

Reciprocity and the News: The Role of Personal and Social Media Reciprocity in News Creation and Consumption

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As journalists and audiences increasingly interact via social media spaces online, scholars have begun to explore the varying forms of information and relational exchanges between them. Building on an emerging thread of research that examines the potential role of reciprocity in such encounters, this study examines how reciprocity, as a key ingredient of online communities, might stimulate audiences' consumption and creation of content, including news content. A national survey finds that, while personal beliefs in reciprocity (*perceptions*) may predict news consumption, it is reciprocity in *practice* on social media that is associated with not only news consumption but content creation, both for news and in general. This first-of-its-kind empirical study indicates that scholars may be correct in theorizing a role for reciprocity in the news interaction process, much as in social media and society more broadly.

Keywords: audience, reciprocity, participatory journalism, engagement, content creation, news, social media

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Date submitted: 2014–12–19

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Introduction

As journalism moves toward greater inclusion of and interaction with publics across digital media platforms, audience members may assume dual and interrelated roles as news *consumers* and news *creators* (Östman, 2012). In the developed world especially, such digital forms of news consumption and creation lately have been marked by volume and variety, as individuals draw upon a growing array of devices, apps, sites, and social media services to both access information and amplify their own capacity as creators and distributors of content. As consumers, U.S. adults get their news from an average of five devices in a given week (Media Insight Project, 2014), with more than 85% using mobile devices to access news. And, for the first time, half of all U.S. news consumers cite the Internet as one of their main news sources (Caumont, 2013). Many of them are turning to social network sites (SNS) such as Facebook and Twitter (Mitchell & Guskin, 2013), which facilitate easy access to news and information as well as fast and simple opportunities to actively engage in the news process: commenting, sharing, posting, and so on.

Indeed, as creators, individuals have become integral to a media environment that pulses both with user-generated content (UGC)—tweets, posts, videos, and so on—and with content that is made “spreadable” because of user-led sharing online (Jenkins, Ford, & Green, 2013). As much as eight years’ worth of video is uploaded by YouTube users every day, with individuals providing a diversity of content that often includes elements of news (Bachmann, Correa & Gil de Zúñiga, 2012; Fader & Winer, 2012). Millions of Twitter users—some of them activists, bloggers, and ordinary citizens—contribute to what Lotan and colleagues (2011) call a new form of “online press” (p. 1400), where individuals break and contextualize news. While much of this audience participation in news may be of the incidental or accidental variety—very little UGC resembles anything like professional journalism—these developments have raised questions about the boundaries of journalism (Carlson & Lewis, 2015; Lewis, 2012) and the role of audiences in shaping the nature of news and public information (Domingo, 2011; Fuchs, 2014; Hermida, 2014). Although some news organizations have welcomed audience participation into the newsmaking process (Nel & Westlund, 2013; Williams, Wardle, & Wahl-Jorgensen, 2011), many have remained cautious about ceding too much control (Harrison, 2010; Robinson, 2011), limiting participatory roles of audiences to those of “active recipients” who serve as sources for breaking news or commentators on news already published—but who play little, if any, meaningful role in news construction (Hermida, 2011).

Nevertheless, while news organizations are wrestling with how to open more direct and sustained pathways for audience engagement (Hermida, 2014), some media scholars have suggested that they consider the potential for greater reciprocity between journalists and audiences (Borger, van Hoof, & Sanders, 2014; Lewis, 2015; Lewis, Holton, & Coddington, 2014). Reciprocity is defined as an exchange between individuals for mutual benefit or for the benefit of a community, and it is considered by sociologists, social psychologists, and network researchers to be foundational to trust, social capital, and connectedness (Molm, 2010; Molm, Schaefer, & Collett, 2007). Engagement today between journalists, news organizations, and their audiences happens most frequently in these digital spaces, presenting opportunities for multiple levels and types of reciprocity that could create networks of news exchange wherein the creation and consumption of content becomes communally beneficial, as Lewis and colleagues (2014) have suggested. Such reciprocity might occur, for instance, as audiences and journalists come to

feel a commitment to repay one another for favors (such as helpful tips or information) provided in the past, thereby enriching the trust and connectedness that sustains the network.

This study explores that possibility by considering the extent to which reciprocity may be associated with how audiences consume and create content, including news content. Drawing upon a structural theory of reciprocity, we examine reciprocity as a personal belief as well as a set of behaviors—in this case, manifested in social media use. We also recognize that, whereas news consumption may be distinct from creation, creation itself may be for news or for other non-news purposes. This study, therefore, melds theoretical constructs of reciprocity with emerging news behaviors of audiences to enhance a contemporary understanding of what drives news consumption and creation.

