the analytical format (mean difference = 1.44, $SE = .31$, $p < .001$). In the social identity violation condition, there was no effect of presentation format (mean difference = .04, $SE = .31$, $p = .901$). These results support Hypothesis 1.
I bootstrapped the indirect effects of presentation format on informational justice perception, using Preacher and Hayes’s (2004, 2008) approach. The bootstrap estimates presented here are based on 5000 bootstrap samples. In agreement with Hypothesis 2, narrative transportation mediated the relationship between presentation format and informational justice perception (point estimate = .42, bias corrected and accelerated 95% CI = .15 ± .76).

Discussion

In Experiment 1, I examined personal and social identity violations as well as story and analytical presentation formats and their interaction effect on a justice perception. Consistent with Hypothesis 1, if a decision to intervene violated a user’s personal identity, when the decision was presented in a story format, it was perceived as more just than when it was presented in an analytical format. The other relevant finding was for Hypothesis 2, which involved mediation of the relationship between presentation format and justice perception by narrative transportation. Thus, this research provides boundary conditions on the communication of decisions to intervene in social media and extends work on the dilemma between one user’s right to freely construct an online identity and another user’s right to protection from cyber harassment. Indeed, I find that it does not take the violation of a user’s social identity per se to reduce the influence of decisions to intervene on justice perceptions; rather, when the decision to intervene is presented in a story format, the effect on justice perceptions is negligible.

Experiment 2

In Experiment 2, I built on my findings in Experiment 1. First, instead of manipulating identity violation within the context of a network provider decision that affects users of a business school’s social network site, I asked participants to imagine cyber harassment in their actual social media experiences. Thus, Experiment 2 improved the generalizability of the
findings in Experiment 1; that is, instead of hypothetical cyber harassment on the business school’s social network site, Experiment 2 examined cyber harassment that would actually affect participants in social media. Second, I examined an explanation for the presentation format effect when a decision to intervene violates personal identity. Specifically, I drew on self-referencing strategy (Burnkrant and Unnava, 1989) to examine whether a decision’s encouragement to use a person’s personal identity to process the information by self-referencing serves as an explanation for the presentation format effect when a decision to intervene violates personal identity.

Method

I examined the interaction between the format in which the decision is presented to users and whether the decision encourages self-referencing. Both presentation format and self-referencing strategy were manipulated. Experiment 2 was a randomized 2 (presentation format: story or analytical) × 2 (self-referencing: encouraged or not encouraged) full-factorial design.

Participants

Participants received course credit for participation, and confidentiality was assured. Participants were 233 different graduate business students from those in Experiment 1 (48.5% female). The age of the participants ranged from 19 to 35 years, with an average age of 25.57 years (SD = 3.58). The average amount of hours per month spent on social media was 6.38 (SD = 2.51), and the average tenure of having a social media profile was 2.52 years (SD = 1.51). These statistics are similar to those of social media users around the world (comScore, 2011). They were covaried in the hypotheses tests to increase statistical power.¹

Materials and Procedure
This experiment was based on the same introduction as Experiment 1. A fictitious wall post on a computer screen followed the study introduction. The wall post began with the following opening statement:

As you may be aware, there has been considerable debate on the Internet regarding the issue of cyber harassment on your favorite social network.

The next part of the wall post introduced the presentation format and self-referencing manipulations. There were four conditions:

*Story Format, Encouraged Self-Referencing*

To give a brief background, imagine that one cyber-harasser posted hundreds of messages in the past month, depicting you as a talentless, sex-crazed swindler. Then the harasser created a profile under your name and left obscene messages on your own wall. Now not only you get daily death threats, but so do your friends and fellow students. You feel humiliated, helpless, and abused and your studies and social life suffer.

*Story Format, Not Encouraged Self-Referencing*

To give a brief background, one cyber-harasser posted hundreds of messages in the past month, depicting a fellow student as a talentless, sex-crazed swindler. Then the harasser created a profile under the victim’s name and left obscene messages on the victim’s own wall. Now not only the victim gets daily death threats, but so do the victim’s friends and fellow students. The victim feels humiliated, helpless, and abused and the victim’s studies and social life suffer.

