Platforms for Incivility: Examining Perceptions Across Different Media Formats

Dr. Emily Sydnor (corresponding author)
Southwestern University

1001 E. University Ave.
Georgetown, TX 78626
Phone: (512)863-1587
Email: sydnore@southwestern.edu

Emily Sydnor is a Visiting Assistant Professor at Southwestern University.

The author would like to acknowledge Southwestern University and the University of Virginia Political Psychology Working Group for their financial support for this project. She would also like to thank Paul Freedman, Nicole Pankiewicz, Emily Pears, Lynn Sanders, and Nicholas J.G. Winter, as well as participants in the 2014 APSA Political Communication Preconference, Emily Vraga, Leticia Bode, and the anonymous reviewers for their feedback on earlier drafts.

Keywords: incivility, hybridity, perceptions, media platforms, mix of attributes theory

Abstract: This paper investigates how the mix of attributes present across different media shapes perceptions of incivility. I argue that certain modalities, particularly the channel and structure of a media platform, facilitate the perception of media as more uncivil even if the content is kept the same. To test this argument, I conduct two survey experiments in which participants are randomly assigned to treatments in which the substantive content and text remains the same but is packaged to mimic different media types. Generally, audio and video increase awareness of incivility cues as well as participants’ evaluations of negative, emotional and entertaining tone. There are also differences in the extent to which individuals notice incivility on Twitter than on other text-based media platforms. The social media platform is also particularly entertaining in comparison to the other platforms studied. This article demonstrates that media attributes interact to shape our understanding and identification of uncivil language. Furthermore, it suggests that more attention should be focused on identifying the different sets of characteristics that make incivility more or less likely or salient in political media.
Americans believe incivility is on the rise and blame the media, especially talk radio and cable television, for this increase (Shea et al., 2010). In mediated discourse, our perception of incivility is dependent on the interplay between the characteristics of uncivil rhetoric and attributes of the media environment. Drawing on Eveland’s “mix of attributes” theory (2003), I argue that certain characteristics of media platforms can shape a message’s perception as civil or uncivil, as well as individuals’ responses to it. For example, platform interactivity changes the way the speaker and consumer of a message engage with one another, while the level of control offered by each platform lets certain users cut incivility out of their media diet while others seek it out, rereading particularly vitriolic exchanges or scrolling through the comments section.

I focus specifically on channel as an attribute of the media, examining how the different sensory strengths of audio, visual and audiovisual channels influence our assessment of the incivility of a message. Visual and auditory stimuli are more likely to trigger emotional arousal, in part because our brains respond to people and events on screen as if we were experiencing them in real life (Mutz, 2015; Reeves & Nass, 1996). Video exposes gestures, like eye-rolling and pointing, that frequently accompany and signal uncivil language. These added layers of information make it easier for citizens to identify uncivil language and react accordingly.

Social media and online news present interesting cases for understanding the effects of channel in combination with other attributes on identification of incivility. Different channels can be incorporated into a single Tweet, post, or article as users choose whether to read, watch the video or listen to the audio first. As Mutz notes, we cannot make blanket statements about the effects of incivility on the Internet because of the mix of text, still photos, and audiovisual material present there (2015: 172). Even when Internet communication is expressed on a single
channel, its organizational structure can differ from that of traditional media, which can change perceptions of messages.

I investigate the effects of channel and organization on individuals’ ability to identify specific characteristics of incivility as well as their emotional reactions to incivility. I employ two experiments in which participants are randomly assigned to experience an uncivil exchange between political elites. The channels available to participants vary across conditions; in study 1, the message is presented as a text-based transcript, as an audio clip or as a video clip. In the second experiment, I add a Twitter condition that resembles the transcript in its lack of audio or visual channels but varies in organization because of the 140-character structure central to the platform. This combination of attributes demonstrates the importance of considering the interactive effects of a mix of attributes rather than any single attribute on its own. Across the studies, I find that some channels make it easier for individuals to notice (or think they notice) incivility than others. Participants are more likely to notice hostility and criticism in audio and video treatments than in text-based conditions. Video and audio lead to more overall uncivil assessments of the message. Study 2 suggests that people are particularly aware of name-calling, sarcasm and belittling on Twitter, but that it also might be the most entertaining of the four platforms studied.

**Incivility in Context**

The scholarly debate around incivility focuses not only on its effects, but also how it is conceptualized and operationalized. Herbst’s (2011) argument that incivility is a strategic tool offers a starting point for understanding when and under what conditions individuals deploy incivility. However, what that tool looks like is contested in both the scholarly literature and the minds of citizens. Incivility can be defined through an assessment of the substance of
communication, focusing on the use of identity-based slurs and anti-democratic sentiment. Alternatively, incivility is a function of the tone of communication, identified by the use of vulgarity, obscenity, mockery, name-calling and insults, among other categories of speech. While I elaborate on both definitions, the studies developed in the following pages apply a definition of incivility as a function of tone, not substance.

Arguments for the identification of incivility with substantive message content are in line with the theoretical literature on the importance of inclusion, mutual respect, and sensitivity to inequality in democratic deliberation (e.g. Ferree, Gamson, Gerhards, & Rucht, 2002; Gastil, 2008; Gutmann & Thompson, 1996). From this perspective, sarcasm, interruption and shouting are impolite, but they are not uncivil. As Papacharissi argues, incivility requires that communication indicate “disrespect for the collective traditions of democracy,” specifically by verbalizing threats to democracy, assigning stereotypes, and threatening others’ rights (2004, 267; see also Stryker, Conway and Danielson, 2016).