Literature Review

News Consumption and Creation

As evidenced by the most recent State of the News Media Report distributed by the Pew Research Center, news consumption among traditional news platforms continues to shrink while consumption and creation through digital news outlets and SNS continues to show promise (Mitchell, 2014). These trends correlate with the emergence of digital-only and digital-first news publications, which both open opportunities for professional journalists and frequently rely on UGC to supplement some areas of news coverage (Ellis, 2014; Mitchell, 2014). Although the incorporation of UGC into professional news feeds is nothing new, the increased role of such content points to a tension as news organizations maintain the *distribution* of news content while struggling to find ways to actually *create* such content in full. Media scholars have noted that, despite their reluctance to open pathways to richer engagement with audiences, news organizations nonetheless have increasingly relied upon those audiences for content that fills gaps in coverage and helps to drive traffic and, therefore, revenue (Deuze, 2008; Napoli, 2011). Thus, it is important for media scholars and, perhaps more critically, news organizations and professional journalists to consider what social-psychological factors may drive audiences to create content, including content that may be used in the news process.

UGC describes a breadth of content creation by individuals, ranging from photos and videos to tweets and Facebook updates (Jönsson & Örnebring, 2011; Singer, 2014; Thornham & McFarlane, 2014). In broad terms, UGC has been described as content created outside of professional routines or regulations for publication, with an element of creative effort (Wunsch-Vincent & Vickery, 2007). Through networked channels such as SNS, where individual users can select and share news and information on a wide scale, UGC has become part of a news flow where “user experiences, interests, and opinions” are included alongside news (Hermida, 2014). While more traditional forms of UGC within the news process (e.g., posting content to comment boards or providing guest blogs) may still be relevant, especially at the local level (Canter, 2012), UGC has taken on a more social role, helping to connect individuals and events through the rapid sharing of content on platforms such as Twitter and Facebook. The social exchange of information has become a driving force in the news process, inviting media organizations, journalists, and audiences to collaborate in the creation of news (Papacharissi & de Fatima Oliveira, 2012). Newsrooms have leveraged this to some degree, trading boots-on-the-ground reporting for Twitter feed monitoring

and aggregation in some cases and adding layers of context and connectivity in others (Bruno, 2011; Hermida, 2014).

As Jönsson and Örnebring (2011) observed, different users create different types of content that may range on a spectrum of relative involvement, from low (e.g., providing a comment, liking a post) to high (e.g., supplying video footage, penning a news story). Those on the latter end of the spectrum are referred to as participatory journalists, citizen journalists, parajournalists, and a variety of other titles that collectively describe the work of nonprofessional journalists for inclusion in the news cycle. Beyond simply commenting on the news, these news creators provide content that extends news conversations with eyewitness accounts and visuals, breaking information, contextualization of events, and dissemination of news-oriented content to other individuals within their shared networks on SNS (Hermida, 2014; Vis, Faulkner, Parry, Manyukhina, & Evans, 2014). This has contributed to what Papacharissi and de Fatima Oliveira (2012, p. 279) describe as an "affective news stream" wherein the news is no longer constructed on the traditional tenets of journalism alone, but also according to personal experiences, opinions, and emotions that contribute to an "ambient news environment" (see also Papacharissi, 2014). Still, despite the growing prominence of news creation as breaking news with inclusions of personal perceptions and perspectives, much of today's UGC remains *reactive* in nature, meaning it is exchanged in response to news that is already circulating (Bergström, 2011; Hermida, 2011).

Media scholars have given much attention to the growing participatory culture of news, analyzing the changing expectations and roles of news consumers and professional and nonprofessional news creators (Hermida, 2012, 2014; Lewis, 2012; Singer, 2014). These studies have found that news consumers increasingly want news coupled with opinion and personalization as well as opportunities to take part in the news process, though they typically do not consider themselves journalists. Rather, when it comes to content creation, they are driven by self-expression, a desire to connect with other individuals and digital networks, and an ability to influence politics (Lotan et al., 2011; Robinson, 2011). Less is known about what drives individuals to create news content, though some studies have indicated that a desire to break and share news/information and to serve as alternative media voices may be motivators (Ekdale, Namkoong, Fung, & Perlmutter, 2010; Hermida, 2014; Kaye, 2007). Given that the consumption of news through digital channels and across SNS is higher than ever, and that those spaces provide unique opportunities for a reciprocal exchange of content that can promote individual and network activity, we argue that reciprocity should be examined as a possible motivator for news consumption and creation.