*Analytical Format, Encouraged Self-Referencing*

To give a brief background, imagine being stalked, insulted, a false profile created under your name, obscene messages on your own wall, and widespread death threats.
These cause you emotional distress, which has harmful effects on your studies and social life.

**Analytical Format, Not Encouraged Self-Referencing**

To give a brief background, there have been issues with stalking of certain students, insults, the creation of false profiles, obscene messages on victims’ own walls, and widespread death threats. These cause victims emotional distress, which has harmful effects on their studies and social life.

Following the manipulations, information was provided about the decision the network provider made. The wall post continued and concluded similar to the personal identity violation condition of Experiment 1 (“As the network provider…”). After reading the wall post, participants responded to a series of scales regarding the wall post. The scales included narrative transportation, informational justice perception, and control measures; manipulation check items; and demographic measures. At the conclusion of the study, the funneled debriefing of Experiment 1 was administered. Participants were then thanked and dismissed.

**Measures**

**Dependent and Control Measures**

Informational justice perception (α=.79) and narrative transportation measures (α=.89) were the same dependent measures as those in Experiment 1. Similar to Experiment 1, in Experiment 2 I controlled for personality traits that could covary with processing information in different presentation formats—in this case, fantasy absorption (α=.91) and need for cognition (α=.80).4

Escalas (2004) finds that the effect of self-referencing on message-based perceptions covaries with attitude toward the message topic. Attitude toward interventions concerns this

---

4 Unlike Experiment 1, I did not deem it useful to measure social identification, because I only considered personal identity violation in Experiment 2.
covariance in my study. I used four 7-point semantic differential–type scales (α=.89) to measure attitude toward interventions.

**Manipulation Checks**

Consistent with Experiment 1, I conducted manipulation checks to ensure that the story and analytical presentation formats are distinct concepts. I used the same nine items as in Experiment 1 (α = .89).

Self-referencing manipulation checks were adapted from Burnkrant and Unnava (1995) for the purpose of this study. The self-referencing manipulation check had five items (α = .86). The participants responded on a 7-point Likert-type scale ranging from “not at all” to “very much.”

**Results**

During the funneled debriefing, no participant indicated awareness of the manipulations during the experiment. Table 2 lists the means, standard deviations, and intercorrelations of the key study variables.

[Insert Table 2 about here]

**Manipulation Checks**

Before testing the hypotheses, I examined whether the manipulations were successful by conducting independent-samples t-tests. The presentation format manipulation had a significant effect on participants’ storytelling perceptions ($t_{(231)} = 6.41, p < .001$). The results indicated that participants in the story format condition reported more storytelling ($M = 4.82$, $SD = 1.58$) than participants in the analytical format condition ($M = 3.56$, $SD = 1.43$). The self-referencing manipulation had a significant effect on participants’ reported self-referencing ($t_{(231)} = 3.54, p < .001$). The results indicated that participants in the encouraged self-referencing condition reported more self-referencing ($M = 4.48$, $SD = 1.57$) than those in the not encouraged self-referencing condition ($M = 3.77$, $SD = 1.50$).
**Hypotheses Tests**

Informational justice perception was analyzed with a 2 × 2 ANCOVA, with presentation format (story or analytical) and self-referencing (encouraged or not encouraged) as between-subjects factors and the demographic (sex, age, time spent online, and social media tenure) and control (fantasy absorption, need for cognition, and attitude toward interventions) variables as covariates. There was a main effect of presentation format ($F_{(1, 222)} = 235.97, p < .001, \eta^2_p = .515$), qualified by an interaction between presentation format and self-referencing ($F_{(1, 222)} = 33.55, p < .001, \eta^2_p = .131$). Tests of simple effects on the adjusted means indicated that in both the story and the analytical presentation format conditions, the difference in informational justice perceptions was significant for self-referencing (see Figure 2). The story format resulted in greater informational justice perception when self-referencing was encouraged (mean difference = .69, SE = .20, $p < .001$). The analytical format resulted in lesser informational justice perception when self-referencing was encouraged (mean difference = .90, SE = .20, $p < .001$). These results support Hypotheses 3a and 3b.