Alternatively, a range of empirical investigations into the effects of incivility on political behavior define incivility as “rudeness in the political arena” (Stryker et al., 2016: 4) or “an unnecessarily disrespectful tone” (Coe, Kenski, & Rains, 2014: 660). In this definition, incivility is independent from substance because it violates acceptable social norms; it is “a characteristic of the style of interaction rather than of any given individual’s opinions per se” (Mutz, 2015: 7). From this perspective, it is both uncivil or impolite to use obscenities, slurs, or character attacks in conversation. Under this definition, incivility includes language that is consistently viewed as outside social norms—insults, name-calling and obscenity—but also less obvious aggressions like sarcasm and finger-pointing (Mutz, 2015; Mutz & Reeves, 2005).
This focus on tone and word choice as key to identifying incivility aligns with citizens’ perceptions of what constitutes uncivil communication and behavior. In two recent surveys asking Americans what constitutes incivility, over three-quarters of respondents emphasized cursing, belittling, personal attacks, shouting, and interruption (Shea et al., 2010; Weber Shandwick, KRC Research, & Powell Tate, 2013). Citizens react to these minimal cues in much the same way they react to highly demeaning language like obscenity and name-calling, although the strength of those reactions differs with the strength of the incivility (Gervais, 2015). We can therefore think of incivility as a continuum with civil language on one end, moderately uncivil language and tone (like sarcasm or eye-rolling) somewhere in the middle, and highly uncivil language like racial slurs and obscenity towards the other end. This study focuses on communication in the middle of the continuum. The experimental treatments evoke incivility primarily through the use of interruption, shouting, and verbal sparring, rather than obscenity or other highly uncivil words.

**Media Attributes Offer Context**

Incivility is context dependent; whether a speaker uses uncivil language will depend on the platform and cues from fellow discussants. Television, talk radio and internet sources are the most likely venues for uncivil communication. Using content analysis, Sobieraj and Berry (2014) find that cable news and talk radio shows contain the most outrage1 language (23 and 24 incidents per case, respectively), while newspaper columns and blogs contain a much smaller amount of outrage (6 incidents per case). Papacharissi’s findings about incivility and impoliteness in online discussion forums support Sobieraj and Berry’s assertion that blogs and online discussion are not always uncivil; she finds that the majority of forum posts were neither

---

1 Sobieraj and Berry operationalize outrage language as 13 different characteristics of communication, including: insulting language, name-calling, emotional displays, emotional language, verbal fighting/sparring, character assassination, misrepresentative exaggeration, mockery/sarcasm, conflagration, ideologically extremizing language, slippery slope arguments, belittling and obscene language.
im polite nor uncivil (2004). Similarly, in their investigation into comments posted in response to newspapers’ online articles, Coe, Kenski and Rains (2014) find that more than one in five (22%) comments on online articles written for the *Arizona Daily Star* were uncivil. The sources used, topic of an article, and its insertion into an uncivil blog post can influence readers’ reactions to and perceptions of incivility (Anderson, Yeo, Brossard, Scheufele, & Xenos, 2016; Coe et al., 2014; Thorson, Vraga, & Ekdale, 2010).

More investigation is needed into why incivility is more frequently found on certain platforms and why certain effects are unique to particular platforms. As a framework for understanding incivility’s presence and effects across media, I use Eveland’s (2003) “mix of attributes” approach to studying media effects, in which media are defined by a multidimensional continuum composed of a wide variety of attributes. Rather than thinking about media effects as based solely in content, the mix of attributes theory emphasizes differences in the way individuals use media. Eveland points to six attributes in his theory: interactivity, organization, control, channel, textuality, and content. I focus on the effects of two of these attributes—channel and organization—on how incivility can be interpreted differently across media.

Channel, as an attribute of media, is based upon which senses are used in the sending or receiving of messages; we most frequently distinguish between audio, visual, and audiovisual channels in investigating media effects (Eveland, 2003). Much research has focused on how the visual images central to television news set it apart from other media, increasing the personalized and emotional responses to politics (e.g. Druckman, 2003; Graber, 1990, 2001; Hart, 1999; Meyrowitz, 1985). While video determines how much people learn from the visuals specifically, the audio component of television tends to carry most of the information, and viewers tend to pay closer attention to text when the visual data is also available (Crigler, Just, & Neuman, 1994;
Graber, 1990). Crigler et al (1994) find that audio alone can be just as cognitively satisfying as audiovisual stimuli. They argue that audio is the most effective single means of conveying the meaning of a story, carrying more cognitive and emotional weight.

The organization or structure of media has been conceptualized in many ways, including focus on narrative structure, organization of content in a linear format, or the cut from one set of images to another (Jeffres, 1997; Lang, Geiger, Strickwerda, & Sumner, 1993; Newhagen & Rafaeli, 1996). These structural changes affect our factual recall and learning from media messages (Eveland & Cortese, 2004; Lang, 1989). Social media like Twitter are structurally different from media like television and radio in that they allow for non-linear engagement with messages through hyperlinks or for the use of multiple channels to articulate a message. Twitter contains a unique organizational structure—textual content is limited to 140 characters.

The studies described here focus exclusively on scenarios found in traditional media coverage—incivility witnessed by the average consumer in an exchange between political elites. The experiments described below hold content constant and focus most specifically on the ways in which channel and organization affect our understanding of and response to incivility.

**Expectations**

I argue that because our awareness of incivility is dependent on the tone used to convey a message, audio and visual channels have distinct effects on individuals’ perceptions of and responses to incivility. To explore the effects of channel on the effects of incivility, I focus on three steps—identification of uncivil cues and assessment of the message as civil or uncivil, emotional engagement with the message, and subsequent feelings that the message is interesting or entertaining—across four platforms—television, radio, a text-based transcript, and social media (Twitter).
First, I expect that the channels provided by a particular media platform will shape individuals’ awareness of particular characteristics of incivility. Because much visual processing occurs unconsciously, it is less important to identify whether participants correctly identified all of the uncivil elements present in the media environment than it is to see if they believe the treatment contained particular elements (Hoffman, 2000; Kahneman, 2011). Because audio and visual channels offer more information for individuals to process, I expect that participants will recall more characteristics of incivility in the visual and audio conditions than in text-based transcripts or social media.

**H1:** Participants will report the presence of more characteristics of incivility in the visual condition than the audio condition, and a greater number of characteristics in both video and audio than in Twitter or the transcript.

I expect the television clips to produce the strongest perceptions of an overall uncivil tone, followed by audio clips and finally text. Adding the visuals and allowing viewers to not only hear voices but read body language will further augment their perceptions of the exchange as uncivil. The reverse is true for civil tone. Because the material selected for these experiments is designed to be uncivil, perceptions of respect and civility will be strongest in the textual conditions, where audio and visuals cannot undercut the relative politeness of the words themselves.