News Engagement and Reciprocity

Even as news organizations have struggled to negotiate their interactions with audiences on social media platforms, the number of Americans turning to SNS for news doubled between 2010 and 2012 (Caumont, 2013). More than half of Americans using Twitter now use the microblogging site to exchange news by sharing breaking events and passing along information to their individual networks (Mitchell, 2014; Mitchell & Guskin, 2013). As more news organizations loosen their grip on the flow of content and more readily include audiences in the exchange of news, they find themselves lagging behind other for-profit sectors that have been fashioning higher levels of engagement with consumers for some

time. Many corporations and businesses have worked to develop online relationships with their consumers, making the reciprocal exchange of content, ideas, emotions, and so on a cornerstone of their marketing strategies (Fader & Winer, 2012; McChesney, 2013; Susarla, Oh, & Tan, 2012).

Reciprocity can be broadly defined as an exchange between individuals or networks for mutual benefit that serves as a catalyst for relationship and community building (Gouldner, 1960; Molm, 2010; Putnam, 2000). Reciprocity can be manifest both in *perception* (i.e., a personal belief in the role of reciprocity in one's life) and in *practice* (i.e., a set of behaviors, or intended behaviors, oriented to particular social situations and opportunities for interaction) (Perugini, Gallucci, Presaghi, & Ercolani, 2003). Positive reciprocity—or exchanges performed with good intentions or goals in mind—is a bedrock of trust, social capital, connectivity, and relationship maintenance, all of which guide and strengthen off-line and online communities (Ammann, 2011; Gaudeul & Giannetti, 2013; Molm, 2010). Such reciprocity, especially in digital media environments, encourages community dialogue, engagement, and more enduring interactions (Lauterbach, Truong, Shah, & Adamic, 2009; Lussier, Reader, & Chawla, 2010). Media scholars have contended that journalists and news organizations should take more active roles in engagement, whether through exchanges on comment boards or through SNS, both to extend their reach with audiences and to better develop communities of engaged news audiences (Canter, 2012; Meyer & Carey, 2014; Robinson, 2011). These spaces offer unique opportunities for the communal sharing and building of knowledge, which can heighten levels of trust and encourage others to be more proactive (Parks, 2011). In their survey of more than 100 newspaper editors and more than 1,000 Internet users, Meyer and Carey (2014) found that audiences sought novel ways to connect with the news, including enriched connectivity with journalists and news organizations.

Lewis and colleagues (2014) expanded on this need for broader multilateral connection, arguing that reciprocity may be a necessary evolution for the survival of professional journalism. Drawing on theoretical conceptualizations of reciprocity by Molm (2010; see also Perugini et al., 2003), Lewis et al. (2014) conceptualized "reciprocal journalism" at three levels: *direct* (i.e., exchanges between journalists and audiences in a one-to-one fashion), *indirect* (i.e., exchanges that are witnessed by others and intended for community benefit, in more of a one-to-many fashion); and *sustained* (i.e., exchanges that occur continuously over time). Noting that previous studies have shown these levels of reciprocity to be critical to the sustainability of networks in digital and social media spaces (Ammann, 2011; Bakshy, Rosenn, Marlow, & Adamic, 2012; Gaudeul & Giannetti, 2013), Lewis and colleagues contended that so, too, might reciprocity on the whole be important to similar networks built around news. In a separate empirical study, Borger et al. (2014) found a crucial role for reciprocity in explaining the difference between successful and failed participatory journalism projects; its practice bridged the gap between users' expectations and experiences that proved vital in determining whether they would continue participating. Their study provides an important hint at the significance of understanding the role of reciprocity in the news.

Just as a wealth of scholarship outside of media research has examined how perceptions and practices of reciprocity can help to predict the role of actions and roles of individuals within digital and social media networks, so, too, can a similar approach be put to news consumers and creators, who are increasingly working within those networks. Indeed, as a concept of social exchange, reciprocity may be

particularly suited to “help us understand a mediascape increasingly dominated by social exchange—where the sharing, receiving, and recirculating of information ‘gifts’ is central to the very social and technical frameworks on which these media function” (Lewis, 2015, p. 1). This study, therefore, is concerned with self-reported personal beliefs in reciprocity (in general) and self-reported personal behaviors of reciprocity (on social media in particular). Recognizing that little is known about what drives today’s news audiences to consume and create news content, and with the purpose of exploring the potential role of reciprocity in stimulating such consumption and creation, the following research questions are posed:

RQ1a. Are personal beliefs in reciprocity associated with news consumption?

RQ1b. Is social media reciprocity associated with news consumption?

RQ2a. Are personal beliefs in reciprocity associated with content creation?

RQ2b. Is social media reciprocity associated with content creation?

