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**Facebook-Diskussionen zu journalistischen Nachrichten:  
Der Einfluss von Objektivität, Thema und Medienmarke**

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## Facebook discussions of journalistic news: Investigating article objectivity, topic, and media brand as influencing factors

### Facebook-Diskussionen zu journalistischen Nachrichten: Der Einfluss von Objektivität, Thema und Medienmarke

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**Abstract:** User discussions of journalistic online news are a sensitive issue. First, most users do not seem to be motivated to comment on articles. Second, as far as discussions emerge, they seldom aim to create mutual understanding. Since this threatens the idea of online deliberation and might negatively affect the perceived brand images of news sites, factors influencing the quantity and quality of user comments should be investigated in more detail. In this paper, we analyze 120 articles from four German news outlets (*taz.de*, *SZ.de*, *FOCUS Online*, *FAZ.net*) and the related Facebook posts. Additionally, we analyze Facebook discussions emerging below the article posts. We comparatively assess the impact of the article's objectivity, topic, and the media brand on the number of user comments and deliberative discussion quality. The media brand had a significant impact on the number of user comments and most criteria of comment and discussion quality. Article objectivity had a small but significant impact on the level of incivility. We propose to investigate the factor in other communication contexts in future studies.

**Keywords:** User comments, online news, objectivity, topic, media brand, discussion quality, deliberation

**Zusammenfassung:** Nutzerdiskussionen zu Beiträgen von Nachrichten-Websites sind ein sensibles Thema. Erstens scheinen Nutzer wenig motiviert, Beiträge überhaupt zu kommentieren. Zweitens, sofern es doch zu einer Diskussion kommt, zielen diese selten auf gegenseitiges Verständnis ab. Weil das nicht nur die Idee einer Online-Deliberation gefährdet, sondern auch das wahrgenommene Image von Medienmarken negativ beeinflussen kann, müssen Faktoren, die die Quantität und Qualität von Nutzerkommentaren bedingen, intensiver erforscht werden. In dieser Studie werden 120 Artikel von vier deutschen Nachrichtenseiten (*taz.de*, *SZ.de*, *FOCUS Online*, *FAZ.net*) und die entsprechenden Facebook-Posts analysiert. Ebenfalls analysiert werden die Facebook-Diskussionen zum Post. Vergleichend untersucht wird der Einfluss der Objektivität des Artikels, des Themas und der Medienmarke auf die Anzahl der Kommentare und die deliberative Qualität der Diskussionen. Die Medienmarke hat einen großen und signifikanten Einfluss auf die Anzahl der Kommentare und die meisten Qualitätskriterien. Der Objektivitätsgrad hat einen kleinen aber signifikanten Einfluss auf den Grad der Unhöflichkeit. Zukünftige Studien sollten den Faktor in anderen Kommunikationskontexten untersuchen.

**Schlagwörter:** Nutzerkommentare, Nachrichten online, Objektivität, Thema, Medienmarke, Diskussionsqualität, Deliberation

## 1. Introduction

Nowadays, user participation in online journalism is state of the art. Users can like, share, or comment on news articles – either on news websites or on social network sites, such as Facebook (Trost & Schwarzer, 2012, p. 126). As an international survey by Singer et al. (2011) shows, user interaction is relevant to journalists for several different reasons. On one hand, there are economic advantages resulting from user brand loyalty attained by user involvement (Vujnovic, 2011, p. 146). Active audience communities ensure website traffic and media reach. Furthermore, commenters can serve as “audience pulse-takers” as well as proofreaders for journalists (Heinonen, 2011, pp. 42–43). On the other hand, there are advantages from a public sphere perspective. Comment sections are a convenient opportunity for users to have their voices heard, thus promoting a “healthy democratization” of public discourse (Singer & Ashman, 2009).

Nevertheless, in Germany a good deal of untapped potential remains concerning online discussions about news. The 2015 Digital News Report (Newman, Levy, & Nielsen, 2015, pp. 82–83) shows that more German news consumers prefer to share (13% via Social Networks, 10% via e-mail) and rate (14%) news stories rather than comment on news websites (6%). The Reuters Digital News Report 2016 (Newman, Fletcher, Levy, & Nielsen, 2016, p. 99) provides more current data for commenting behavior in social media: while about 30 percent of German respondents already use social media for news, only 10 percent actually comment on news “during an average week.”

In addition to low participation rates, journalists regularly have to deal with “trolls” and polemic, uncivil user discussions (Coe, Kenski, & Rains, 2014), which lower the quality of user comments. These users do not only jeopardize democratic values but can even negatively influence the perception of journalistic work. An experimental study by Prochazka, Weber, and Schweiger (2016) revealed that in Germany, uncivil user comments negatively affected audience perception of a journalistic article’s formal quality. Even the mere presence of user comments decreased the perceived quality.

Consequently, some German-language news websites, e.g., *Süddeutsche Zeitung* or *Neue Zürcher Zeitung*, are restricting or even shutting down their comment sections.<sup>1</sup> International examples are the US-magazine *Popular Science* (Stroud, Scacco, Muddiman, & Curry, 2015) and *Radio New Zealand*<sup>2</sup>, who shut down their online comment sections in 2013 and 2016.

To counteract these trends, it seems necessary to more intensively investigate factors influencing user commenting behavior. The present study focuses on differences both in quantity of comments on journalistic articles and in deliberative discussion quality. As we outlined above, the number of comments an article provokes is relevant to journalists in terms of media reach, while discussion quality

1 See <http://www.sueddeutsche.de/kolumne/ihre-sz-lassen-sie-uns-diskutieren-1.2095271> (February 24, 2017) and <https://www.nzz.ch/feuilleton/in-eigener-sache-warum-wir-unsere-kommentarspalte-umbauen-ld.143568> (February 24, 2017).

2 See <http://www.radionz.co.nz/news/national/308405/why-we%27re-turning-off-comments> (September 11, 2017)

determines the image of the media brand and is of broader societal interest in view of a discussion's deliberative potential. Fostering both remains a major challenge for online journalism.

Following Gastil (2008, p. 8), deliberation describes the process of “carefully examin[ing] a problem and arriv[ing] at a well-reasoned solution after a period of inclusive, respectful consideration of diverse points of view.” The concept is based on Habermas' theory of public discourse (1984) which provides conditions for ethical and rational debates, such as openness for any individual who wants to freely express her or his opinion and take part in a discussion (see also Ruiz et al., 2011, p. 466). Taking the users' perspective, studies show that participating in a debate is one of the main motives for commenting online, accompanied by motives such as adding or correcting information and expressing emotions or opinions (Diakopoulos & Naaman, 2011; Schultz, Jakob, Ziegele, Quiring, & Schemer, 2017; Stroud, van Duyn, Alizor, Alibhai, & Lang, 2016).

Wessler and Schultz (2007) claim that the journalists' performance “is pivotal for achieving elements of public deliberation in a normatively demanding sense.” To foster deliberation, journalists must fulfill different functions. First and foremost, they should shed light on issues that need to be publicly discussed (Romano, 2010). Therefore, reports need to be “sufficiently engaging to capture public attention” (p. 11). However, they also need to be comprehensive and balanced, including contributions of all relevant actors in a situation “so that the public can frame issues and understand the background and implications of those issues.” In a study of public debate on drug policy in Germany, Wessler (1999) compared utterances made by different types of actors such as political parties, public intellectuals, and journalists, and found that the journalists' utterances contributed most to providing a complex picture of the issue, presenting opposing ideas and weighing positive and negative aspects of a policy proposal.

Despite the aforementioned need for balance, there are journalistic articles which implicitly or explicitly favor one side of an issue over the other. In order to investigate the effect of such a “predefined” opinion on user deliberation and participation online, we included degree of article objectivity as the first factor; a factor that has been rather neglected so far. As studies on the influence of the article topic mainly look at differences between “hard news” and “soft news” (e.g., Coe et al., 2014), we further extend the line of research by focusing on differences within the field of politically controversial issues as the second factor. The third factor, the media brand, represents a certain editorial policy, certain comment regulation strategies, or certain audience characteristics, and is often included to explain differences in participation and deliberation online (e.g., Hille & Bakker, 2014; Ruiz et al., 2011). However, research on discussions hosted by German news outlets is still scarce.

In line with studies showing that people worldwide use social media for news and for commenting on news stories (Newman et al., 2016), we investigated user discussions on articles published on Facebook, rather than discussions in the comment section of news sites. In doing so, we excluded influences of the technical and design characteristics of medium-specific discussion tools (Peacock, Scacco, & Jomini Stroud, 2017; Weber, 2012; Wright & Street, 2007) and narrowed

our analysis down to a communication context that boyd (2010) describes as a “networked public”:

What distinguishes networked publics from other types of publics is their underlying structure. Networked technologies reorganize how information flows and how people interact with information and each other. In essence, the architecture of networked publics differentiates them from more traditional notions of publics. (p. 3)

One central characteristic of such networked publics is “the blurring of public and private.” Considering that Facebook provides both public and private spaces, Semaan, Robertson, Douglas, and Maruyama (2014) suggest that the behavior encouraged in either space might be very different: “with Facebook, much of the discussion may or may not be political. This makes the use of Facebook for political deliberation challenging” (p. 1418). Nevertheless, the authors point at Facebook’s group-based public spaces where people are discussing political issues. “These public spheres have been the major foci of recent studies of the deliberation that is taking place on Facebook” (pp. 1418–1419). The same applies for the present study, looking for deliberation on *taz.de*, *SZ.de*, *FOCUS Online*, and *FAZ.net* fan pages.