I again bootstrapped the indirect effects of presentation format on informational justice perception, using Preacher and Hayes’s (2004, 2008) approach. The bootstrap estimates presented here are based on 5000 bootstrap samples. In agreement with Hypothesis 2, narrative transportation mediated the relationship between presentation format and informational justice perception (point estimate = .16, bias corrected and accelerated 95% CI = .06 ± .28).

**Discussion**

The results of Experiment 2 are consistent with the proposed effect of self-referencing. Specifically, a significant interaction occurred between presentation format and self-referencing on informational justice perception. If the decision to intervene encouraged self-
rekening, receiving the decision in a story format had a positive effect on informational justice perception, whereas receiving the decision in an analytical format had a negative effect on informational justice perception. As was the case in Experiment 1, the only significant main effect involved presentation format, suggesting that a decision to intervene may be a larger concern when in an analytical format. Furthermore, narrative transportation mediated the interaction effect. This mediation effect is consistent with the engrossing effect of stories (Green and Brock, 2000). In summary, the results from Experiment 2 lend support to an underlying explanation for the effect of presentation format found in Experiment 1.

**General Discussion**

The purpose of this research was to examine boundary conditions of the communication of decisions to intervene in social media to combat cyber harassment. Specifically I tested the effect of presentation format—that is, the notion that decisions to intervene have less of a negative effect on justice perceptions when the decision is based on a story. The results from two experiments provide support for the proposed effect of presentation format. Furthermore, the findings of both experiments lend support for narrative transportation as an underlying mechanism for the effect. Specifically, when users’ identity was violated but they were transported into a cyber-harassment story, they were less aware of their personal and social identity and their subsequent justice perception was more favorable. In addition, the findings from Experiment 2 suggest that decisions to intervene are more likely to be perceived as just when they are based on a story and encourage a self-referencing strategy. In summary, I extend research on the dilemma between one user’s right to freely construct an online identity and another user’s right to protection from cyber harassment by (1) assessing decisions to intervene across identity violations, (2) examining the role of presentation format, and (3) examining self-referencing strategy as an explanatory factor.
I tested the model in a social media context with personally relevant decisions. The findings show that there are boundary conditions of the communication of decisions to intervene in social media. Given the harmful effects associated with cyber harassment, it is important to better understand when users perceive decisions to intervene as just. The results of this research suggest that one caveat to the universality of the identity violation effect of decisions to intervene is how damaging to one’s identity a decision is perceived to be. In general, I found strong support for the interaction between presentation format and personal and social identity violations on justice perceptions, such that a story format had a positive effect on justice perceptions when a decision violated personal identity. Indeed, the effect of identity violation with story format on informational justice perception was non-significant in Experiment 1. Given that the negative effect of the analytical format involved personal identity violation, it seems that personal identity violation is more likely to be responsible for the identity violation effect, at least with the decisions to intervene in social media contexts examined in this research. It should be noted that though the effect size of the interaction was not large, it is consistent with research on identity violations in business (Mayer et al., 2009).

In addition to the identity violation and presentation format interaction, this research aimed to extend work on narrative transportation theory. According to narrative transportation theory, when readers lose themselves in a story, their worldview changes to reflect that story (Green and Brock, 2000). Whereas prior research has not actually assessed consequences personally relevant to readers but rather has focused on beliefs about the world at large, in the present research I directly assessed violations of social media users’ identity and found that when a user is transported into a cyber-harassment story, the presentation of identity-violating decisions to intervene has little effect on his or her justice perceptions. Thus, this research extends narrative transportation theory by highlighting that a story need not be general to be transporting; rather, when a cyber-harassment story is transporting, the negative effects of
decisions violating users’ identity are negligible.