**H2:** Perceptions of incivility will be strongest in the video condition, followed by audio, Twitter, and then the transcript.

**H3:** Overall perceptions of civility will be strongest in the transcript and Twitter conditions, while audio and visual will be perceived as less positive.

In assessments of emotional response, I expect participants to respond to Twitter as they would to the transcript of the text. Gervais (2015) demonstrates that textual incivility in an online forum can elicit an emotional response from readers, but it must be histrionic incivility, the
addition of visual elements like uppercase letters, multiple exclamation points, and vulgarity. This type of behavior is common in online political commentary, but in citizen-to-citizen or citizen-to-elite exchanges more often than political elites (Berry & Sobeiraj, 2014; Sobeiraj & Berry, 2011). Because the experimental tests below use exchanges between political elites that were originally drawn from television (and in one case, a televised legislative hearing), they represent a milder form of incivility that does not contain histrionics and strong emotionality. Research on incivility and emotion suggests that certain contexts produce anger while others elicit anxiety, fear and disgust (Gervais, 2015; Phillips & Smith, 2004). I expect that participants will not only have stronger emotional responses to incivility in the visual condition than in audio and text, but stronger negative emotions.

\[ H_{4a}: \text{Video will perceived as more emotional than audio, Twitter and the transcript.} \]

\[ H_{4b}: \text{Video will elicit more anger and anxiety in participants than will audio and text-based messages.} \]

Incivility can mobilize citizens and increase their interest in politics (Berry & Sobeiraj, 2014; Brooks & Geer, 2007; Ferree et al., 2002). Perceiving greater incivility, therefore, should lead consumers to see that message as interesting or entertaining. Because my initial expectations are that visual messages will be perceived as most uncivil, followed by audio and textual conditions, I would also expect that assessments of interest and entertainment will follow a similar pattern, with one caveat: I believe participants will assess the Twitter exchange’s entertainment value as more like a visual medium.

\[ H_5: \text{The visual and Twitter platforms will arouse the greatest interest and entertainment, followed by audio and text.} \]

Why might Twitter perform more like media with visual channel capabilities? I argue that while Twitter uses the same text-based channel present in a transcript, differences in their organizational structure will lead to divergent outcomes on key variables. Unlike other textual
media, exchanges on Twitter can be “conceived as a simulation of face-to-face communication” (Bounegru, 2009) that register in the same way as an oral exchange; we “process chatty words online (whether on Twitter, or Slack or gchat) like we process someone saying them to us in front of us” (Meyer, 2015; see also Stewart, 2016). And indeed, Twitter exchanges can feel like conversations that are boiled down to 140 characters. It’s this need to be concise that also could also fuel the perception of Twitter as uncivil or confrontational—the platform forces users to strip the pleasantries away, leaving messages direct and at times more confrontational. The organizational differences in the presentation of text in a transcript and on Twitter lead me to expect greater perceptions of incivility on Twitter than in the transcript, but still not at the level of the conditions that contain visual and audio channels. While these distinctions are implied above, the final hypothesis formalizes the distinction between the transcript and Twitter. Comparisons between the text-based transcript and social media message are particularly important to demonstrate that it is a mix of attributes and not simply the sensory differences across channels that drive perceptions.

H6: Messages presented on Twitter will be perceived as more uncivil and will produce more interest and emotional response than those presented in transcript form.

Table 1 summarizes the outcomes from these six hypotheses, stating in which condition the outcomes will be most noticeable (or perceived at higher levels) and in which conditions citizens will be least aware of incivility.

[Table 1 about here]

Study 1: Experimental Manipulation of Platforms
This experiment was designed to test the effect of three media channels—video, audio and text—on Americans’ perceptions of incivility in the material. Participants in the experiment
were recruited through Amazon’s Mechanical Turk in August, 2014. MTurk workers self-selected into the survey experiment; 794 respondents completed the full questionnaire.

Like most samples collected on Mechanical Turk, the participants tended to be white, college educated and liberal at a higher proportion than one would find in the national population (Berinsky, Huber, & Lenz, 2012). Table 2 displays the demographic make-up of both samples collected for this study, as well as data from the 2010 Census for comparison. While the use of a non-probabilistic convenience sample limits generalizability of these findings to Americans nationwide, the goal of experimental research such as this is to understand how specific differences in message presentation influence interpretation of and response to that information, rather than to make a general claim about how individuals engage with uncivil communication. Beyond concerns about the representativeness of the sample, the use of MTurk raises issues of respondent attention and accuracy. To control for attention, the questionnaire included two attention checks; fourteen participants were not included in the final analysis because they did not correctly respond to these questions. Furthermore, the design of the experiment made it difficult for respondents to “cheat”—I was not interested in measuring, for example, knowledge that participants could look up in another browser window.

[Table 2 about here]

Participants were first asked several questions about their attitudes towards conflict and compromise, then randomly assigned to one of six experimental treatments that were 30-second edited excerpts from either MSNBC’s Dylan Ratigan Show or Morning Joe. The material was presented either as the original video, as audio with the visuals removed, or as a transcript of the exchange. Both excerpts covered economic topics that were well known at the time but unlikely to evoke strong attitudinal priors: Morning Joe interviewed former Majority Leader Eric Cantor
(R-VA) about the controversy surrounding bonuses for AIG employees, while *Dylan Ratigan* featured a round table discussion of tax reform and the budget deficit.

I chose the clips based primarily on their tone. Both clips showed political elites—journalists and elected officials—disagreeing about a political outcome. The composition of both sets of elites is mixed in regards to gender, which could impact perceptions of incivility; however, because men and women are present in both clips any effects of gender composition should be constant across all treatments. Substantively, the clips focused on policy rather than the anti-democratic content Papacharissi identifies as uncivil. Both clips contained interruption, shouting, and verbal sparring (phrases like “wait a second” or “well, listen”), all indicators of incivility that have been used in other experimental research on incivility and outrage (e.g. Berry & Sobeiraj, 2014; Brooks & Geer, 2007; Gervais, 2015; Mutz, 2015). The clips also showed some visual cues that might indicate an individual was using an uncivil tone. In the *Dylan Ratigan* clip, one of the female speakers held her hands up while fighting against an interruption, reinforcing her words, “wait a minute” with a hand gesture that indicated the same thing. In *Morning Joe*, co-host Mika Brzezinski touches Joe Scarborough’s forearm as he emphatically interrupts Congressman Cantor, as if to encourage him to tone down his response. While neither gesture is uncivil, both could be incorporated into an individual’s mental picture of the scene as evidence that incivility was occurring. In a pretest conducted on a different sample of MTurk workers, the video versions of these treatments were ranked as moderately uncivil, and there was no statistical difference in the average perceived incivility of the *Dylan Ratigan* clip in comparison to that of *Morning Joe*.² For this reason, the analyses conducted below will only compare findings across platforms, rather than making distinctions between the two shows.