RQ3a. Are personal beliefs in reciprocity associated with news creation?

RQ3b. Is social media reciprocity associated with news creation?

Methods

Survey

The data for this study were drawn from a U.S. national study conducted by a research unit at a southwestern university. The survey was administered through the online survey software Qualtrics. Respondents for the initial survey were selected from among those who registered to participate in an online panel administered by the media-polling group AS Nielsen, which uses stratified quota sampling to recruit respondents from more than 200,000 people. To overcome some of the limitations of sampling from Internet users and ensure national representativeness, a quota based on gender, age, education, and income was used to enable the sample to provide as close of a match as possible to the distribution of these demographic variables as reported by the U.S. Census (see Iyengar & Hahn, 2009; Bode, Vraga, Borah, & Shah, 2013).

The survey was conducted in December 2013 and January 2014 from an initial sample of 5,000 individuals. In total, 2,060 participants responded, and 247 cases were deleted for incomplete or invalid data ($N = 1,813$), resulting in a 34.6% response rate using the American Association of Public Opinion Research’s (see Skalland, 2011) RR3 response rate calculator. This response rate falls within the acceptable range for Web-based surveys (Shih & Fan, 2008). Compared with the U.S. Census, our sample had slightly younger, more educated respondents and had fewer Hispanics, though the sample compared closely to other surveys employing random collection methods (Pew Research Center for the People and

the Press, 2013) as well as the national population as whole (see the Appendix for detailed demographic comparisons).

Control Variables

Several demographic variables that have been shown in previous studies to be associated with participation in the news process through consumption and creation were controlled for in an effort to limit potential confounds (Bachmann & Gil de Zúñiga, 2013). These included gender (50% women) and race, which was recoded into White and non-White categories (74.2% White). Education was reported at eight levels, ranging from 1, or less than high school, to 8, or a doctoral degree ($M = 3.64$, $SD = 1.45$, mode = some college). Income was also reported at eight levels, ranging from less than \$10,000 at the lowest to \$200,000 or more at the highest ($M = 4.45$, $SD = 1.45$, mode = \$50,000 to \$99,999).

In addition, political efficacy and media trust were controlled for to further isolate the effects of variables of interest, because both have been shown to have a significant influence on media perception and participation. Political efficacy has been found to be closely related with participatory uses of online media (Kushin & Yamamoto, 2010; Wojcieszak & Smith, 2014). This study followed that of Holton, Coddington, and Gil de Zúñiga (2013) in measuring political efficacy through agreement or disagreement with three statements measured on a 10-point Likert-type scale: (1) People like me can influence government; (2) I consider myself qualified to participate in politics; (3) I have a good understanding of the important political issues facing our country. Responses to each question were added into a single index ($\alpha = .79$, $M = 15.21$, $SD = 6.84$).

Media trust also has been studied as an important variable in both news consumption and participation in news, especially in online environments (Johnson & Kaye, 2009; Peters & Broersma, 2013). Because this study addresses news consumption and creation in a variety of contexts, we used an index of trust in media across several of those contexts, with agreement or disagreement with four statements measured through 10-point Likert-type scales. Users were asked whether they generally trust news from mainstream news media, alternative news media, social media sites, and news aggregators. Those four items were combined into a single index ($\alpha = .72$, $M = 17.39$, $SD = 6.91$).

Independent Variables

Personal reciprocity. To examine personal beliefs in reciprocity, this study draws on the work on Perugini and colleagues (2003), who developed reliable and cross-culturally meaningful survey measures for assessing beliefs in reciprocity (see Appendix A in their article). Using seven of the nine items they developed (excluding two that we deemed irrelevant to this study's context), we developed a single index to represent personal beliefs in reciprocity. It was measured through agreement or disagreement with seven statements, on a 10-point Likert-type scale (1 = *strongly disagree*, 10 = *strongly agree*): (1) To help somebody is the best policy to be certain that s/he will help you in the future; (2) I do not behave badly with others so as to avoid them behaving badly with me; (3) I fear the reactions of a person I have previously treated badly; (4) If I work hard, I expect it will be repaid; (5) When I pay someone compliments, I expect that s/he in turn will reciprocate; (6) I avoid being impolite because I do not want

others being impolite with me; (7) If I help people, I expect that they will thank me nicely. The items were combined into a single index ($\alpha = .83$, $M = 36.71$, $SD = 13.12$), with higher scores indicating higher levels of reciprocity beliefs.