Another finding of this research pertains to understanding the explanatory factor for the effect of presentation format on justice perceptions. In Experiment 2, I found support for the self-referencing strategy; users who received a decision to intervene presented in an analytical format and were encouraged to relate the cyber harassment to themselves were less likely to perceive the decision as just. These findings are consistent with Burnkrant and Unnava’s (1989, 1995) findings that self-referencing may lead people to scrutinize information extensively. However, Escalas (2004, 2007) suggests that under the self-referencing strategy, people will be motivated to imagine themselves as the main character in a story. Such self-referencing would increase the value of intervention if the story character is a victim of cyber harassment. In line with Escalas, I found that self-referencing indeed served as an explanation for why a decision violating users’ personal identity caused justice to be elevated when based on a transporting story.

Limitations and Future Research Directions

The results of this research have been interpreted as a causal model, but the cross-sectional nature of the data limits the causal interpretations that can be made. It is possible that participants who had already suffered cyber harassment experienced more self-referencing and narrative transportation because of their initial receptivity to the issue rather than the reverse order of effects. However, the design of Experiment 2 somewhat alleviated this problem because when the attitude toward interventions was controlled for, the pattern of effects remained the same. Nonetheless, further research using longitudinal data to detect changes between pre- and post-exposure perceptions of justice would be useful to strengthen the case for the hypothesized order of effects. It should also be noted that these experiments were conducted in a forced-exposure context, which may have increased attention to and narrative transportation in the stimuli. The relationships among presentation format,
information-processing strategies, and user perceptions should therefore be further investigated with methods that more closely reflect a natural social media experience.

Research that delves into the range of information-processing strategies in response to communication in differing presentation formats is also needed. Recent research in health communication finds that people exposed to a story format or an analytical format experience similar levels of self-referencing (Dunlop et al., 2010). However, the current research suggests that there are different self-referencing routes, some with a more narrative-like quality than others. It is highly likely that self-referencing a story format or an analytical format is a qualitatively different experience, as their differential effects on perceived justice evidence in Experiment 2. This idea might be explored within the social media context, as information-processing strategies that differ on important dimensions are likely to have differential impacts on user perceptions.

Managerial Implications

Network providers need to be aware that if a decision to intervene in the network damages a central part of an individual (i.e., one’s personal identity), they must be prepared to reformat their communication. That is, when a decision violates a user’s personal identity, it is unlikely that providing a case for intervention following a logical line of argument can remedy the situation. Instead, a practical managerial application of these findings is that network providers can assuage the negative effects of decisions to intervene in social media by presenting users with a decision based on a transporting story of cyber harassment.

How can a network provider deal with this catch-22? According to research in advertising (Phillips and McQuarrie, 2010), a short story can transport readers when (1) the story contains precise narrative cues such as characters, (2) the story is presented in a story-like structure and thus inhibits critical evaluation, (3) the story contains grotesque and/or pathetic elements, and (4) the readers are able and motivated to draw from the narrative cues
to transfer the present status displayed in the story into a past–present–future narrative. By employing accounts of cyber harassment that meet these criteria and demonstrate that the victim had no control over the harassment, a network provider could potentially help maximize narrative transportation.

In addition, network providers need to understand that not only the presentation format of decisions to intervene but also the extent to which social media users experience the cyber harassment from their own perspectives influence justice perceptions. If users imagine themselves as the victim in a cyber-harassment story, it is likely that they will be transported more and perceive the decision to intervene as more just. However, if the decision to intervene is presented in an analytical format and users relate the decision to themselves, it is likely that they will be disenchanted more. Thus, network providers need to think broadly about how decisions will encourage self-referencing: only when a decision to intervene is based on a story will self-referencing affect social media users positively. In that case, starting with an expression such as “Imagine yourself…” encourages self-referencing (Escalas, 2004).