² In the pretest, 300 MTurk participants were randomly assigned to watch one of six videos—a civil or uncivil clip from *Morning Joe, The Dylan Ratigan Show,* or *Hannity.* They were then asked, “To what extent was the
Individuals who were randomly assigned to the audio clips simply heard the exchanges without the additional visual aids. In the text condition, the message was identified as a transcript and written in a way that mirrors the format of television transcripts found on Lexis-Nexis. Interruptions were indicated through the use of ellipses and, when multiple individuals were speaking at once, through the label “Crosstalk.” Exclamation points denoted shouting. I saw the use of these indicators as decreasing the ecological validity of the textual treatment as a transcript.

After exposure to the treatment, participants completed a series of questions about the levels of incivility and disagreement found in the material, as well as their emotional responses to it. I used a variety of measures to assess individuals’ perceptions of incivility and the tone of the piece more generally. First, participants were asked to use a five point scale (from one, “not at all” to five, “extremely”) to evaluate the extent to which they found the material to be civil, rude, respectful, childish, interesting, emotional, or entertaining. From these, I constructed additive measures of overall civil and uncivil perceptions that were rescaled to maintain the original one to five point scale. Overall civility included assessments of civility and respect, while overall incivility was calculated from participants’ evaluations of the materials’ rudeness and childishness. Alpha tests of both scales indicate that rudeness and childishness have a strong inter-item covariance (0.95) while civility and respect have a lower average covariance (0.58). However, both pairs have stronger alphas when measured independently than when combined into a four-item scale capturing civility and incivility (0.51). Evaluations of the content’s entertainment, interest or emotional value are considered separately. The average assessment of morning Joe and The Dylan Ratigan Show were found to be statistically indistinguishable in both the civil and uncivil conditions. The uncivil clips used to build the treatments in this paper were evaluated as follows: $M_{\text{Morning Joe}}=2.89$, $M_{\text{Ratigan}}=2.98$, $p<0.69$. clip you just watched uncivil?” They could respond on a scale from one to five, with one indicating “not at all uncivil” and five representing “extremely uncivil.” Morning Joe and The Dylan Ratigan Show were found to be statistically indistinguishable in both the civil and uncivil conditions. The uncivil clips used to build the treatments in this paper were evaluated as follows: $M_{\text{Morning Joe}}=2.89$, $M_{\text{Ratigan}}=2.98$, $p<0.69$. clip you just watched uncivil?” They could respond on a scale from one to five, with one indicating “not at all uncivil” and five representing “extremely uncivil.” Morning Joe and The Dylan Ratigan Show were found to be statistically indistinguishable in both the civil and uncivil conditions. The uncivil clips used to build the treatments in this paper were evaluated as follows: $M_{\text{Morning Joe}}=2.89$, $M_{\text{Ratigan}}=2.98$, $p<0.69$. clip you just watched uncivil?” They could respond on a scale from one to five, with one indicating “not at all uncivil” and five representing “extremely uncivil.” Morning Joe and The Dylan Ratigan Show were found to be statistically indistinguishable in both the civil and uncivil conditions. The uncivil clips used to build the treatments in this paper were evaluated as follows: $M_{\text{Morning Joe}}=2.89$, $M_{\text{Ratigan}}=2.98$, $p<0.69$.
each of these characteristics, as well as the additive civility and incivility measures across the three treatments can be seen in Table 3.

[Table 3 about here]

In addition to offering their general evaluation of the levels of civility and incivility found in the news coverage, respondents were also asked to identify whether they had noticed specific characteristics thought to define incivility in the material. Participants checked boxes to identify whether any of 13 characteristics had been present in their treatment, including obscene language, hostility, interruption, shouting, respect for opposing viewpoints, and name-calling. These responses were then added together to create a count of the total number of characteristics each respondent identified in the treatment. The average respondent noted about 4 characteristics in both treatments they were shown ($\bar{x}_1 = 4.2, sd = 2.47; \bar{x}_2 = 3.89, sd = 2.51$). It is important to note that not all the characteristics were present in the treatments. I was more interested in what types of incivility participants thought they had witnessed than in their accuracy in categorizing incivility.

Beyond the basic assessment of the extent to which participants found the message emotional, the questionnaire also asked participants to assess the extent to which the message made them feel specific sets of emotions. Following Brader (2006), these sets of emotions include: hope, reassurance and confidence; anxiety, worry and fear; enthusiasm, excitement and eagerness; and anger, irritation and upset. On average, the treatments did not evoke particularly strong emotions; on a zero to four scale where zero meant “not at all” emotional and four indicated “completely” emotional, the average for all emotions fell between 0 and 2. As expected, given previous research, participants reported feeling more anxious ($\bar{x} = 1.2, sd =$

---

3 These characteristics were drawn primarily from Sobieraj and Berry’s (2011) measures of outrage; however, I also included two elements of physical incivility—eye-rolling and finger-pointing—used by Mutz and Reeves’ (2005).
1.11) and angry ($\bar{x} = 1.8, sd = 1.16$) than enthusiastic ($\bar{x} = 0.80, sd = 1.06$) and hopeful ($\bar{x} = 0.5, sd = 0.92$).

**Results: Changing Platforms, Changing Reactions**

I expected video clips to have the greatest impact on each measure of perceived incivility. The results provide support for several of my hypotheses, but with only small effects and frequently without statistical significance.