## 2. Literature overview

### 2.1 Defining deliberative discussion quality

Friess and Eilders (2015) summarize the positive individual-level outcomes of online deliberation. Deliberating online seems to lead to higher social trust and political engagement; furthermore, it fosters people’s knowledge about the issue under discussion and makes them aware of reasons behind opposing views. Receiving additional information and learning about different viewpoints for interpersonal communication or one’s own “internal-reflective deliberation” (Wessler, 2008, p. 5) is a desirable outcome, not only for participants but also for lurkers – those who follow discussions due to cognitive motives such as knowledge gain, but do not comment themselves (Springer, Engelmann, & Pfaffinger, 2015). Consensus and an increased perceived legitimacy of policy choices are desirable results on a societal level (Friess & Eilders, 2015).

Given the idea that the desirable effects need to be preceded by discussions that meet normative standards of deliberation, a growing number of studies investigate the deliberative quality of online discussions by applying criteria derived from Habermas’ theory of public discourse (1984). Researchers frequently enrich basic elements such as rational-critical argument, public issue focus, and equality with further online deliberative metrics (Freelon, 2010). Thus, they do not exclusively consider the Habermasian “type I deliberation” but rather a concept-stretching “type II deliberation” which is more real-world oriented, “shift[ing] emphasis from an ideal conception of the political to the phenomenological” (Bächtiger, Niemeyer, Neblo, Steenberg, & Steiner, 2010, p. 42). For guidance on which criteria are important for assessing online deliberation, several empirical studies on online interaction and deliberation were examined prior to this study (i.e., Freelon, 2010, 2015; Halpern & Gibbs, 2013; Janssen & Kies, 2005;

Jensen, 2003; Rowe, 2015; Ruiz et al., 2011; Stromer-Galley, 2007). We introduce the most commonly investigated criteria in the following paragraphs. The set of criteria includes the degree of argumentation, the conversational tone (civil/uncivil), discussion topic focus and diversity, user reference, type of reference (intra-/inter-ideological) and questions asked.

**Argumentation.** A basic prerequisite for deliberation is providing rational critical arguments for an opinion (Freelon, 2010, p. 1181; Stromer-Galley, 2007, p. 3). A position must be well-justified to have an impact on the formation of public opinion and on governmental action (Stromer-Galley, 2007, p. 4). Jensen (2003, p. 360) distinguishes internal validation, based on one's "own viewpoints, stands and values," from external validation, based on "facts and figures." Following Habermas (1981, p. 27), only utterances allowing an objective assessment can be labeled as "rational". Accordingly, external validation is considered to be the most deliberative form of argumentation (see also Janssen & Kies, 2005, p. 327).

**Conversational tone.** A civil conversational tone creates the atmosphere for an effective discussion (Wessler, 2008, p. 4). Stryker and Danielson (2013) suggest that "deliberative civility entails questioning and disputing, but in a way that respects and affirms all persons, even while critiquing their arguments" (p. 9). On the contrary, uncivil and abusive posting is described as "the most rudimentary way in which some groups or individuals come to silence others" (Dahlberg, 2000, p. 198) and which inhibits productive discourse (Prochazka et al., 2016, p. 5). According to Massaro and Stryker (2012, p. 409), incivility includes instances such as speech that is: excessively vulgar or disrespectful; intentionally threatening to others; excessively ad hominem; or deploying negative racial, sexual, religious, or other epithets.

**Discussion topic focus.** To reach a consensus or at least a mutual understanding, it is of vital importance that users stay focused on the topic under discussion (Freelon, 2010, p. 1177). This focus is also necessary for a closer examination of the problem at hand and the development of adequate solutions (Stromer-Galley, 2007, p. 6). Stromer-Galley (2007, p. 6) argues that discussing unrelated topics, as well as quickly drifting from one interactional topic to another, will undermine the process of deliberation.

**Diversity.** While a consensus of contesting sides is defined as a "salutary effect" (Wessler, 2008, p. 3) of deliberation, the variety of existing opinions should become visible in the process of deliberation, leading to "a reflective examination and possibly transformation of one's own convictions and preferences" (Peters, 2005, p. 173, cf. Wessler, 2008, p. 3). Thus, in a deliberative discussion, each participant should be able to make an assertion or question a point of view given (Dahlberg, 2001, p. 623) and thereby foster discussion network diversity. In considering verbal attacks to be a way to silence others, Dahlberg (2000, p. 198) hints at a possible interplay between discussion diversity and civility.

**Reference.** It is not until speakers consider the propositions of others, express their agreement or disagreement, or ask for clarification (Manosevitch & Walker, 2009, pp. 14–15) that one can speak of a "real discussion" (Janssen & Kies, 2005, p. 326). We can further distinguish the *type of reference*: intra-ideological discussions are discussions, where participants communicate primarily with "ide-

ological similars” while in the more deliberative inter-ideological or “cross-cutting” discussions participants “actually communicate across lines of difference” (Freelon, 2010, pp. 1181–1182).

**Question.** Asking questions is closely linked to the previous criterion (Freelon, 2010, p. 1181). It demonstrates a user’s interest to interact with other users or even with the whole community (see also Stromer-Galley, 2007, p. 12) and “suggests that one respects and values the other participants as resources for deepening her knowledge” (Manosevitch & Walker, 2009, p. 15). Since they are not aimed at seriously clarifying an ambiguity at hand, rhetorical questions remain an exception (Freelon, 2010, p. 1181).

Considering the positive outcomes of (online) deliberation, such as political information and engagement, and keeping in mind these outcomes while observing the attempts of traditional news media to move user discussions from their websites to Facebook, it seems important to investigate factors influencing the degree of user deliberation on Facebook. Since journalists might not primarily aim at fostering user deliberation but at stimulating a certain amount of user comments, thus media reach, we additionally consider effects on the number of user comments in the following section.

## 2.2 Factors influencing number of comments and discussion quality across online platforms

A large number of studies compared discussion quality either on different news websites (e.g., da Silva, 2013; Ruiz et al., 2011; Sampaio & Barros, 2012), on news websites versus Facebook (e.g., Hille & Bakker, 2014; Schweiger, 2014), or on news websites versus Twitter (e.g., Freelon, 2015). They unanimously found that online discussions seldom fulfilled normative standards for deliberation and that discussions on news websites were of higher quality than discussions on Twitter or Facebook. To explain differences across platforms, researchers discuss the role of platform design (Peacock et al., 2017; Wright & Street, 2007), need for registration and identification, and the role of media moderation strategies.

While moderation is broadly considered an important path to high-quality civil discussions (Ksiazek, 2015; Stroud et al., 2015), the effect of user identification sparks some controversy. While Berg (2015) did not find significant differences in deliberation among anonymous versus non-anonymous users, Santana (2014) discovered that anonymous users post uncivil comments significantly more often than non-anonymous users. Rowe (2015) supported these results for uncivil comments that were addressed to other users. Furthermore, Cho and Kwon (2015) highlighted that only voluntary identification lowered the degree of incivility in a user discussion. Since users might consider non-anonymity as an inhibition threshold, the factor is also introduced as an explanation for differences in the number of user comments (Hille & Bakker, 2014). Finally, Ruiz et al. (2011) analyzed five news websites from different countries. The authors identified two types of online public debate that seemed to be closely related to a country’s cultural context, i.e., its political system and media system. *Communities of*



*debate* are characterized by “the diversity of points of view, the amount of argumentation and the volume of actual dialogue between the participants” (p. 482). In *homogenous communities*, however, “expressing feelings about current events dominates the contributions and there is less of an argumentative debate” (p. 463).

### 2.3 Factors influencing number of comments and discussion quality on Facebook

Any news medium can create a Facebook fan page for sharing and spreading editorial content and can enable user comments. In a survey by Neuberger et al. (2014), all daily and weekly newspapers, as well as all broadcasters, had at least one Facebook account. To connect and interact on Facebook, all users must sign up with real names and work with the same interface in the same context (networked public). To explain differences in user commenting behavior within the social network, we need to focus on the question of which medium published what kind of content. In the present study, we included the article objectivity, the topic, and the media brand as influencing factors.

**Article objectivity.** Objective news reporting is defined by McQuail as

a form of media practice and also a particular attitude to the task of information collection, processing and dissemination. It means adopting a position of detachment and neutrality from the object of reporting [...]. It calls for attachment to accuracy and other truth criteria [...] as well as lack of ulterior motive or service to a third party. (1992, p. 72)

However, the call for separating news from opinion is often violated (Schönbach, 1977), resulting in a lack of balance and neutrality in news reporting, which is commonly known as “news bias.” The literature on news bias distinguishes several types. On a content production level, there are quantitative as well as qualitative types of bias. The coverage bias (D’Alessio & Allen, 2000) and the visibility bias (Eberl, Boomgaarden, & Wagner, 2015) both describe disproportionate reporting on a certain viewpoint or political actor. For journalistic evaluations of a certain position that can be either favorable or unfavorable, the terms *statement bias* or *tonality bias* are used. Maurer, Vogelgesang, Weiß, and Weiß (2008) recommend distinguishing *explicitly tendentious content* (containing value judgements expressed by the journalist) from *implicitly tendentious content* (containing value judgements expressed by a third party or selectively focusing on certain thematic aspects).

Entman (2007) further differentiates *bias*, which he defines as “consistent patterns in the framing of mediated communication that promote the influence of one side in conflicts over the use of government power” (p. 166), from *slant*, describing “individual news reports and editorials in which the framing favors one side over the other in a current or potential dispute.” (p. 165) The latter term seems more appropriate in the present study, since we investigate the effect of individual articles. We should note that there are journalistic genres other than news reporting, such as commentaries, which allow journalists to participate in public discourse underpinning the relevance of certain topics, actors, or positions

(Eilders, 2008, p. 30). As we do not expect the genre to make a difference in perceived objectivity and the effects on participation and discussion quality, commentaries promoting a certain opinion and slanted news content are equally defined as tendentious content.