A final implication of this research pertains to understanding the criterion of cyber harassment. Facebook has the option for users to report friends and mark posts as spam, and Twitter allows users to block and report followers. This feedback may give network providers some indication of the issues on which to act. However, given that social media blur cultural and geographic boundaries, it is difficult for network providers to discern where to draw the line between benign teasing and cyber harassment. Consider the following two examples. When in 2012 Besseres Hannover, a German right-wing extremist group, was charged with inciting racial hatred, Twitter blocked access to its account. Yet when in the same year Hamza Kashgari, a Saudi writer, was deemed a blasphemer by his country’s authorities for a poem and the Internet was filled with hate speech against him, network providers allowed the cyber harassment to continue. Yet Kashgari felt distinctly uncomfortable and experienced emotional
distress. The situation requires a criterion so that network providers can identify whether the conversation has escalated and intervention is warranted. Article 29, section 2, of the International Bill of Human Rights (1948) may provide such a criterion:

In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.

When cyber harassment disrupts social networks by this criterion, network providers should not wash their hands in innocence and ignore such online aggression; instead, paraphrasing Machiavelli, I believe it becomes the network provider’s responsibility to use the means set out in this article—protect the user from harm—and put an end to the online aggression.
Appendix

Informational Justice Perception

1. The network provider has been candid in his communications with you.
2. The network provider has explained the procedures thoroughly.
3. The network provider’s explanations regarding the procedures were reasonable.
4. The network provider has communicated details in a timely manner.
5. The network provider has seemed to tailor his communications to your specific needs.

Narrative Transportation

1. While I was reading the wall post, I could easily picture the events in it taking place.
2. While I was reading the wall post, activity going on in the room around me was on my mind. (reverse coded)
3. I could picture myself in the scene of the events described in the wall post.
4. I was mentally involved in the wall post while reading it.
5. After finishing the wall post, I found it easy to put it out of my mind. (reverse coded)
6. I wanted to learn how the wall post ended.
7. The wall post affected me emotionally.
8. I found myself thinking of ways the wall post could have turned out differently.
9. I found my mind wandering while reading the wall post. (reverse coded)
10. The events in the wall post are relevant to my everyday life.
11. The events in the wall post have changed my life.
12. While reading the wall post I had a vivid image of the victim(s).

Social Identification

1. Being a [social network site name] user is a big part of my identity.
2. Being a [social network site name] user is important to me.
3. I feel proud to be a part of the [social network site name] family.
Fantasy Absorption

1. If I wish, I can imagine (or daydream) some things so vividly that they hold my attention in the way a good movie or story does.

2. I can tell a story with elaborations to make it sound better and then have the elaboration seem as real to me as the actual incident, or almost so.

3. I am sometimes able to forget about my present self and get absorbed in a fantasy that I am someone else.

Need for Cognition

1. I would prefer complex to simple problems.

2. I like to have the responsibility of handling a situation that requires a lot of thinking.

3. Thinking is not my idea of fun. (reverse coded)

4. I would rather do something that requires little thought than something that is sure to challenge my thinking abilities. (reverse coded)

5. I try to anticipate and avoid situations where there is likely a chance I will have to think in depth about something. (reverse coded)

6. I find satisfaction in deliberating hard and for long hours.

7. I only think as hard as I have to. (reverse coded)

8. I prefer to think about small, daily projects to long-term ones. (reverse coded)

9. I like tasks that require little thought once I’ve learned them. (reverse coded)

10. The idea of relying on thought to make my way to the top appeals to me.

11. I really enjoy a task that involves coming up with new solutions to problems.

12. Learning new ways to think doesn’t excite me very much. (reverse coded)

13. I prefer my life to be filled with puzzles that I must solve.

14. The notion of thinking abstractly is appealing to me.
15. I would prefer a task that is intellectual, difficult, and important to one that is somewhat important but does not require much thought.

16. I feel relief rather than satisfaction after completing a task that required a lot of mental effort. (reverse coded)

17. It’s enough for me that something gets the job done; I don’t care how or why it works. (reverse coded)

18. I usually end up deliberating about issues even when they do not affect me personally.

Reported Identity Violation

*Personal Identity Violation*

1. I feel like the decision that the network provider made violated some of my personal identity.

2. The decision that the network provider made goes against things that are central (i.e., very important) to my personal identity.