I expected that the use of the audiovisual channel would increase participants’ identification of characteristics of incivility in comparison to audio or text-based media. The results are mixed. A one-way ANOVA indicates that there are differences between the average number of characteristics identified across the three treatments ($F(2,776)=3.02, p<0.045$), but post-hoc estimation reveals that there is only a statistically significant difference between the video ($\bar{x} = 4.61, sd = 2.47$) and audio ($\bar{x} = 4.14, sd = 2.66, p < 0.1$) conditions. The difference is very small—about a half of an additional characteristic, on average, is noticed in video over audio—and the number of characteristics identified in the textual condition ($\bar{x} = 4.18, sd = 2.09$) is statistically indistinguishable from either video or audio.

The difference in the number of characteristics identified across conditions could center around specific types of incivility that are more easily identified on one channel over others. Figure 1 shows the differences across treatments for each of the 13 individual characteristics. Thirty-nine percent of participants who viewed the video clip reported that they had noticed pointing, while only 27 and 28 percent reported pointing in text and audio, respectively. Audio-centered characteristics like shouting and interruption were also reported at higher levels in the video condition, but unsurprisingly these were statistically indistinguishable from their reported frequency in the audio condition. However, other characteristics were identified in the audio conditions at statistically greater rates. Hostility was identified by 64 percent of the respondents
in the audio treatment—14 percent more than the text condition and 10 percent more than those who saw the video. Respondents were also more likely to pick out criticism in the audio condition (56 percent) than in text or video (50 and 48 percent, respectively). These results support hypothesis 1.

Hypotheses 2 and 3 suggested that overall perceptions of incivility and civility would also be dependent on the channels used to present the message, while hypotheses 4 and 5 predicted that video would elicit the greatest emotional response, interest and entertainment. However, as Figure 3 shows, results of one-way ANOVAs indicate that both the overall civility index and the perception of the material as “interesting” fall well short of statistical significance across any of the three conditions (Civility: F(2, 741)=2.16, p<0.12; Interest: F(2,740)=0.46, p<0.63). Immediately, it is clear that the data do not support hypothesis 3, that overall perceptions of civility will be strongest in the text-based condition.

For each of the other outcomes—evaluations of general incivility, emotion, and entertainment—one-way ANOVAs suggest significant differences between the conditions. The results of the one-way ANOVAs for each model are as follows: Incivility (F(2,741)=3.94, p<0.020); Entertainment (F(2,739)=3.32, p<0.037); Emotion (F(2,740)=4.99, p<0.007). Looking closer at the differences between conditions, post-hoc estimations using Bonferroni’s method suggest the text condition looked significantly different from one of the other conditions in each evaluation, but there were no clear differences across all three categories. As Figure 2 shows, video was rated as significantly more uncivil than text, although this change is small—one-third of a point, not even equivalent to a shift from responding “slightly uncivil” to “moderately uncivil” (M_{video}=1.85; M_{text}=1.58, p<0.016). Perceptions of the material’s entertainment value
demonstrated a similarly small shift. While the material was reported as not particularly entertaining regardless of the platform, video was statistically significantly more entertaining than the text version \((M_{\text{video}}=1.15; M_{\text{text}}=0.92, p<0.033)\). Interestingly, the audio clip was seen as the most emotional—significantly more so than the text—although we cannot reject the hypothesis that the video clip was perceived as equally emotional as the audio clip \((M_{\text{audio}}=2.13; M_{\text{text}}=1.79 p<0.005)\). Figure 3 displays the finding that while visuals seem to set video clips apart from text, audio falls somewhere in the middle, not quite distinguishable from text in some cases or from video in others when evaluating for incivility, emotion and entertainment. Therefore, while not clearly aligning in the order predicted, there is still moderate support for hypotheses 3 and 5.

[Figure 2 here]

Hypothesis 4b focused on the emotional responses of participants, arguing that visuals, by virtue of being seen as the most emotional, would also evoke greater negative emotions in viewers. However, the results do not show any support for this prediction. There were no significant differences in participants’ feelings of anger, anxiety or hope across the three treatments, according to an one way ANOVA. Participants did report different levels of enthusiasm \((F(2, 745)=3.33, p<0.04)\). Specifically, those in the video condition were a quarter of a point more likely to feel enthusiastic than those in the transcript condition \((p=0.03)\). In summary, these findings show little support for hypothesis 4b. Only enthusiasm is different across treatments.

Study 2: Incorporating Social Media

Study 1 demonstrates that perceptions of incivility vary with the channels used to convey information. But to what extent could other attributes of media influence perceptions of
incivility? Study 2 attempts to answer this question and invites us to consider how organization might influence behavioral responses to incivility.

The second study used the same design as Study 1, with two exceptions. First, the participants were recruited through Qualtrics Panels, a firm that partners with over 20 online panel providers to offer diverse respondents. The survey experiment utilized a quota system in order to ensure a diverse sample whose demographic composition mirrored that of the American population. Specifically, quotas were placed on age, gender, education, race and ethnicity. Three hundred eighty three people completed the entire questionnaire and all participants were retained for the final analysis.

The experiment also used new treatments and included an additional condition designed to look like a series of Tweets. The increasing prominence of Twitter (Bode & Dalrymple, 2014; Gottfried, Barthel, Shearer, & Mitchell, 2016; Parmelee, 2013), its hybrid platform and its centrality in the controversy over online incivility (Bruinius, 2015; Friedersdorf, 2015) make the platform particularly interesting to investigate alongside more traditional media. Furthermore, its 140-character limit creates a structure that is fundamentally different from that of other text-based communication.

The treatments were based on a clip from C-SPAN of Congressional hearings dealing with federal funding of Planned Parenthood. The full video of the hearings was broadcast on September 29th, 2015. The survey experiment was conducted August 17-24, 2016. The one-minute C-SPAN clip portrayed a one-on-one interaction between Cecile Richards, CEO of Planned Parenthood, and Congressman James D. Jordan (R-OH). In the video, Jordan repeatedly raises his voice to Richards and cuts her off several times, and both Richards and Jordan talk over one another. In a pretest, participants were asked to indicate how civil the clip was on a
scale from zero (“not at all”) to four (“extremely”). The average perceived civility of the clip was 0.76, suggesting that pretest participants saw it as somewhere between “not at all” and “slightly” civil. Like in Study 1, the text treatment was a transcript of the exchange in the video clip, and the audio treatment was the audio component of the video clip without the visuals. The fourth treatment was designed to replicate the exchange from the video clip but formatted in such a way that it looked like an exchange between the two political elites on Twitter (see Supplementary Materials for all treatments).