News media are accused of being partisan on a regular basis. In a survey conducted by Schultz et al. (2017), only 33 percent of the respondents agreed to the statement that the reporting of mainstream media is balanced, while 50 percent partly agreed and 17 percent disagreed. Prochazka & Schweiger (2017) find that partisanship is one of the most common accusations in user comments containing some kind of media criticism. An experimental study conducted by Chung, Munno & Moritz (2015) shows that perceived story bias is a significant predictor of participatory behavior, including the likelihood of commenting on, sharing, liking, or disliking a story. Following Rojas (2010), the authors argue that reactions to slanted stories are driven by an intent to prevent others from potential media effects by censoring media content. In qualitative interviews conducted by Ziegele (2016), interviewees emphasized the same mechanisms Rojas (2010) invokes. Weber (2014) explored how news factors affect participation levels and user interactivity. Given that he found a negative effect of facticity on participation, the comment-provoking nature of articles containing some opinion tendency is once again supported. Turning to the effects on discussion quality, Weber (2014) found a negative effect of facticity on user interaction and concludes “that the perspectives on the news issues offered by journalists play a key role in making them accessible for a discursive treatment” (p. 13). In contrast, the interviews conducted by Ziegele (2016) prompted the conclusion that while tendentious content might promote participation, deliberativeness in the comment section might suffer, given that content supporting a certain position restricts the space for user interpretations and opinion (p. 334).

**Article topic.** Coe et al. (2014) showed that hard news (on politics, economics, taxes, etc.) increased the degree of incivility in user discussions; similarly, Stroud et al. (2015) found that articles on crime, abortion, and economics were discussed less deliberatively than were articles on education. Concerning the number of user comments, Diakopoulos and Namaan (2011) showed that users more often commented on articles dealing with negative topics than on articles dealing with positive topics. In the same vein, Weber (2012) found that the news factor damage (i.e., reports addressing physical damage or even bodily harm) had a significant positive effect on user participation. Other studies reported that political topics received the most comments (e.g., Stroud et al., 2016) and that within political topics, articles on finances and economic policy were the most commented ones (Ksiazek, 2016).

**Media brand.** Janssen and Kies (2005) argue that discussion quality is affected by the category of political actors hosting the debate (e.g., political parties sites, institutional sites, news websites): “the fact that each type of political actor hosts different kinds of participants and has different interests and aims suggests that the debates in their online public space are dissimilar.” (p. 322) Indeed, participants’ ideology should to a certain degree align with news source editorial policy (Iyengar & Hahn, 2009) and might be differentiating discussion culture on differ-

ent news websites. Freelon (2015) investigated the effect of user ideology on normative discussion criteria, showing that progressives were more likely than conservatives to engage in inter-ideological justifications and questions; conservatives, on the other hand, contributed more monologues and insults. What might also influence discussion quality is the way news media moderate user discussions and put their house rules into practice. If uncivil comments are strictly deleted, or if users are asked to stick to the topic of discussion on a regular basis, the discussions appear to be of better quality. The number of a media brand's Facebook fans might be a primary factor in determining the number of comments an article receives (see for example the results reported by Hille & Bakker, 2014).

### 3. Study objectives

We have presented article objectivity, topic, and media brand as factors that might affect the discussion behavior of users on Facebook; the objective of our study is to comparatively assess the influence of each of these factors on the number of user comments (RQ1), on the deliberative quality of user discussions (measured as an overall quality score, RQ2a), and also on single quality criteria (RQ2b).

As the impact of article objectivity has been rather neglected so far, we aim to study its influence in more detail. Taking into account the way users discover news online, using Facebook as a starting point, we consider objectivity not only in an article as a whole, but also in the prominent article elements (including (sub-) headline, teaser, cover photo, and caption) and in the article's Facebook post (including status update, headline, photo, and teaser). These elements might have an even greater effect on the perception of article objectivity. Moreover, following the results reported by Ziegele (2016), we assume:

*H1: Tendentious contributions receive more comments than balanced/neutral contributions.*

*H2: Discussions on tendentious contributions are less deliberative than those on balanced/neutral contributions.*

By distinguishing implicit tendencies from explicit tendencies (Maurer et al., 2008), we explore whether different types of tendentious content differently affect the number of user comments and deliberative discussion quality (RQ3).

### 4. Method

We investigated our research questions and the hypotheses using a quantitative online content analysis (Rössler, 2010).

#### 4.1 Sampling

We analyzed articles shared on the Facebook fan pages of four opinion-leading German news outlets (see Table 1) as well as the Facebook discussions in the comments. We controlled for effects of political culture and ideology on discus-

sion behavior (Freelon, 2015; Janssen & Kies, 2005) by including two right- and two left-leaning news media: *taz.de* and *SZ.de* (both left-leaning), *FOCUS Online* and *FAZ.net* (both right-leaning).

**Table 1.** News outlets included in the analysis

Media brand on Facebook (name of website)	Facebook-fans (June 15, 2016)	Editorial policy (Toepfl & Piwoni, 2015)
<i>taz.die tageszeitung (taz.de)</i>	226,023	left-leaning
<i>Süddeutsche Zeitung (SZ.de)</i>	520,170	left-leaning
<i>FOCUS Online Politik (FOCUS Online)</i>	450,492	right-leaning
<i>FAZ.NET – Frankfurter Allgemeine Zeitung (FAZ.net)</i>	372,421	right-leaning

We selected 30 Facebook posts and linked articles per medium (contributions). Beginning July 26, 2016, and working retroactively, for each day we picked the first Facebook post published after 12 p.m. that was linked to an article on the news website and that dealt with a politically controversial issue<sup>3</sup>. If no such post occurred, we moved on to the day before. We repeated the same search for each preceding day until we had 30 contributions. The final sample was comprised of 120 contributions published between May 2 and July 26, 2016. We retrieved Facebook posts on the website fan pages, including status update, photo and article teaser, article link, and user comments (initial “level 1” comments as well as “level 2” reply comments) and saved them on July 28 and July 29, 2016, using facepager 3.6 (Keyling & Jünger, 2013). We had to accept a loss of user comments of about five percent, due to privacy settings of users and pages as well as restrictions of the API (correspondence with Till Keyling, August 5, 2016). Each contribution was coded for degree of objectivity, topic, media brand, and number of user comments. Assuming that a minimum number of comments is a necessary condition for a discussion to evolve, we added a second sampling level. Thus, discussions below the Facebook posts were only analyzed in terms of quality if there were more than 20 comments at hand. This was the case for 117 of the 120 contributions selected. All three contributions with less than 20 comments came from the *taz.de* fan page, the page with the smallest number of fans. For the analysis, initial comments (level 1) were sorted chronologically, even though on Facebook fan pages “top comments” are displayed first. Reply comments on level 2 are sorted chronologically by default. Discussion analysis was limited to the oldest 100 comments, including comments on level 1 and 2.

3 Controversy was defined as a conflict of interest between two or more parties that was outlined at least implicitly in an article (Fretwurst, 2008, p. 28).

## 4.2 Measure

### 4.2.1 Independent variables

For each contribution in the sample, we first coded the media brand (*taz.de*, *SZ.de*, *FOCUS Online*, *FAZ.net*) and the topic. Topics were clustered later on; most of the contributions dealt with “migration and refugees” ( $n = 29$ ), a topic which was still hotly debated in 2016. Nearly the same amount ( $n = 26$ ) dealt with the so-called Brexit – supported by a majority of Britons in the referendum on June 23, 2016 – and its consequences. The remaining contributions ( $n = 65$ ) covered a range of diverse subjects and were subsumed in the category “other.” Contributions dealing with the Brexit were most commonly posted by *FOCUS Online* (35%), while articles dealing with migration were predominantly posted by *taz.de* and *SZ.de* (30% and 33%). “Other” issues were most commonly posted by *FAZ.net* (32%).

To measure the degree of article objectivity, literature suggests using three-point scales that include positive evaluation, neutral/ambivalent evaluation, and negative evaluation (Eberl et al., 2015). As a differentiation between positive and negative evaluations was not required to answer our research questions, we chose a dichotomous variable to classify the article, the prominent article elements, and the Facebook post as either balanced/neutral or tendentious. They were coded as *explicitly tendentious* if the journalist notably supported a certain stance towards the issue, an actor, or an actor’s position by (a) evaluating a third-party stance towards the issue, the actor, or the actor’s position as positive/negative or by (b) stating his own position. If the journalist notably overrepresented a third-party stance towards an issue, an actor, or an actor’s position in terms of space, the element was coded as *implicitly tendentious*.

About one-half of each contribution element – the Facebook posts, the prominent article elements, and the articles as a whole – contained either implicit or explicit tendencies. While in the article itself implicit tendencies (38%) were nearly as common as explicit tendencies (28%), explicit tendencies considerably dominated in the prominent article elements (33% vs. 18%) and the Facebook post (32% vs. 24%). As opinionated content seems to be more arousing than neutral content (Ziegele, 2016, p. 364), this could be a strategy to at least increase attention and number of clicks. While neutral/balanced contributions were most commonly posted by *SZ.de* and *FAZ.net*, explicitly tendentious contributions were predominantly posted by *taz.de* and implicitly tendentious contributions were most commonly posted by *FOCUS Online*.

### 4.2.2 Dependent variables

The number of user comments, the quality criteria introduced in Section 2.1, and an overall quality score were the dependent variables in the present study. Facebook outputs were used for counting the comments each contribution received. To assess deliberative quality of each discussion, we chose a holistic approach: ratings for each quality criterion were based on coders’ overall judgement. The total

number of comments in a discussion served as the basic information for the coders to determine the criteria's prevalence. Coders were advised to go through the discussion separately for each quality criterion.