3. I feel that the network provider’s decision violated something that is very important to my personal identity.

4. The network provider’s decision disregarded some things that I value and that are a part of my personal identity.

*Social Identity Violation*

5. I feel the decision that the network provider made is damaging to the [social network site name] users.

6. The decision that the network provider made goes against [social network site name] users.

7. I feel that the network provider’s decision violated something that is very important to [social network site name] users.
8. The network provider’s decision disregarded some things that I value and that are a part of my identity as a [social network site name] user.

Storytelling

1. The main story character experiences an inciting incident.
2. There is a mundane presentation of the self in everyday life of a main story character in the story.
3. The main story character found the wall post engages in actions to achieve goals.
4. The wall post presents a story that informs about conscious and/or unconscious thoughts of the main story character.
5. The wall post presents a story about how personal evolution or change in the life of the main story character occurs.
6. The wall post describes a world of personal block that does/may prevent goal attainment.
7. The wall post has a beginning, middle, and end.
8. The wall post presents a main story character in clear-cut situations.
9. The wall post has a main story character who offers a lesson learned.

Attitude Toward Interventions

I think interventions are in general....

1. bad—good.
2. wise—unwise. (reverse coded)
3. pleasant—unpleasant. (reverse coded)
4. negative—positive.

Reported Self-Referencing

1. To what extent did you think about your experiences with cyber harassment?
2. To what extent did you think what it would be like to be harassed in social media?
3. To what extent were you reminded of your own experiences with cyber harassment?

4. To what extent did you believe that the wall post seemed to be written with you in mind?

5. To what extent did you believe that the wall post related to you personally?
Figure 1

Experiment 1: Informational justice perception for different presentation format and identity violation combinations

Notes: Error bars indicate the standard error.
Figure 2

Experiment 2: Informational justice perception for different presentation format and self-referencing combinations

Notes: Error bars indicate the standard error.
### Table 1

**Experiment 1: Descriptive statistics**

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Storytelling</td>
<td>3.97 (2.35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Reported identity violation</td>
<td>3.98 (1.93)</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Informational justice perception</td>
<td>4.47 (1.33)</td>
<td>.28**</td>
<td>-.21*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Narrative transportation</td>
<td>4.10 (1.44)</td>
<td>.33**</td>
<td>.05</td>
<td>.08</td>
<td>.07</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>5. Social identification</td>
<td>4.11 (1.10)</td>
<td>.05</td>
<td>.08</td>
<td>.07</td>
<td>-.06</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Fantasy absorption</td>
<td>3.99 (1.05)</td>
<td>.01</td>
<td>-.17</td>
<td>.02</td>
<td>.01</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>7. Need for cognition</td>
<td>4.44 (1.04)</td>
<td>.09</td>
<td>.07</td>
<td>.03</td>
<td>-.01</td>
<td>-.04</td>
<td>.02</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.
### Table 2

**Experiment 2: Descriptive statistics**

<table>
<thead>
<tr>
<th></th>
<th>M (SD)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Storytelling</td>
<td>4.19 (1.63)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Reported self-referencing</td>
<td>4.13 (1.57)</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Informational justice perception</td>
<td>4.14 (1.55)</td>
<td>.18**</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Narrative transportation</td>
<td>3.77 (.86)</td>
<td>.15*</td>
<td>.08</td>
<td>.37**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fantasy absorption</td>
<td>3.97 (.95)</td>
<td>.05</td>
<td>-.10</td>
<td>-.04</td>
<td>.01</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Need for cognition</td>
<td>4.04 (.96)</td>
<td>-.12</td>
<td>-.07</td>
<td>-.17*</td>
<td>-.06</td>
<td>-.00</td>
<td></td>
</tr>
<tr>
<td>7. Attitude toward interventions</td>
<td>4.01 (1.05)</td>
<td>.07</td>
<td>-.07</td>
<td>.08</td>
<td>-.01</td>
<td>.16*</td>
<td>.04</td>
</tr>
</tbody>
</table>

* p < .05; ** p < .01.
References


comScore, I. (2011). It's a social world: Top 10 need-to-knows about social networking and where it's headed.