Social media reciprocity. To examine reciprocity as it occurs in the context social media platforms, this study again draws on Perugini et al. (2003), adapting all but one of their questions about "positive reciprocity" to refer specifically to social media platforms. A social media reciprocity index was developed with eight items measuring agreement or disagreement with statements on a 10-point Likert-type scale (1 = *strongly disagree*, 10 = *strongly agree*), each of which asked, regarding "your interactions with the followers you have on social media": (1) I am ready to undergo personal costs to help somebody who helped me before; (2) If someone does a favor for me, I am ready to return it; (3) If someone is helpful with me in my work, I am pleased to help him/her; (4) I'm ready to go out of my way to return someone's previous help; (5) When someone does me a favor, I feel committed to repay him/her; (6) If someone asks me politely for information, I'm really happy to help him/her; (7) If someone does me a favor in sharing information, I feel I should give him/her back something in return; (8) I go out of my way to help somebody who has been kind to me before. The items were combined into a single index ($\alpha = .98$, $M = 42.91$, $SD = 23.88$). To confirm the validity and independence of the two indexes, the 15 items from both indexes were entered into an exploratory factor analysis with Varimax rotation. Two factors were extracted, with the items loading on them corresponding precisely with the two indexes: Eight items in social media reciprocity (eigenvalue = 7.39, 49.25% variance explained), and seven items in personal reciprocity (eigenvalue = 2.98, 19.89% variance explained). The two indexes had a moderately positive correlation ($r = .298$, $p < .001$).

Dependent Variables

News consumption. This study used a measure of news consumption that aimed to capture the broad range of contexts and sources from which people consume news in the contemporary environment. It thus expanded on the basic items of news consumption used by the Pew Research Center (2012) to include items measuring news consumption on social media sites, mobile platforms and apps, online news aggregators, and comedy news shows such as *The Daily Show*. Using a 10-point Likert-type scale (1 = *never*, 10 = *all the time*), the study asked 13 questions about how often respondents get news from the following sources: (1) network TV news; (2) local TV news; (3) cable TV news; (4) national newspapers; (5) local newspapers; (6) radio news; (7) fake news programs, such as *The Daily Show* or *The Colbert Report*; (8) online news sites, such as Gawker, Politico, or BuzzFeed; (9) online news aggregators, such as Google News; (10) Facebook; (11) Twitter; (12) mobile apps or browsers; (13) tablet apps or browsers. The 13 items were combined into a single index ($\alpha = .75$, $M = 49.35$, $SD = 18.96$), with higher scores indicating higher levels of news consumption.

Content creation. This measure sought to develop an index of online content creation that incorporated the broad forms such generative activity can take online. In addition to the widely measured activities of posting videos and photos online (Hargittai & Walejko, 2008), this study also included commenting, blogging, and circulating content by sharing links on social media, all of which have been characterized as creative activity online (Bruns, 2008; Schmidt, 2007). The study measured these

activities through five questions based on a 10-point Likert-type scales (1 = never, 10 = *all the time*), asking how often respondents engaged in the following activities: (1) create and upload your own videos; (2) upload your own photos; (3) share links on sites like Facebook, Twitter, or Reddit; (4) write comments on others' blogs; (5) write posts on your own blog. The five items were combined into a single index ($\alpha = .86$, $M = 13.05$, $SD = 9.94$), with higher scores indicating higher levels of content creation.

News creation.— In addition to general content creation, this study sought to create a measure of online creative activity more specifically related to news or political content. Though previous studies have included more general online content creation and news-oriented creation in the same index (e.g., Holton et al., 2013), this study aimed to treat general content creation and news creation as distinct practices. It thus measured news creation through six questions dealing specifically with creating content regarding news or public affairs, all measured on a 10-point Likert-type scale (1 = *never*, 10 = *all the time*): (1) posting or sharing photos, videos, memes, or gifs created by others that relate to current events or politics; (2) posting or sharing photos, videos, memes, or gifs created by you that relate to current events or politics; (3) posting your thoughts about current events or politics on microblogging sites such as Twitter; (4) posting comments on news sites; (5) posting comments on a political blog; (6) creating posts for your own blog about current events or public affairs. The six items were combined into a single index ($\alpha = .89$, $M = 12.19$, $SD = 10.04$), with higher scores indicating greater levels of news creation.

The study used ordinary least squares regressions to test whether personal reciprocity and social media reciprocity predicted news consumption, content creation, and news creation.