The quality criteria "argumentation" and "questioning" were each measured on a four-point scale, ranging from "no arguments given/questions asked" to "arguments given/questions asked frequently." Looking at former study results on the proportion of arguments given (e.g., Halpern & Gibbs, 2013; Stroud et al., 2015) and questions asked (e.g., Rowe, 2015; Stroud et al., 2015) within a discussion, we coded "frequently" if more than one-third of user comments contained arguments/questions. The pretest revealed a more common appearance of "references," thus we chose a five-point scale, ranging from "no references" to "users referring to others very frequently" (coded if more than half of user comments contained references). Quoting previous text or mentioning other users by username signals a reference but is not a necessary condition; one user refers to another whenever he or she reacts to another user statement, either to ask for clarification, to express agreement or disagreement, or to build on the statement (Manosevitch & Walker, 2009). On a five-point scale, we coded whether a user refers to another user with similar ideological convictions – that is, he or she embraces the same side of the issue – or very different ones (scale ranging from "completely intra-ideological" to "completely inter-ideological"). The same scale was applied for discussion topic focus (scale ranging from "completely off-topic" to "completely on-topic"). Further, we coded the degree of incivility emerging in a discussion; drawing on a study conducted by Stryker, Conway and Danielson (2016), who clustered types of incivility by their perceived severity, we used a four-point scale ranging from "not at all uncivil" to "very uncivil" to measure both the maximum as well as the overall level of incivility in a discussion. In addition, we measured to what extent discussions reached a certain degree of opinion-diversity (three-point scale ranging from "roughly balanced", indicating that users expressed at least two different viewpoints in a fairly balanced proportion, to "extremely one-sided").

In order to assess the overall quality of a discussion, an index was used that included all eight quality criteria mentioned in Section 2.1. We first recoded some scales to reach homogenous polarity, and then performed z-transformation for each variable to prevent distortion due to different scale-ranges (Hayes, 2005, pp. 61–63). Afterwards, a "quality score" was calculated by averaging the quality criteria values. With Cronbach's Alpha = .73, the index internal consistency was acceptable (Peterson, 1994).

#### 4.2.3 Intercoder-reliability

Although the sample was analyzed by a single coder, a second coder was recruited to ensure reliability during the coding process. First, the codebook was discussed and revised in terms of comprehensibility. The coders then passed through a period of training, and some further amendments were made. With the final codebook, each coder coded four contributions (one per medium, published July 27–28, 2016), including Facebook discussions, to check for intercoder-reliability. For

each variable, we calculated percent agreement as well as Krippendorff's Alpha (Krippendorff, 2013) (see appendix, Table 3). We registered some minor discrepancies for "reference," "inter-ideological reference," "diversity" (each  $r_\alpha = .77$ ), and "overall level of incivility" ( $r_\alpha = .70$ ). Given that in each of these categories Krippendorff's Alpha was at least .70, the discrepancies were accepted.

## 5. Results

As our independent variables are categorical, research questions were answered, and hypotheses were tested by processing factorial ANOVAs and Bonferroni-adjusted post hoc-tests (for an overview on post hoc-test results see Table 5 in the appendix).

### 5.1 Effects on the number of user comments

Our first objective was to investigate the impact of degree of objectivity, topic, and media brand on the number of user comments. In order to reduce positive skew of the count data, we processed log-transformation before calculating the ANOVA (Field, 2013, pp. 201–204, see Table 3 in the appendix).<sup>4</sup> The overall model was highly significant ( $F(11, 108) = 4.67, p = .000, R^2 = .32$ ; see also Table 2). The only significant factor included was the media brand: contributions from *taz.de* ( $M = 58$ ; 95% CI [40, 83]) received significantly fewer comments than contributions from *SZ.de* ( $M = 244$ ; 95% CI [183, 325]), *FOCUS Online* ( $M = 179$ ; 95% CI [125, 256]) and *FAZ.net* ( $M = 121$ , 95% CI [86, 171]) did. Furthermore, the number of comments left on the *FAZ.net* fan page was significantly lower compared to the number of comments on the *SZ.de* and *FOCUS Online* fan page. A first explanation might be the platform's house rules: while editors of *taz.de* explicitly mention that they delete Facebook comments which do not refer to the article,<sup>5</sup> deletion rules seem to be less strict for the *FAZ.net* fan page and the *FOCUS Online* fan page<sup>6</sup>. As a second explanation, the effect can be traced back to the number of Facebook fans: while the *taz.de* fan page had only attracted about 226,000 fans by June 15, 2016, *SZ.de* and *FOCUS Online* had about twice as many fans (see Table 1).

4 The means and confidence intervals reported in the following are the detransformed geometric means and CIs.

5 See [https://www.facebook.com/pg/taz.kommune/about/?ref=page\\_internal](https://www.facebook.com/pg/taz.kommune/about/?ref=page_internal) (February 24, 2017)

6 See [https://www.facebook.com/pg/faz/about/?ref=page\\_internal](https://www.facebook.com/pg/faz/about/?ref=page_internal) and [https://www.facebook.com/pg/FOCUS-Online-Politik-492723560754814/about/?ref=page\\_internal](https://www.facebook.com/pg/FOCUS-Online-Politik-492723560754814/about/?ref=page_internal) (February 24, 2017). The *SZ.de* fan page does not provide a Facebook netiquette but hyperlinks the house rules for the *SZ.de* discussion forum, see [https://www.facebook.com/pg/ihre.sz/about/?ref=page\\_internal](https://www.facebook.com/pg/ihre.sz/about/?ref=page_internal) (February 24, 2017)

### 5.2 Effects on overall deliberative discussion quality and single quality criteria

Concerning the score of deliberative discussion quality, the overall model was highly significant ( $F(11, 105) = 6.35, p = .000, R^2 = .40, n = 117$ ; see Table 2). While degree of objectivity had only minor, nonsignificant effects on discussion quality, discussion quality differed significantly between media brands: discussion quality on the *FOCUS Online* fan page ( $M = -.50, SD = .52$ ) was significantly lower than discussion quality on the fan pages of *SZ.de* ( $M = .35, SD = .49$ ), *FAZ.net* ( $M = .15, SD = .48$ ) and *taz.de* ( $M = .001, SD = .57$ ). In addition, overall discussion quality was significantly lower on the *taz.de* fan page compared to the Facebook discussions hosted by *SZ.de*.

**Table 2.** Factorial ANOVA – effect sizes and significances

	Number of comments		Quality score		Argumentation		Overall level of incivility		Maximum level of incivility	
	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$
Media brand	13.62***	.28	18.07***	.34	11.44***	.25	11.86***	.25	3.76*	.10
Topic of article/post	2.27	.04	4.11*	.07	2.35	.04	6.67**	.11	4.75*	.08
Degree of objectivity...										
... in the article	1.62	.03	1.75	.03	.12	.00	3.51*	.06	.10	.00
... in the prominent article elements	.87	.02	.58	.01	.74	.01	1.71	.03	.01	.00
... in the Facebook post	1.70	.03	.09	.00	.70	.01	1.65	.03	.31	.01

  

	Topic focus		Diversity		Reference		Inter-ideological reference		Question reference	
	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$	<i>F</i>	$\eta_p^2$
Media brand	6.09**	.15	6.79***	.16	4.67**	.12	3.64*	.09	4.00	.10
Topic of article/post	.07	.00	1.43	.03	.31	.01	2.79	.05	.92	.02
Degree of objectivity...										
... in the article	1.19	.02	2.56	.05	.74	.01	.14	.00	.54	.01
... in the prominent article elements	.13	.00	1.34	.02	.32	.01	.67	.01	.95	.02
... in the Facebook post	.41	.01	.51	.01	1.59	.03	.52	.01	.20	.00

Note.  $N = 117-120$ ; factorial ANOVA; \*\*\* $p < .001$ ; \*\* $p < .01$ ; \* $p < .05$ .

To investigate more deeply the origins of differences in overall discussion quality, we took a closer look at each quality criterion separately (see Table 2). The overall model was significant for the degree of argumentation ( $F(11, 105) = 4.04, p = .000, R^2 = .30$ ), the overall level of incivility ( $F(11, 105) = 4.72, p = .000, R^2 = .33$ ), the maximum level of incivility ( $F(11, 105) = 4.04, p = .042, R^2 = .17$ ), discussion topic focus ( $F(11, 105) = 2.39, p = .011, R^2 = .20$ ), discussion diversity ( $F(11, 105) = 2.77, p = .003, R^2 = .23$ ), the degree of references ( $F(11, 105) =$



2.40,  $p = .011$ ,  $R^2 = .20$ ), and the degree of inter-ideological references ( $F(11, 105) = 1.99$ ,  $p = .037$ ,  $R^2 = .17$ )<sup>7</sup>. Media brand significantly affected all of these quality criteria. The results for *FOCUS Online* were especially striking: Facebook discussions hosted by *FOCUS Online* were significantly less argumentative ( $M = 1.03$ ;  $SD = .49$ ) than those hosted by the other three media brands ( $M_{SZ} = 1.93$ ,  $SD = .64$ ;  $M_{FAZ} = 1.70$ ,  $SD = .60$ ;  $M_{taz} = 1.63$ ,  $SD = .69$ ). The same applies for discussion topic focus, as discussions on contributions from *FOCUS Online* focused significantly less on the articles' topics ( $M = 2.20$ ;  $SD = 1.16$ ) than did discussions of articles by *taz.de* ( $M = 3.22$ ,  $SD = 1.01$ ), *FAZ.net* ( $M = 3.20$ ,  $SD = .96$ ), and *SZ.de* ( $M = 3.00$ ,  $SD = .98$ ).