As discussed above, when translating visual or auditory incivility into text, there are decisions that must be made about how to accurately depict characteristics like interruption and shouting. In developing the transcript and Tweet treatments, I erred on the conservative side and did not represent shouting as capitalization. In the transcript, this decision was made primarily to adhere to convention; rarely do we see transcripts that include capital letters to indicating yelling. In the Twitter condition, the decision not to capitalize shouting was based on a brief review of real exchanges between political professionals, including Jordan and Richards. With a few exceptions, contentious arguments that one could imagine would be carried out at an elevated volume in person or on television did not include the capitalization indicative of online yelling. Neither Richards nor Jordan used capitalization as a means of indicating shouting in their feeds. Instead of using some of the measures of histrionic incivility, such as capitalization and multiple exclamation points, I tried to keep the text in the Twitter condition similar to that in the transcript condition while also adhering to the 140-character limit that an individual would have when using the platform. If a particular passage of text would take more than 140 characters to repeat, it was split into smaller chunks and presented as a series of Tweets.

---

4 The pretest was conducted in April 2016 using 356 participants recruited from Amazon’s Mechanical Turk.
The same measures were used to evaluate the presence of uncivil characteristics, generalized civility and incivility, emotion, entertainment and interest. Participants were asked to check which of 13 characteristics they had noticed in their treatment condition; on average, across all treatments, they identified 2.9 (sd = 2.34). Once again, participants were given the five point scale (from zero, “not at all” to four, “extremely”) to assess the material’s civility, rudeness, respect, childishness and the extent to which they found the message interesting, emotional, or entertaining. Participants assessed the message as slightly more rude (\( \bar{x} = 1.9, sd = 1.20 \)) and childish (\( \bar{x} = 1.8, sd = 1.37 \)) than civil (\( \bar{x} = 1.5, sd = 1.24 \)) and respectful (\( \bar{x} = 1.4, sd = 1.26 \)). The additive measures of overall civility (civility + respect) showed greater coherence for this sample than in study 1, with an alpha of 0.83. General incivility (rudeness + childishness) had a weaker alpha than in study 1, but at 0.75 it remains acceptable to add the two scales together. Participants found the treatments moderately emotional (\( \bar{x} = 2.0, sd = 1.22 \)), but slightly less interesting (\( \bar{x} = 1.7, sd = 1.30 \)) and entertaining (\( \bar{x} = 1.4, sd = 1.34 \)).

Looking at specific emotions evoked by the treatments, I again asked about hope, enthusiasm, anxiety and anger on a zero to four scale where zero indicated that a participant felt a particular emotion “not at all” and four indicated “extremely” emotional. Unsurprisingly, given that the treatments were seen as more uncivil than civil, participants reported slightly stronger negative emotional responses than positive ones. Average feelings of anxiety hovered around the scale’s midpoint (\( \bar{x} = 1.4, sd = 1.28 \)) while anger was slightly higher (\( \bar{x} = 1.7, sd = 1.36 \)). Participants were equivalently enthusiastic (\( \bar{x} = 1.2, sd = 1.29 \)) and hopeful (\( \bar{x} = 1.2, sd = 1.31 \)) after engaging with the message.
Results

Study 2 suggests a pattern of awareness of characteristics of incivility across the four platforms similar to that found in study 1. Results from a one way ANOVA show that there is a significant difference in the number of uncivil components noted across the treatments (F(3, 343)=5.07, p=0.01). On average, the fewest characteristics were noted in the television condition (2.66), followed by the transcript (2.89) and Twitter (2.96). As with the first set of outcomes, the biggest differences in perception stem from the audio condition, where participants noticed an average of 3.87 uncivil characteristics. In other words, participants in the audio condition reported noticing one more characteristic than did their peers in the transcript, tweet or video conditions, a difference that is statistically significant for all conditions (Bonferroni p(text)=0.02, p(Twitter)=0.03, p(video)=0.01).

Specific characteristics drive the differences in perceptions of incivility across platforms. ANOVA results suggest that participants differentially notice criticism, sarcasm, interruption, hostility, and shouting across platforms—many of the same characteristics identified in study 1. Furthermore, as Figure 3 shows, these differences occur because certain characteristics, particularly interruption and shouting, are conveyed more easily in audio and video than in textual messages. A one way ANOVA on the relationship between shouting and the four treatments shows statistically significant differences between treatments (F(3, 346)=14.69, p=0.01). Forty-two percent of participants in the audio condition heard shouting in the exchange between Richards and Jordan, while 26 percent noticed shouting in the video condition (a statistically significant difference, p=0.05). However, only 9 percent of participants in the transcript and Twitter conditions interpreted the exchange as including shouting. Therefore, people were significantly more likely to report shouting in the audio and video conditions, where a raised voice could be easily heard, than they were in the text conditions, where individuals had
to infer shouting. The same pattern is apparent in ANOVA results for interruption (F(3, 346)=19.33, p=0.00). Significantly more people identified interruptions in the video and audio conditions than they did in the transcript or Twitter conditions.

[Figure 3 here]

As for the characteristics that are less obviously tied to audio-visual expression (criticism, sarcasm and hostility), the differences across treatments are once again driven primarily by the audio condition. Significantly more participants (59%) noticed hostility in the audio condition than they did in the video (34%; p=0.01), transcript (41%; p=0.11), and Twitter (34%, p=0.02). Significantly more participants noticed sarcasm in the Twitter condition than in the video condition, and more participants recorded an awareness of criticism in the audio condition than did those in the video condition. Ultimately, these results offer some support for hypothesis 1, although visual communication was less powerful in conveying specific characteristics of incivility than I had originally predicted. Some characteristics, like sarcasm, belittling and name-calling, were more frequently picked up on Twitter than they were in the transcript condition, even if not all differences were statistically significant. This provides some evidence for hypothesis 6.