Results

The first two research questions asked whether associations exist between personal beliefs in reciprocity and news consumption (RQ1a) and between social media reciprocity and news consumption (RQ1b). Zero-order correlations (see Table 1) indicated a significant positive relationship for both (personal reciprocity $r = .271$, $p < .001$; social media reciprocity $r = .246$, $p < .001$), and that positive relationship remained in partial correlations that controlled for demographic variables, political efficacy, and media trust (personal reciprocity $r = .097$, $p < .001$; social media reciprocity $r = .096$, $p < .001$). When these relationships were tested in a regression analysis controlling for the same confounding variables (see Table 2), both personal reciprocity and social media reciprocity played significant but relatively minor roles in explaining the variance in news consumption. Personal reciprocity accounted for 0.6% of the variance in news consumption, with those who held stronger beliefs in reciprocity more likely to consume news ($\beta = .072$, $p < .01$). Similarly, those who expressed higher levels of social media reciprocity were more likely to consume news ($\beta = .067$, $p < .01$), though this variable accounted for just 0.4% of the variance in news consumption. Overall, personal beliefs in reciprocity and social media reciprocity were both positively but mildly associated with news consumption.

Table 1. Zero-order and Partial Correlations Among Key Variables.

	1	2	3	4	5
1. Personal reciprocity	—	.291***	.271***	.229***	.241***
2. Social media reciprocity	.204***	—	.246***	.426***	.294***
3. News consumption	.097***	.096***	—	.459***	.495***
4. Content creation	.080**	.298***	.300***	—	.755***
5. News creation	.077**	.153***	.321***	.682***	—

Note. Cell entries are two-tailed zero-order Pearson's correlation (top diagonal) and partial correlations (bottom diagonal) with controls for age, gender, education, income, race, political efficacy, and media trust. $N = 1,432$ for partial correlation; $N = 1439$ for zero-order correlations.

* $p < .05$. ** $p < .01$. *** $p < .001$.

The second two research questions examined whether relationships exist between content creation and personal beliefs in reciprocity (RQ2a) and social media reciprocity (RQ2b). In zero-order correlations (see Table 1), both personal beliefs in reciprocity ($r = .229$, $p < .001$) and social media reciprocity ($r = .426$, $p < .001$) were significantly positively related to content creation. Both positive relationships were also found in partial correlations controlling for confounding variables (personal reciprocity $r = .080$, $p < .01$; social media reciprocity $r = .298$, $p < .001$). However, when the relationships were tested in a regression analysis with the variance of social media reciprocity controlled for, personal reciprocity was no longer significantly related to content creation ($\beta = .019$, $p = .384$). Those who expressed higher levels of social media reciprocity were more likely to create content ($\beta = .253$, $p < .001$) in the regression analysis. Social media reciprocity played a larger explanatory role in content creation ($\Delta R^2 = 5.3\%$) than it did in news consumption. In sum, personal beliefs in reciprocity were not significantly related to content creation when social media reciprocity and all confounding variables were accounted for, though social media reciprocity was itself positively and significantly related to content creation.

**Table 2. Ordinary Least Squares Regression Models
Predicting News Consumption, Content Creation, and News Creation.**

	News consumption <i>B</i>	Content creation β	News creation β
Demographics			
Age	-.013	-.250***	-.210***
Gender (Woman = 1)	-.008	.028	-.077***
Education	.002	-.040	-.043
Income	.115***	-.026	-.066**
Race (White = 0)	.028	.014	.036
ΔR^2 (%)	4.3	11.9	7.6
Political efficacy, media trust			
Political efficacy	.217***	.109***	.253***
Media trust	.426***	.307***	.293***
ΔR^2 (%)	30.7	17.8	22.0
Personal reciprocity			
Personal reciprocity beliefs	.072**	.019	.043
ΔR^2 (%)	0.6	0.4	0.4
Social media reciprocity			
Social media reciprocity	.067**	.253***	.129***
ΔR^2 (%)	0.4	5.3	1.4
Total R^2 (%)	36.0	35.5	31.4

Note. $N = 1,502$, news consumption; $N = 1,579$, content creation; $N = 1,554$, news creation. Cell entries are final-entry ordinary least squares standardized Beta (β) coefficients.

* $p < .05$. ** $p < .01$. *** $p < .001$.

The final two research questions addressed the relationships between news creation and personal beliefs in reciprocity (RQ3a) and social media reciprocity (RQ3b). Similar to the previous relationships examined, significantly positive relationships were found in zero-order correlations (see Table 1) between the dependent variable, content creation, and both independent variables (personal reciprocity $r = .241, p < .001$; social media reciprocity $r = .294, p < .001$). The relationships between content creation and both personal beliefs in reciprocity ($r = .077, p < .01$) and social media reciprocity ($r = .153, p < .001$) remained significant and positive when controlling for confounding variables in partial correlations. In a regression analysis, personal reciprocity beliefs had no significant association with news creation ($\beta = .043, p = .059$), while higher levels of social media reciprocity predicted greater news creation ($\beta = .129, p < .001$).