Opinion diversity was significantly lower in *FOCUS* discussions ( $M = .60$ ,  $SD = .68$ ) than it was in discussions on contributions from *SZ.de* ( $M = 1.30$ ,  $SD = .65$ ) and *FAZ.net* ( $M = 1.10$ ,  $SD = .80$ ); the average diversity of discussions on *taz.de* lay in between ( $M = .93$ ,  $SD = .83$ ). Regarding the proportion of references made by commenters, Facebook discussions hosted by *FOCUS Online* ( $M = 2.83$ ,  $SD = .83$ ) as well as those hosted by *taz.de* ( $M = 2.67$ ,  $SD = .83$ ) had significantly lower proportions than discussions hosted by *SZ.de* ( $M = 3.50$ ,  $SD = .73$ ). Further, discussions on the *FOCUS Online* fan page were significantly less inter-ideological ( $M = 1.93$ ,  $SD = 1.26$ ) than were those on the *SZ.de* fan page ( $M = 3.07$ ,  $SD = 1.31$ ).

Both the maximum as well as the overall level of incivility are significantly affected by the medium. Again, Facebook discussions on *FOCUS Online* contributions were significantly more uncivil on an overall level ( $M = 1.70$ ,  $SD = .60$ ) than were discussions hosted by *taz.de* ( $M = .74$ ,  $SD = .90$ ), *FAZ.net* ( $M = .83$ ,  $SD = .75$ ), and *SZ.de* ( $M = .90$ ,  $SD = .88$ ). The maximum level of incivility in *FOCUS Online* discussions ( $M = 2.33$ ,  $SD = 2.48$ ) differed significantly from the maximum level of incivility in *FAZ.net* ( $M = 1.73$ ,  $SD = .69$ ) and *SZ.de* discussions ( $M = 1.80$ ,  $SD = .76$ ). Moreover, the degree of incivility is significantly affected by the article issue: the maximum level of incivility was significantly higher in discussions on migration and refugees ( $M = 2.15$ ,  $SD = .66$ ) than was the maximum level of incivility in discussions on contributions dealing with the Brexit ( $M = 1.60$ ,  $SD = .71$ ). The same is found for discussions' overall level of incivility ( $M_{\text{migration}} = 1.30$ ,  $SD = .87$ ;  $M_{\text{Brexit}} = .80$ ,  $SD = .82$ ), although Bonferroni-adjusted post-hoc analysis revealed an only marginally significant difference ( $p = .056$ ). Regarding the emotional charge of migration-related topics, the discussions' uncivil character is hardly surprising. Besides the effects of media brand and topic, we found a significant effect of article objectivity on the overall level of incivility. Discussions on balanced/neutral articles were significantly less uncivil ( $M = .87$ ,  $SD = .85$ ) than were those on implicitly tendentious articles ( $M = 1.27$ ,  $SD = .80$ ), although the difference was only marginally significant ( $p = .051$ ).

In conclusion, we have to reject H1 and largely reject H2. Even though comparison of mean values suggests the expected differences – users tend to comment more often on tendentious contributions than they do on balanced/neutral ones,

<sup>7</sup> As the overall model was not significant for the criterion “questions” we will focus on the empirically more promising criteria in the following.

but also seem to discuss them less deliberatively – there are only minor, nonsignificant effects of the degree of objectivity in the article, the prominent article elements, or the Facebook post on number of user comments as well as on discussion quality score. The overall level of incivility is the only quality criterion significantly affected by the article’s degree of objectivity.

## 6. Discussion and limitations

The overarching objective of the present study was to explore and comparatively investigate the effects of selected factors, such as the article’s objectivity, on the quantity of comments and deliberative discussion quality on the Facebook pages of German news sites. Contrary to expectations, opinion tendencies in an article, its prominent article elements, and its associated Facebook post neither caused significantly more user comments nor did they cause significantly lower values of overall discussion quality compared to neutral/balanced contributions. However, a serious limitation of our results is the sample size of 120 contributions. As the effects we are interested in, especially the effects of degree of objectivity, are possibly quite small, the sample might not have enough power to detect them. Thus, conclusions need to be drawn with caution.

Nevertheless, we gathered some new insights. First and foremost, the present study highlights that differences in user discussion behavior depend on the media brand, or rather its audiences. Discussions on contributions from *FOCUS Online* especially suffer from shortcomings in terms of argumentation, topic focus, diversity, and civility, while they receive a remarkably large amount of comments. Since *FOCUS Online* has become increasingly popular with right-wingers and PEGIDA,<sup>8</sup> the lack of deliberation in general and incivility in particular might partly be rooted in an extreme ideology dominating the discussion space (Davis, 1999, cited from Janssen & Kies, 2005). As this is not the case for discussions on contributions published by *taz.de*, which is known to be a “national forum of debate for the German Left” (Toepfl & Piwoni, 2015), we find support for the findings reported by Freelon (2015) showing that progressives are more eager to deliberate than conservatives. On a related note, it seems interesting to further investigate deliberative discussion quality in communities of increasingly popular alternative-news media, which provide counterpublic spaces and tend to criticize mainstream media as well as governmental action (Schweiger, 2017, p. 47). Do they primarily host homogenous user communities with aligned ideas and opinions not willing to deliberate? Or are there vital discussions containing a range of opinions which just do not fit “mainstream” ideas?

Besides ideological leanings, differences between media brands might also be explained by audience sociodemographic characteristics, such as age and education, which could determine rhetorical skills and the users’ ability to reason. Studies such as the one by Klinger and Russmann (2015) have already investigated the link between sociodemographics and online deliberation during the 2011 Zurich

8 See <http://web.br.de/interaktiv/rechtes-netz/> (February 24, 2017)

city debate, but in order to fully understand the link between audience characteristics and discussion quality, additional research is needed. Furthermore, one should consider potential effects of moderation and comment control. Though the news media did not interact with commenters in our sample (by answering questions, appreciating thoughtful comments, or asking users to act more respectfully; Ziegele & Jost, 2016), there may be (or might have been in the past) some form of moderation affecting the overall climate and quality of discussions on a news website's Facebook page. Likewise, news media might differ in how strictly they handle comment control.

The topic significantly influenced the level of incivility, which in turn affected discussion quality. Expanding the findings from Coe et al. (2014), who showed that "hard news" cause greater incivility than "soft news," we found significant differences within the category of politically controversial topics, in particular between discussions on migration/refugees and discussions on the United Kingdom's (potential) withdrawal from the European Union. News factors such as proximity and impact have significant positive effects on user participation and interactivity (Weber, 2014) and might also explain why Facebook fans of German news websites discuss foreign policy (Brexit) more civilly. This level of civility has important effects; Dahlberg (2000, p. 198) implies far-reaching consequences of uncivil user comments on discussion atmosphere as well as on opinion-diversity. Confirming his apprehensions, by performing an additional t-test ( $t(115) = 3.955$ ,  $p < .001$ ),<sup>9</sup> we found that discussions which were more uncivil were significantly less diverse ( $M = .64$ ,  $SD = .77$ ) than discussions which were more civil ( $M = 1.19$ ,  $SD = .71$ ). Blocking user discussions on hot topics thus seems adequate in several respects.

Though it was the only effect of article objectivity, we found that the overall level of incivility differed significantly between discussions on implicitly tendentious articles and discussions on balanced/neutral articles, the latter being more civil. As implicitly tendentious articles usually deal with a political party's or a politician's notions and decisions, they provide both arousing opinions that users might want to contradict as well as advocates they can attack without having to fear the advocates' reactions. Also, users might want to blame the editors for their alleged partisanship. Thus, as incivility is a major challenge for online journalism, some rethinking on which articles are provided for discussion on Facebook seems worth striving for. To avoid the impression of one-sided reporting as well as an exclusion of alternative viewpoints from public discourse, editors could make use of Facebook's "related articles" function, presenting articles to the users that deal with (advocates of) divergent views on the very same issue.

These findings have to be discussed considering some limitations. For instance, in our study we had to limit the set of influencing factors. We neglected factors such as conversational prompts (Stroud et al., 2015), which might particularly affect the number of user comments; news factors comprised in an article (Weber, 2012; 2014); and author gender (Gardiner et al., 2016). Moreover, we did not

<sup>9</sup> Groups were formed based on a dummy variable for the average degree of incivility with 0 = rather civil and 1 = rather uncivil. Assignment was carried out with a median split.

consider the impact of user comments themselves. As Ziegele, Breiner, and Quiring (2015) show in experimental studies, user comments that provide additional information on a news article positively affect the willingness of others to comment on the article as well as to answer on the comment. Therefore, future research should continue to investigate user comment impact on discussion structure.

Further, we investigated discussions on Facebook exclusively; therefore, results will not necessarily apply to user discussions in more traditional public spheres. Discussions on news websites, for example, might be less uncivil, as communities tend to be smaller and easier to control. Also, discussions might be less diverse and there might be greater effects of tendentious reporting, given that communities on news websites might be more like-minded than in networked publics, where users still might come across content liked, shared, and commented on by ‘friends’ with different ideological convictions.

The results might also differ depending on cultural context and media landscape, which is why cross-national studies should be conducted. Alignment of media system and politics in Germany today is rather moderate (Wessler & Rinke, 2016): In small media markets, profit-seeking news media are forced to meet the needs of diverse audiences to ensure media reach and thus tend to be “mainstream”; and German public service broadcasters are explicitly charged with the public service obligation to ensure pluralism and impartiality (Schweiger, 2017, pp. 38–42). Slant might be more apparent and thus create more negative effects on user discussion behavior in countries belonging to the “Polarized Pluralist” model (introduced by Hallin & Mancini, 2004). In such a model, media tend to align themselves with specific political positions, and coverage of each newspaper tends to be less plural in itself (Ruiz et al., 2011, p. 468). Ruiz et al. (2011) show that less respectful and less plural discussions (‘homogenous communities’) in online comment sections can be found on news websites from “Polarized Pluralist” countries (e.g., France, Spain, and Italy), compared to discussions on news websites from countries belonging to a “Liberal” model, where media tend to include a variety of viewpoints in their coverage. Even though a medium that is part of a “Liberal” model might occasionally provide slanted news for user discussions, slant will be less distinct and regular users still receive a great repertoire of ideas they can refer to in discussions on both balanced/neutral and slanted articles.