As with Study 1, I expected video to have the greatest impact on each measure of perceived incivility, followed by audio and the textual media. I also expected that participants in the Twitter condition would behave similarly to those in the transcript condition, the exception being that Twitter would incite greater interest and entertainment than the transcript. Here, a one-way ANOVA indicates significant differences in evaluations of overall civility, emotion and entertainment across treatments, while general incivility and interest were statistically insignificant (F(3, 326)=1.80, p=0.15; F(3, 323)=0.45, p=0.72, respectively). When considering
overall civility, emotion and entertainment, the effects are primarily driven by perceptions of the audio condition, as assessed using Bonferroni coefficients. On average, audio is perceived half a point less civil than the transcript condition (p=.02) and three-quarters of a point less civil than the Twitter condition (p=0.01). Audio is also seen as more emotional than text, although only the relationship between audio and the transcript conditions approaches conventional statistical significance (p=0.08). Differences in perceptions of the treatments’ entertainment value are entirely driven by the social media treatment; reading the exchange on Twitter is seen as half a point more entertaining than reading it in transcript form (p=0.04) but no other differences are statistically significant. As Figure 4 shows, there are differences in how the same message is perceived across the four platforms. These differences offer support for hypotheses 3 and 6 and mixed evidence for hypotheses 4a and 5, but minimal support for hypothesis 2.

[Figure 4 here]

Finally, we see unexpected differences in specific emotional reactions across platforms. Only feelings of hope are statistically significant across treatments (F(3, 328)=3.86, p=0.01). Bonferroni coefficients suggest that individuals are substantially less hopeful in the audio condition than in the other three conditions (a difference of between 0.46 and 0.66 points on a five point scale), but that only the largest of these differences, that of audio and video, is significant (p=0.01). Anger, anxiety and enthusiasm are not significantly different across the three treatments, showing no support for hypothesis 4b.

Discussion

The two studies in this paper offer several conclusions about the extent to which attributes of media platform beyond their content can influence consumers’ interpretation of and reaction to political messages. The channels used on each platform influence perceptions of the message’s overall civility and incivility. Consistently, video and audio lead to more uncivil
perceptions of the message. The platform can also shape how entertaining or emotional people perceive a message to be; video and audio are more entertaining and emotional than text. However, study 2 suggests that an uncivil exchange on Twitter might be the most entertaining of all.

Not only does channel shape perceptions of the message, it also facilitates the identification of some characteristics of incivility over others. Consistently across the two studies, participants were more likely to notice hostility, sarcasm and criticism in the audio and visual treatments as well as inherently auditory or visual cues like shouting and interruption. This finding suggests a mutually reinforcing relationship between audio and audiovisual channels and content as attributes of media. People are more likely to notice uncivil language on television and talk radio, leading to greater behavioral reactions than if the same language was deployed in a text-based media.

The inclusion of the Twitter condition in the second study emphasizes that perceptions of incivility are not solely the result of a single media attribute. Mutz finds that incivility is signaled “by the tone of voice and visuals of the candidates, not by the words that they uttered” (2015, 161). This finding suggests that channel should be the most important attribute in explaining variation in perceptions of incivility and implies that differences in incivility on Twitter or in a transcript are a function of different norms around content (172). However, Study 2 demonstrates that perceptions of and responses to incivility on Twitter are not solely about differences in content or channel. Even when the same content is expressed in a solely textual channel, people notice certain types of incivility more on Twitter than they do in a transcript format. This finding provides support for Eveland’s argument that we should be attending to the ways in which attributes of media interact with one another and offers an explicit articulation of what it is about
mass media that shapes perceptions of incivility. In doing so, the research also contributes to the conversation about what defines incivility and the ways in which institutions might intervene to improve civil discourse.

Taken as a whole, these findings demonstrate the important ways in which media attributes interact to produce attitudinal and behavioral effects. I focus on channel and organizational structure, but future research should explore how other attributes, especially interactivity and user control, moderate our evaluations of incivility and our emotional and behavioral responses to them. As Americans place themselves in increasingly homogeneous online communication networks, it seems probable that they will see more like-minded incivility and less disagreeable incivility. Media in which users have less control—traditional newspapers and network television, for example—might limit individuals’ exposure to like-minded incivility and therefore their inclination to use uncivil, critical language themselves. These studies did not control for participants’ evaluations of the actors, but we can imagine that one’s like or dislike of Morning Joe or of Cecile Richards might influence perceptions of their use of incivility.

The limitations of the treatments also highlight the importance of interactions between media attributes. They were designed to vary solely in the channel or modality used to express incivility, even though in the real world, changes in channel would be accompanied by differences in other attributes like content, control, interactivity, and textuality. For example, think about the ties between channel and content. Each treatment started as a video clip, and audio that is paired with video is different in many ways from audio heard on the radio. Talk radio hosts go out of their way to describe sights and sounds in a way that the audio used in a television program does not; it is unlikely that content will truly be the same on television and on the radio. Similarly, a transcript, while faithful to the language used in the video and audio
conditions, does not include background description and context that a traditional news story would.

The list of characteristics of incivility included several items that were not actually present in the experimental treatments—there was no obscenity, for example, nor pointing—even the video conditions. Why, then, did 31 percent of Study 1 participants in the video condition, along with 27 and 28 percent of text and audio condition participants report pointing? It is possible that these people were not paying attention and were simply checking boxes in order to complete the task and move on to the next one. However, these respondents were at least attentive enough to pass the attention checks interspersed throughout the experiment. An alternative explanation, which I find more plausible, is that these individuals checked the boxes for characteristics they associated with the exchange in their mental picture, even if those characteristics were not part of the original treatment.