To compare the strength of social media reciprocity's associations with content creation and news creation, an additional analysis with z scores was conducted. The comparison determined that the difference between the coefficient of social media reciprocity predicting content creation ($\beta = .253$) and the coefficient of social media reciprocity predicting news creation ($\beta = .129$) was statistically significant at the $p < .001$ level (score difference higher than $z = 3.3$).¹ Social media reciprocity was thus a significantly stronger positive predictor of content creation than news creation.

Additional mediation tests using PROCESS (Hayes, 2014) showed that the effect of personal reciprocity on both the creation on content online (direct effect, $\beta = .014, p = .384$; total effect, $\beta = .053, p < .01$) as well as the creation of news (direct effect, $\beta = .032, p = .100$; total effect, $\beta = .052, p < .01$) is fully mediated by the level of social media reciprocity between people and their social media followers. These results further clarify the relationship between personal attitudes toward reciprocity, reciprocal behavior on social media, and the creation of content online, both generally and in relation to news. Social media reciprocity emerges as a key mediator in explaining this connection.

¹ The formula used to calculate the difference between standardized regression coefficients is based on the Beta value, their t value, and their standard error. When z scores are calculated, differences that are $z > 1.96, z > 2.56,$ and $z > 3.3$ represent a statistically significant difference at the $p < .05, p < .01,$ and $p < .001$ levels, respectively (Gil de Zúñiga & Valenzuela, 2011).

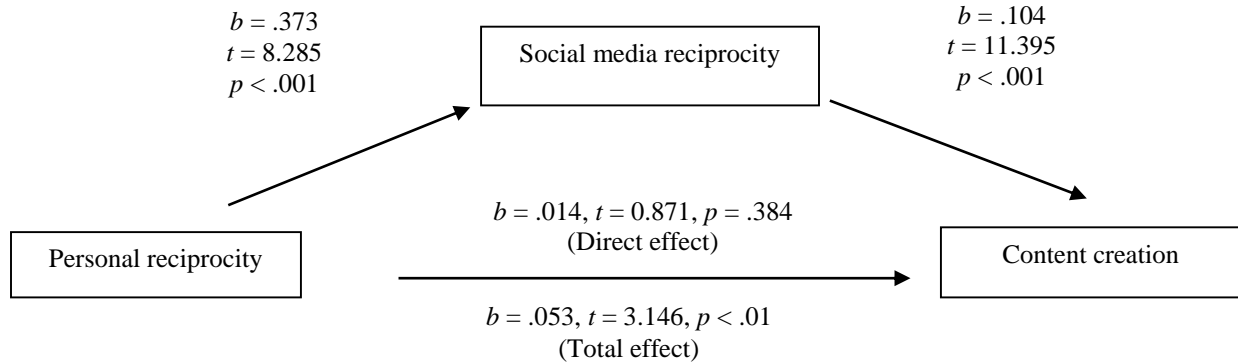


Figure 1. Personal reciprocity and content creation mediated by social media reciprocity (PROCESS).

Note. Indirect effect based on 5,000 bootstrap samples with biased corrected confidence intervals = .0389 (95% CI: .028 to .050). The control variables include age, gender, education, income, race, political efficacy, and media trust. $N = 1,579$. All coefficients are unstandardized Betas coefficients.

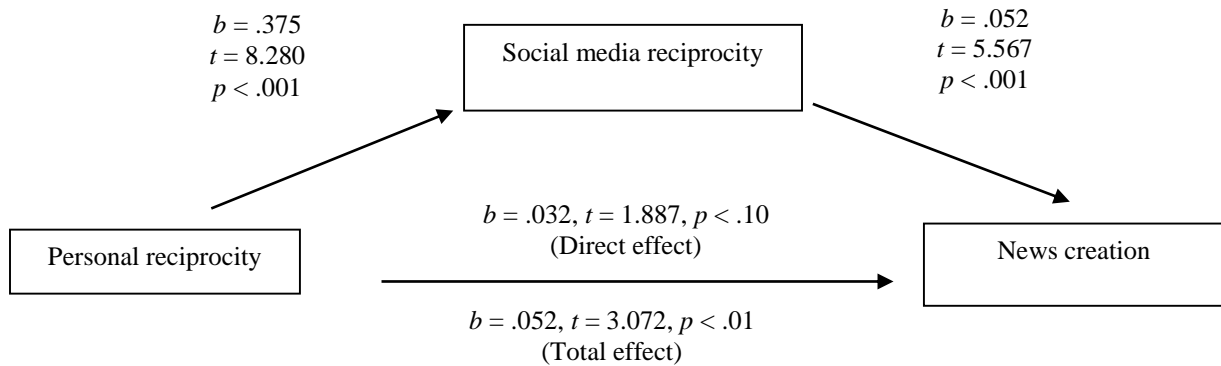


Figure 2. Personal reciprocity and news creation mediated by social media reciprocity (PROCESS.)