The differences regarding the type of content provided by each medium are a major issue. In the sample, neutral/balanced contributions are prevalent on *SZ.de* and *FAZ.net* fan pages, *taz.de* provides mainly explicitly tendentious contributions, and *FOCUS Online* provides mainly implicitly tendentious contributions. Thus, effects of article objectivity on participation and discussion quality might be mingling with the effect the media brand produces; “consistent patterns in the framing of mediated communication” (Entman, 2007, p. 166) might result in user discursive practices independent of a single article’s slant. Furthermore, by defining neutral as well as balanced contributions as “objective,” we might have reduced the differences in number of comments and discussion quality between our groups. Future studies should separate neutral content, i.e., content that is factu-

ally reporting on concrete events and actions (Weber, 2014), from content presenting perspectives on the news issue in a balanced manner, as objectivity might be perceived to be much greater in neutral than in balanced contributions from a user perspective. These studies might also enhance the assessment of degree of objectivity; since coder judgements are potentially affected by subjective or hostile media perceptions, researchers are asked to work with benchmarks and compare news website stances to partisan examples (Groeling, 2013).

## References

- Bächtiger, A., Niemeyer, S., Neblo, M., Steenbergen, M. R., & Steiner, J. (2010). Disentangling diversity in deliberative democracy: Competing theories, their blind spots and complementarities. *Journal of Political Philosophy*, 18(1), 32–63. doi:10.1111/j.1467-9760.2009.00342.x
- Berg, J. (2015). The impact of anonymity and issue controversiality on the quality of online discussion. *Journal of Information Technology & Politics*, 13(1), 37–51. doi:10.1080/19331681.2015.1131654
- boyd, d. (2010). Social Network Sites as networked publics: Affordances, dynamics, and implications. In Z. Papacharissi (Ed.), *A networked self. Identity, community and culture on social network sites* (pp. 39–58). New York: Routledge.
- Cho, D., & Kwon, K. H. (2015). The impacts of identity verification and disclosure of social cues on flaming in online user comments. *Computers in Human Behavior*, 51, 363–372. doi:10.1016/j.chb.2015.04.046
- Coe, K., Kenski, K., & Rains, S. A. (2014). Online and uncivil? Patterns and determinants of incivility in newspaper website comments. *Journal of Communication*, 64(4), 658–679. doi:10.1111/jcom.12104
- D'Alessio, D., & Allen, M. (2000). Media bias in presidential elections: A meta-analysis. *Journal of Communication*, 50(4), 133–156. doi:10.1111/j.1460-2466.2000.tb02866.x
- da Silva, M. T. (2013). Online forums, audience participation and modes of political discussion: readers' comments on the Brazilian presidential election as a case study. *Communication & Society*, 26(4), 175–193.
- Dahlberg, L. (2000). *The Internet and the public sphere: A critical analysis of the possibility of online discourse enhancing deliberative democracy*. Ph. D. dissertation, Massey University.
- Dahlberg, L. (2001). The internet and democratic discourse: Exploring the prospects of online deliberative forums extending the public sphere. *Information, Communication & Society*, 4(4), 615–633. doi:10.1080/13691180110097030
- Diakopoulos, N., & Naaman, M. (2011). Towards quality discourse in online news comments. In P. Hinds, J. C. Tang, J. Wang, J. Bardram, & N. Ducheneaut (Eds.), *the ACM 2011 conference* (p. 133). doi:10.1145/1958824.1958844
- Eberl, J.-M., Boomgaarden, H. G., & Wagner, M. (2015). One bias fits all? Three types of media bias and their effects on party preferences. *Communication Research*, 1–24. doi:10.1177/0093650215614364
- Eilders, C. (2008). Massenmedien als Produzenten öffentlicher Meinungen — Pressekommentare als Manifestation der politischen Akteursrolle [Mass media as producers of public opinion — press comments as manifestation of the role of political actors]. In B.

- Pfetsch & S. Adam (Eds.), *Massenmedien als politische Akteure. Konzepte und Analysen* (pp. 27–51). Wiesbaden: VS Verlag für Sozialwissenschaften. doi:10.1007/978-3-531-90843-4\_2
- Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of Communication*, 57(1), 163–173. doi:10.1111/j.1460-2466.2006.00336.x
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock 'n' roll* (4th edition). Los Angeles, London, New Delhi: Sage.
- Freelon, D. G. (2010). Analyzing online political discussion using three models of democratic communication. *New Media & Society*, 12(7), 1172–1190. doi:10.1177/1461444809357927
- Freelon, D. G. (2015). Discourse architecture, ideology, and democratic norms in online political discussion. *New Media & Society*, 17(5), 772–791. doi:10.1177/1461444813513259
- Fretwurst, B. (2008). *Nachrichten im Interesse der Zuschauer: Eine konzeptionelle und empirische Neubestimmung der Nachrichtenwerttheorie* [News serving the interests of viewers: a conceptual and empirical redefinition of news value theory]. Konstanz: UVK. Retrieved from [http://deposit.d-nb.de/cgi-bin/dokserv?id=3116917&prov=M&dok\\_var=1&dok\\_ext=htm](http://deposit.d-nb.de/cgi-bin/dokserv?id=3116917&prov=M&dok_var=1&dok_ext=htm)
- Friess, D., & Eilders, C. (2015). A systematic review of online deliberation research. *Policy & Internet*, 7(3), 319–339. doi:10.1002/poi3.95
- Gardiner, B., Mansfield, M., Anderson, I., Holder, J., Louter, D., & Ulmanu, M. (2016, April 12). The dark side of Guardian comments. Retrieved from <https://www.theguardian.com/technology/2016/apr/12/the-dark-side-of-guardian-comments>
- Gastil, J. (2008). *Political communication and deliberation*. Los Angeles: Sage Publ. Retrieved from <http://www.loc.gov/catdir/enhancements/fy0808/2007025410-b.html>
- Groeling, T. (2013). Media bias by the numbers: Challenges and opportunities in the empirical study of partisan news. *Annual Review of Political Science*, 16(1), 129–151. doi:10.1146/annurev-polisci-040811-115123
- Habermas, J. (1981). *Theorie des kommunikativen Handelns. Handlungsrationalität und gesellschaftliche Rationalisierung* [The theory of communicative action. Reason and the rationalization of society]. Frankfurt am Main: Suhrkamp.
- Habermas, J. (1984). *Vorstudien und Ergänzungen zur Theorie des kommunikativen Handelns* [Pre-studies on and supplements to the theory of communicative action]. Frankfurt am Main: Suhrkamp.
- Hallin, D. C., & Mancini, P. (2004). *Comparing media systems: Three models of media and politics. Communication, society, and politics*. Cambridge: Cambridge Univ. Press. Retrieved from <http://www.loc.gov/catdir/samples/cam041/2003069684.html>
- Halpern, D., & Gibbs, J. (2013). Social media as a catalyst for online deliberation? Exploring the affordances of Facebook and YouTube for political expression. *Computers in Human Behavior*, 29(3), 1159–1168. doi:10.1016/j.chb.2012.10.008
- Hayes, A. F. (2005). *Statistical methods for communication science. Routledge Communication Series, 10*. Mahwah, N.J: Lawrence Erlbaum Associates.
- Heinonen, A. (2011). The journalist's relationship with users. In J. B. Singer, A. Hermida, D. Domingo, A. Heinonen, S. Paulussen, T. Quandt, . . . M. Vujnovic (Eds.), *Participatory Journalism* (pp. 34–55). Oxford, UK: Wiley-Blackwell. doi:10.1002/9781444340747.ch3

- Hille, S., & Bakker, P. (2014). Engaging the social news user. *Journalism Practice*, 8(5), 563–572. doi:10.1080/17512786.2014.899758
- Iyengar, S., & Hahn, K. S. (2009). Red Media, Blue Media: Evidence of ideological selectivity in media use. *Journal of Communication*, 59(1), 19–39. doi:10.1111/j.1460-2466.2008.01402.x
- Janssen, D., & Kies, R. (2005). Online forums and deliberative democracy. *Acta Politica*, 40(S3), 317–335. doi:10.1057/palgrave.ap.5500115
- Jensen, J. L. (2003). Public spheres on the internet: Anarchic or government-sponsored – a comparison. *Scandinavian Political Studies*, 26(4), 349–374. doi:10.1111/j.1467-9477.2003.00093.x
- Keyling, T., & Jünger, J. (2013). *Facepager (Version, f.e. 3.3). An application for generic data retrieval through APIs*. Source code available from <https://github.com/strohne/Facepager>.
- Klinger, U., & Russmann, U. (2015). The sociodemographics of political public deliberation: Measuring deliberative quality in different user groups. *Communications*, 40(4). doi:10.1515/commun-2015-0017
- Krippendorff, K. (2013). *Content analysis: An introduction to its methodology* (3rd edition). Los Angeles, London, New Delhi, Singapore: Sage.
- Ksiazek, T. B. (2015, May). *Civil interactivity: Discouraging hostility in user comments on news websites*. Paper presented at the annual meeting of the International Communication Association 65th Annual Conference, Puerto Rico, San Juan.
- Ksiazek, T. B. (2016). Commenting on the news. *Journalism Studies*. Advance online publication. doi:10.1080/1461670X.2016.1209977
- Manosevitch, E., & Walker, D. M. (2009, April). *Reader comments to online opinion journalism: A Space of Public Deliberation*. Paper prepared for presentation at the 10th International Symposium on Online Journalism, Austin, Texas.
- Maurer, T., Vogelgesang, J., Wei, M., & Wei, H.-J. (2008). Aktive oder passive Berichterstatte? Die Rolle der Massenmedien während des Kosovo-, Afghanistan- und Irakkriegs [Active or passive reporting? The role of mass media during the Kosovo War, the Afghanistan War and the Iraq War]. In B. Pfetsch & S. Adam (Eds.), *Massenmedien als politische Akteure. Konzepte und Analysen* (pp. 144–167). Wiesbaden: VS Verlag für Sozialwissenschaften. doi:10.1007/978-3-531-90843-4\_7
- McQuail, D. (1992). *Media performance: Mass communication and the public interest*. London: Sage. Retrieved from <http://www.loc.gov/catdir/enhancements/fy0656/92050228-d.html>
- Neuberger, C., Langenohl, S., & Nuernbergk, C. (2014). *Social Media und Journalismus. LfM-Dokumentation, Band 50* [Social media and journalism. LfM-Documentation, Vol. 50]. Düsseldorf. Retrieved from [http://lfmpublikationen.lfm-nrw.de/modules/pdf\\_download.php?products\\_id=360](http://lfmpublikationen.lfm-nrw.de/modules/pdf_download.php?products_id=360)
- Newman, N., Fletcher, R., Levy, D. A. L., & Nielsen, R. K. (Eds.). (2016). *Reuters Institute Digital News Report 2016*. Oxford University: Reuters Institute for the Study of Journalism. Retrieved from <http://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/Digital%2520News%2520Report%25202016.pdf>
- Newman, N., Levy, D. A. L., & Nielsen, R. K. (Eds.). (2015). *Reuters Institute Digital News Report 2015*. Oxford University: Reuters Institute for the Study of Journalism. Retrieved from <http://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/>