The lack of support for the hypothesized variation in emotional reactions offers an interesting tension for incivility researchers to explore. Overall, incivility evoked stronger feelings of anger and anxiety than enthusiasm and hope, supporting previous research. However, channel only had an effect on the extent to which participants felt enthusiastic (study 1) or hopeful (study 2). Visuals lead to greater awareness of a message’s incivility, but also more enthusiasm than in audio or text-based media. If the increase in emotion is simply a function of video’s increased ability to arouse emotion (Mutz, 2015), we would expect the visual condition to elicit stronger emotional reactions across the board. Instead, we might investigate how visuals facilitate both positive and negative engagement with material, regardless of the extent to which that material is uncivil. Further research could also investigate whether the decreased hope in the audio condition was an artifact of the specific experiment or a broader, replicable outcome.
These studies establish that incivility is perceived differently across platforms because of the mix of attributes each platform contains and suggests that future research should investigate different combinations of attributes. Social media like Twitter, in particular, offers the potential to explore the interactions between channels—how two or more channels can interact to make incivility a more or less prominent part of political discourse—as well as the extent to which user control facilitates selective exposure, potentially increasing perceptions of incivility on the part of the opposition. Media attributes not only interact with one another to produce effects, they can also interact with characteristics of the communicators themselves to change political discourse and engagement. Perhaps we see incivility differently when it comes from politicians than when it comes from news anchors—a distinction that was not explored in this study. Just as we perceive incivility differently in the dining room and on the sports field, so too do we need to consider how the media environment facilitates the deployment of civil and uncivil language.
Works Cited


Table 1: Summary of Perception Hypotheses

<table>
<thead>
<tr>
<th>Incivility is…</th>
<th>Number of Characteristics (H₁)</th>
<th>Incivility (H₂)</th>
<th>Civility (H₃)</th>
<th>Emotion (H₄)</th>
<th>Interest/Entertainment (H₅)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most noticeable</td>
<td>Video</td>
<td>Video</td>
<td>Transcript</td>
<td>Video</td>
<td>Video Social media</td>
</tr>
<tr>
<td></td>
<td>Audio</td>
<td>Audio</td>
<td>Social media</td>
<td>Audio</td>
<td>Audio</td>
</tr>
<tr>
<td>Least noticeable</td>
<td>Twitter Transcript</td>
<td>Twitter Transcript</td>
<td>Audio</td>
<td>Social media</td>
<td>Transcript</td>
</tr>
</tbody>
</table>
### Table 2: Characteristics of Both Samples in Comparison to the National Population

<table>
<thead>
<tr>
<th></th>
<th>Study 1: Mechanical Turk</th>
<th>Study 2: Qualtrics Panels</th>
<th>National Population</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Median Income</strong></td>
<td>$30,000 - $45,000</td>
<td>$45,000 - $60,000</td>
<td>$53,046</td>
</tr>
<tr>
<td><strong>Median Age</strong></td>
<td>31</td>
<td>50</td>
<td>37</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;H.S. diploma</td>
<td>1.4%</td>
<td>12%</td>
<td>14%</td>
</tr>
<tr>
<td>H.S. grad/some college</td>
<td>38%</td>
<td>51%</td>
<td>57%</td>
</tr>
<tr>
<td>College grad +</td>
<td>60%</td>
<td>36.8%</td>
<td>29%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>81%</td>
<td>72%</td>
<td>78%</td>
</tr>
<tr>
<td>Black</td>
<td>10%</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>6%</td>
<td>11%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>41%</td>
<td>51%</td>
<td>51%</td>
</tr>
<tr>
<td><strong>Partisanship</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democrat</td>
<td>44%</td>
<td>43%</td>
<td>29%</td>
</tr>
<tr>
<td>Republican</td>
<td>16%</td>
<td>24%</td>
<td>26%</td>
</tr>
<tr>
<td>Independent</td>
<td>36%</td>
<td>25%</td>
<td>42%</td>
</tr>
<tr>
<td><strong>Ideology</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liberal</td>
<td>57%</td>
<td>36%</td>
<td>25%</td>
</tr>
<tr>
<td>Moderate</td>
<td>21%</td>
<td>32%</td>
<td>36%</td>
</tr>
<tr>
<td>Conservative</td>
<td>22%</td>
<td>32%</td>
<td>34%</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>794</td>
<td>372</td>
<td>--</td>
</tr>
</tbody>
</table>

Note: Participants in the survey were allowed to check more than one race and were asked about Hispanic ethnicity separately from their race. National data are from U.S. Census estimates for 2012, except age (U. S. Census Bureau, 2010), party and ideology (Gallup Inc., 2016, 2017).
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Average</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rude</td>
<td>1.71</td>
<td>741</td>
</tr>
<tr>
<td>(Standard Deviation</td>
<td>(1.16)</td>
<td></td>
</tr>
<tr>
<td>Childish</td>
<td>1.69</td>
<td>742</td>
</tr>
<tr>
<td>(1.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil</td>
<td>0.92</td>
<td>740</td>
</tr>
<tr>
<td>(0.90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respectful</td>
<td>0.80</td>
<td>743</td>
</tr>
<tr>
<td>(0.92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interesting</td>
<td>1.39</td>
<td>743</td>
</tr>
<tr>
<td>(1.10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>1.95</td>
<td>743</td>
</tr>
<tr>
<td>(1.21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entertaining</td>
<td>1.02</td>
<td>742</td>
</tr>
<tr>
<td>(1.05)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civility</td>
<td>0.86</td>
<td>744</td>
</tr>
<tr>
<td>(0.84)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incivility</td>
<td>1.70</td>
<td>744</td>
</tr>
<tr>
<td>(1.10)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assessments were made on a 0-4 scale with 0 indicating the material was “not at all” rude, childish, etc. and 4 indicating that the material was “extremely” so.
Figure 1

Incivility Characteristics Are Perceived with Different Frequency Across Media Platforms

Percentage of Respondents Identifying Characteristic
* indicates statistically significant difference between at least two treatment conditions
Figure 2

Study 1 Participants Evaluate Text Differently Than Audio, Video

- Emotion
- Incivility
- Entertainment
- Interest
- Civility

Average Evaluation

Evaluations were made on a 0 to 4 scale with 4 signifying high overall civility, entertainment, etc. * indicates a statistically significant (p<0.05) difference the highest and lowest treatment condition averages.
Figure 3

Study 2 Also Shows Differences in Perceived Incivility Characteristics Across Media Platforms

Percentage of Respondents Identifying Characteristic

* indicates statistically significant difference between at least two treatment conditions
Figure 4

Study 2 Participants See Platform Differences in Civility, Entertainment and Emotion

Emotion *

Incivility

Entertainment *

Interest

Civility *

Average Evaluation

Evaluations were made on a 0 to 4 scale with 4 signifying high overall civility, entertainment, etc. * indicates a statistically significant (p<0.05) difference the highest and lowest treatment condition averages.