- Reuters%2520Institute%2520Digital%2520News%2520Report%25202015\_Full%2520Report.pdf
- Peacock, C., Scacco, J. M., & Jomini Stroud, N. (2017). The deliberative influence of comment section structure. *Journalism: Theory, Practice & Criticism*, 33(4), 146488491771179. doi:10.1177/1464884917711791
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *Journal of Consumer Research*, 21(2), 381. doi:10.1086/209405
- Prochazka, F., Weber, P., & Schweiger, W. (2016). Effects of civility and reasoning in user comments on perceived journalistic quality. *Journalism Studies*. Advance online publication. doi:10.1080/1461670X.2016.1161497
- Rojas, H. (2010). "Corrective" actions in the public sphere: How perceptions of media and media effects shape political behaviors. *International Journal of Public Opinion Research*, 22(3), 343–363. doi:10.1093/ijpor/edq018
- Romano, A. R. (Ed.). (2010). *International journalism and democracy: Civic engagement models from around the world*. Routledge research in cultural and media studies: Vol. 25. New York NY u.a.: Routledge.
- Rössler, P. (2010). Das Medium ist nicht die Botschaft [The medium is not the message]. In M. Welker & C. Wünsch (Eds.), *Neue Schriften zur Online-Forschung: Vol. 8. Die Online-Inhaltsanalyse. Forschungsobjekt Internet* (pp. 31–43). Köln: Herbert von Halem.
- Rowe, I. (2015). Deliberation 2.0: Comparing the deliberative quality of online news user comments across platforms. *Journal of Broadcasting & Electronic Media*, 59(4), 539–555. doi:10.1080/08838151.2015.1093482
- Ruiz, C., Domingo, D., Mico, J. L., Diaz-Noci, J., Masip, P., & Meso, K. (2011). Public sphere 2.0? The democratic qualities of citizen debates in online newspapers. *The International Journal of Press/Politics*. Advance online publication. doi:10.1177/1940161211415849
- Sampaio, R. C., & Barros, S. A. R. (2012). Can news-sites stimulate online deliberation? A study of readers' comments posted on folha.com. *Brazilian Journalism Research*, 8(2), 188–205.
- Santana, A. D. (2014). Virtuous or vitriolic. *Journalism Practice*, 8(1), 18–33. doi:10.1080/17512786.2013.813194
- Schönbach, K. (1977). *Trennung von Nachricht und Meinung: Empirische Untersuchung eines journalistischen Qualitätskriteriums* [The separation of news and opinion. Empirical investigation of a journalistic quality criterion]. Freiburg im Breisgau, München: Alber.
- Schultz, T., Jakob, N., Ziegele, M., Quiring, O., & Schemer, C. (2017). Erosion des Vertrauens zwischen Medien und Publikum? Ergebnisse einer repräsentativen Bevölkerungsumfrage [Erosion of trust between media and audience? Results of a representative study]. *Media Perspektiven*. (5), 246–272.
- Schweiger, W. (2014). *Reader discussions on news websites and Facebook. How do platform characteristics influence deliberativeness?* Paper presented to the 5th European Communication Conference (ECREA), Lisboa 2014.
- Schweiger, W. (2017). *Der (des)informierte Bürger im Netz: Wie soziale Medien die Meinungsbildung verändern* [The (dis-)informed citizen on the net. How social media affect the formation of opinion]. Wiesbaden: Springer. doi:10.1007/978-3-658-16058-6.



- Semaan, B. C., Robertson, S. P., Douglas, S., & Maruyama, M. (2014). Social media supporting political deliberation across multiple public spheres. In S. Fussell, W. Lutters, M. R. Morris, & M. Reddy (Eds.), *the 17th ACM conference* (pp. 1409–1421). doi:10.1145/2531602.2531605
- Singer, J. B., & Ashman, I. (2009). “Comment is free, but facts are sacred”: User-generated content and ethical constructs at the Guardian. *Journal of Mass Media Ethics*, 24(1), 3–21. doi:10.1080/08900520802644345
- Singer, J. B., Hermida, A., Domingo, D., Heinonen, A., Paulussen, S., Quandt, T., . . . Vujnovic, M. (Eds.). (2011). *Participatory journalism: Guarding open gates at online newspapers*. Chichester, West Sussex, U.K, Malden, MA: Wiley-Blackwell.
- Springer, N., Engelmann, I., & Pfaffinger, C. (2015). User comments: Motives and inhibitors to write and read. *Information, Communication & Society*, 18(7), 798–815. doi:10.1080/1369118X.2014.997268
- Stromer-Galley, J. (2007). Measuring deliberation’s content: A coding scheme. *Journal of Public Deliberation*, 3(1), Article 12.
- Stroud, N. J., Scacco, J. M., Muddiman, A., & Curry, A. L. (2015). Changing deliberative norms on news organizations’ Facebook sites. *Journal of Computer-Mediated Communication*, 20(2), 188–203. doi:10.1111/jcc4.12104
- Stroud, N. J., van Duyn, E., Alizor, A., Alibhai, A., & Lang, C. (2016). *Comment section survey across 20 news sites*. Engaging News Project. Retrieved from <https://engaging-newsproject.org/wp-content/uploads/2017/01/Comment-Section-Survey-Across-20-News-Sites.pdf>
- Stryker, R., Conway, B. A., & Danielson, J. T. (2016). What is political incivility? *Communication Monographs*, 83(4), 535–556. doi:10.1080/03637751.2016.1201207
- Stryker, R., & Danielson, J. T. (2013). *Deliberative democracy and civil discourse*. Retrieved from [http://nicd.arizona.edu/sites/default/files/research\\_briefs/NICD%20Research%20Brief%2010%20FINAL%20for%20web%20posting.pdf](http://nicd.arizona.edu/sites/default/files/research_briefs/NICD%20Research%20Brief%2010%20FINAL%20for%20web%20posting.pdf)
- Stryker, R., & Massaro, T. (2012). Freedom of speech, liberal democracy and emerging evidence on effective democratic engagement. *Arizona Law Review*, 54, 375–441.
- Toepfl, F., & Piwoni, E. (2015). Public spheres in interaction: Comment sections of news websites as counterpublic spaces. *Journal of Communication*, 65(3), 465–488. doi:10.1111/jcom.12156
- Trost, K. E., & Schwarzer, B. (2012). *Social Web auf Online-Portalen deutscher Zeitungen: Eine empirische Untersuchung des Nutzungsverhaltens* [Social web on German newspapers’ web portals: An empirical investigation of user behaviour]. Baden-Baden: Nomos. doi:10.5771/9783845232942.
- Vujnovic, M. (2011). Participatory journalism in the marketplace. In J. B. Singer, A. Hermida, D. Domingo, A. Heinonen, S. Paulussen, T. Quandt, . . . M. Vujnovic (Eds.), *Participatory Journalism* (pp. 139–154). Oxford, UK: Wiley-Blackwell. doi:10.1002/9781444340747.ch8
- Weber, P. (2014). Discussions in the comments section: Factors influencing participation and interactivity in online newspapers’ reader comments. *New Media & Society*, 16(6), 941–957. doi:10.1177/1461444813495165
- Weber, P. (2012). Nachrichtenfaktoren & User Generated Content: Die Bedeutung von Nachrichtenfaktoren für Kommentierungen der politischen Berichterstattung auf Nachrichtenwebsites [News factors & user generated content. The importance of news

- factors for commenting on political reporting on news websites]. *Medien & Kommunikationswissenschaft*, 60(2), 218–239. doi:10.5771/1615-634x-2012-2-218
- Wessler, H. (1999). Öffentlichkeit als Prozeß: Deutungsstrukturen und Deutungswandel in der deutschen Drogenberichterstattung [Public as a process. Interpretive frames and interpretive changes in the German reporting on drugs]. Wiesbaden: VS Verlag für Sozialwissenschaften. doi:10.1007/978-3-663-10932-7.
- Wessler, H. (2008). Investigating deliberativeness comparatively. *Political Communication*, 25(1), 1–22. doi:10.1080/10584600701807752
- Wessler, H., & Rinke, E. M. (2016). Journalismus und Politik [Journalism and politics]. In M. Löffelholz & L. Rothenberger (Eds.), *Handbuch Journalismustheorien* (pp. 639–653). Wiesbaden: Springer VS. doi:10.1007/978-3-531-18966-6\_39
- Wessler, H., & Schultz, T. (2007). Can the mass media deliberate? Insights from print media and political talk shows. In R. Butsch (Ed.), *Media and public spheres* (pp. 15–27). New York: Palgrave Macmillan.
- Wright, S., & Street, J. (2007). Democracy, deliberation and design: The case of online discussion forums. *New Media & Society*, 9(5), 849–869. doi:10.1177/1461444807081230
- Ziegele, M. (2016). *Nutzerkommentare als Anschlusskommunikation: Theorie und qualitative Analyse des Diskussionswerts von Online-Nachrichten [User comments as media-stimulated communication. Theory and qualitative analysis of online news' discussion value]*. Wiesbaden: Springer.
- Ziegele, M., Breiner, T., & Quiring, O. (2015). Nutzerkommentare oder Nachrichteninhalte – Was stimuliert Anschlusskommunikation auf Nachrichtenportalen? [User comments or news content. What encourages users to comment on news websites?]. In O. Hahn, R. Hohlfeld, & T. Knieper (Eds.), *Digitale Öffentlichkeit(en)* (S. 249–266). Konstanz: UVK.
- Ziegele, M., & Jost, P. B. (2016). Not funny? The effects of factual versus sarcastic journalistic responses to uncivil user comments. *Communication Research*. Advance online publication. doi:10.1177/0093650216671854

## Appendix

Table 3. Intercoder reliability for each category

Category	Percent agreement	$r_{\alpha}$
Media brand	100%	1
Topic of article/post	String	String
Degree of objectivity in the Facebook post	100%	1
Type of post tendency	100%	1
Degree of objectivity in the prominent article elements	100%	1
Type of tendency in the prominent article elements	100%	1
Degree of objectivity in the article	100%	1
Type of article tendency	100%	1
Number of user comments	100%	1
Topic focus of discussion	100%	1
Argumentation	100%	1
Reference	75%	0,77
Inter-ideological reference	75%	0,77
Question	100%	1
Maximum level of incivility	100%	1
Overall level of incivility	75%	0,70
Diversity	75%	0,77

Note.  $N = 4$  contributions incl. user discussions.

**Table 4.** Number of user comments: arithmetic means, means of logarithmic values, detransformed geometric means and CIs

	Arithmetic mean	Mean of logarithmic values	Geometric mean	95% CI lower bound upper bound	
<i>Media brand</i>					
taz.de (n = 30)	86 <sup>a</sup>	4.05 <sup>a</sup>	58	40	83
SZ.de (n = 30)	312 <sup>b</sup>	5.50 <sup>b</sup>	244	183	325
FOCUS Online (n = 30)	275 <sup>b</sup>	5.19 <sup>b,c</sup>	179	125	256
FAZ.net (n = 30)	187 <sup>a,b</sup>	4.80 <sup>c</sup>	121	86	171
<i>Topic</i>					
Brexit (n = 25–26)	173	4.76	117	77	177
Migration (n = 27–29)	274	5.03	153	95	248
Other (n = 65)	206	4.87	130	102	165
<i>Degree of objectivity in the article</i>					
Balanced/neutral (n = 47–48)	196	4.87	130	98	173
Implicit tendency (n = 37–38)	262	4.97	144	98	211
Explicit tendency (n = 33–34)	189	4.80	122	85	175
<i>Degree of objectivity in the prominent article elements</i>					
Balanced/neutral (n = 57–58)	250	5.05	155	117	206
Implicit tendency (n = 21–22)	227	4.83	125	76	204
Explicit tendency (n = 39–40)	158	4.68	108	79	146
<i>Degree of objectivity in the Facebook post</i>					
Balanced/neutral (n = 51–52)	231	4.97	144	107	194
Implicit tendency (n = 28–29)	271	4.64	157	103	241
Explicit tendency (n = 38–39)	153	5.06	103	76	140

Note. N = 120. Bonferroni-adjusted post-hoc analysis, means marked with different code letters differ significantly ( $p < .05$ ); Levene's test for equality of variances shows non-significant results ( $p > .05$ ). Natural log-transformation.

**Table 5.** Group means and standard deviations for overall quality score and each quality criterion

	Quality score		Argumentation		Average level of incivility		Maximum level of incivility		Topic focus		Diversity		Reference		Inter-ideological reference		Question	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
<i>Media brand</i>																		
taz.de (n = 30)	.00 <sup>a</sup>	.52	1.63 <sup>a</sup>	.69	.74 <sup>a</sup>	.9	1.85 <sup>a,b</sup>	1.06	3.22 <sup>a</sup>	1.01	1.07 <sup>a,b</sup>	.83	2.67 <sup>a</sup>	.83	2.30 <sup>ab</sup>	1.56	.85	.46
SZ.de (n = 30)	.35 <sup>b</sup>	.49	1.93 <sup>a</sup>	.64	.90 <sup>a</sup>	.88	1.80 <sup>a</sup>	.76	3.00 <sup>a</sup>	.98	.70 <sup>a</sup>	.65	3.5 <sup>b</sup>	.73	3.07 <sup>a</sup>	1.31	1.13	.43
FOCUS Online (n = 30)	-.50 <sup>c</sup>	.52	1.03 <sup>b</sup>	.49	1.70 <sup>b</sup>	.60	2.33 <sup>b</sup>	.48	2.20 <sup>b</sup>	1.16	1.40 <sup>b</sup>	.67	2.83 <sup>a</sup>	.83	1.93 <sup>b</sup>	1.26	.83	.38
FAZ.net (n = 30)	.15 <sup>a,b</sup>	.48	1.70 <sup>a</sup>	.60	.83 <sup>a</sup>	.75	1.73 <sup>a</sup>	.69	3.20 <sup>a</sup>	.96	.90 <sup>a</sup>	.80	2.97 <sup>a,b</sup>	.81	2.7 <sup>a,b</sup>	1.49	.93	.25
<i>Topic</i>																		
Brexit (n = 25–26)	.14	.57	1.76	.66	.80 <sup>a</sup>	.82	1.60	.71 <sup>a</sup>	2.68	1.03	.92	.64	2.92	.76	2.72	1.24	1.00	.29
Migration (n = 27–29)	-.05	.61	1.44	.64	1.30 <sup>b</sup>	.87	2.15	.66 <sup>b</sup>	2.89	1.15	.96	.85	3.15	.91	2.89	1.48	.89	.51
Other (n = 65)	-.03	.59	1.55	.71	1.05 <sup>ab</sup>	.87	1.97	.85 <sup>a,b</sup>	2.98	1.11	1.08	.80	2.97	.87	2.26	1.49	.94	.39
<i>Degree of objectivity in the article</i>																		
Balanced/neutral (n = 47–48)	.13	.62	1.57	.71	.87 <sup>a</sup>	.85	1.94	.79	3.11	1.05	.89	.81	3.21	.83	2.68	1.51	.98	.39
Implicit tendency (n = 37–38)	-.09	.58	1.49	.69	1.27 <sup>b</sup>	.80	2.00	.71	2.76	1.16	.97	.76	2.86	.82	2.41	1.32	.95	.33
Explicit tendency (n = 33–34)	-.08	.54	1.67	.65	1.06 <sup>ab</sup>	.93	1.85	.91	2.76	1.09	1.24	.71	2.85	.87	2.36	1.54	.88	.48
<i>Degree of objectivity in the prominent article elements</i>																		
Balanced/neutral (n = 57–58)	.12	.57	1.60	.68	.96	.91	1.93	.75	3.07	1.03	.86	.81	3.18	.85	2.68	1.44	1.00	.38
Implicit tendency (n = 21–22)	-.15	.54	1.38	.59	1.29	.72	2.05	.67	2.52	1.17	1.05	.67	2.86	.73	2.57	1.36	.95	.38

	Quality score		Argumentation		Average level of incivility		Maximum level of incivility		Topic focus		Diversity		Reference		Inter-ideological reference		Question	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Explicit tendency ( <i>n</i> = 39–40)	-.10	.62	1.64	.74	1.05	.89	1.87	.92	2.85	1.14	1.23	.74	2.82	.88	2.21	1.51	.85	.43
<i>Degree of objectivity in the Facebook post</i>																		
Balanced/neutral ( <i>n</i> = 51–52)	.13	.59	1.57	.70	1.00	.92	1.9	.78	3.16	.99	.86	.85	3.18	.87	2.76	1.46	.98	.37
Implicit tendency ( <i>n</i> = 28–29)	-.07	.54	1.57	.63	1.21	.74	2.04	.69	2.57	1.14	1.04	.64	3.04	.74	2.50	1.32	.96	.33
Explicit tendency ( <i>n</i> = 38–39)	-.12	.6	1.58	.72	1.00	.90	1.89	.89	2.79	1.17	1.21	.74	2.74	.86	2.16	1.5	.87	.47

Note. *N* = 117. Quality score based on z-transformed data, argumentation measured on a scale ranging from 0 (no arguments given) to 3 (arguments given frequently), overall and maximum level of incivility measured on a scale ranging from 0 (not at all uncivil) to 3 (very uncivil), topic focus measured on a scale ranging from 0 (completely off-topic) to 4 (completely on-topic), diversity measured on a scale ranging from 0 (balanced/diverse) to 2 (strongly tendentious), reference measured on a scale ranging from 0 (no references) to 4 (references contained frequently), inter-ideological reference measured on a scale ranging from 0 (completely intra-ideological) to 4 (completely inter-ideological), question measured on scale ranging from 0 (no questions asked) to 3 (questions asked frequently); Bonferroni-adjusted post-hoc analysis, means marked with different code letters differ significantly ( $p < .05$ ), cursive letters indicate a marginally significant difference ( $p < .10$ ); Levene's test for equality of variances shows non-significant results ( $p > .05$ ).