Note. Indirect effect based on 5,000 bootstrap samples with biased corrected confidence intervals = .020 (95% CI: .013 to .028). The control variables include age, gender, education, income, race, political efficacy, and media trust. $N = 1,554$. All coefficients are unstandardized Betas coefficients.

In sum, those who held stronger personal beliefs in reciprocity were more likely to consume more news, though they were not more (or less) likely to create more content generally or to create more news-related content specifically once the effect of social media reciprocity was controlled for. Those who exhibited more reciprocity on social media were also more likely to consume more news, and they were also significantly more likely to create more news-related content and especially to create more general content online.

Discussion and Conclusion

In the scholarly and practical pursuit of understanding news audiences and their growing influence as consumers and creators of media in general and news in particular, journalism research is in need of stronger conceptual tools for capturing, analyzing, and understanding the social psychology that may be intertwined in the news interaction process. Given that the communal exchange of information has become the cornerstone for the development and growth of digital networks, and that news consumption and media creation are happening with increased frequency through these channels, social psychology constructs that have been shown to affect the dynamics between individuals and the digital networks in which they operate should be considered in journalism research. Specifically, because of its importance to network and community dynamics, and because it has not been fully considered in the journalism and mass communication literature to this point, reciprocity is worth examining as a potentially significant factor in content consumption and creation dynamics. This article offers a first-of-its-kind window into the manner in which personal beliefs (perception) and social media behaviors (practices) of reciprocity are predictive of news creation and consumption.

The results indicate that communication scholars may indeed be correct in theorizing a role of reciprocity in the news interaction process (see Lewis, 2015; Lewis et al., 2014). Personal beliefs of reciprocity and social media reciprocity shared a mildly positive relationship with news consumption. This might indicate that perceptions of reciprocity (i.e., intentions to act reciprocally, in a positive manner) may be associated with greater interest in and connection with one's community, which in turn may be associated with news-seeking behaviors. But there also may be a certain basic level of reciprocity in the act of news consumption. In other words, individual news consumers may operate partly on the implicit expectation that if they provide journalists with sustained, regular attention, those journalists will reciprocate with quality, worthwhile content. This passive, tacit form of reciprocity could help to explain the relatively weak relationship between personal beliefs of reciprocation and news consumption. The finding also supports the assertions of communication and sociology scholars who have argued that reciprocity is less influential on passive activities, such as news consumption, and more influential in more engaged exchanges, such as the exchange of news and information and the creation of media (Lussier et al., 2010; Meyer & Carey, 2014; Susarla et al., 2012).

This finding was most evident in the strongly positive association between social media reciprocity and content creation. Though personal beliefs in reciprocity were not directly associated with content creation, those respondents who self-reported higher social media reciprocity were more likely to be content creators, all things being equal. This may indicate that those who behave reciprocally on social

media, in positive ways, have learned the “rules of the game.” They are more savvy with social media, have learned the nuances of follower–followee dynamics, and have used reciprocity as a means of harnessing social media to expand their networks of influence. They have—as Bakshy and his colleagues (2012) argued that individuals linked in social and digital networks are more likely to do over time—learned how to function appropriately within their networks. It is possible these individuals may be both more accustomed to being online and creating content in general and more savvy in doing so in a way that “succeeds” online (i.e., gathers a following and gains attention). In other words, this group of social media reciprocators may be somewhat synonymous with those who are highly engaged and active online in creating content and building an audience for that content.

This notion may extend to the creation of news content as well. The findings here indicated that those who exhibited more reciprocity on social media were likely to consume more news and were significantly more likely to create more news-related content. Here we continue to see a split between individuals’ perceptions and practices. Those who practice reciprocity are more active in content creation, both generally and in news, while those who believe in reciprocity are no more likely to be active. These relationships suggest that perceptions of reciprocity, which may guide individuals’ expectations and motivations in some digital networks, nonetheless must be mediated by individuals’ actual displays of reciprocity if they are to play a role in influencing news consumption and media creation. Although there is a stronger relationship between reciprocity on social media and general content creation, the relationship with news is an important one. It suggests that there is a certain kind of online user who engages in a reciprocal way via social media and who is willing to embed herself into the often shifting and contentious networks surrounding news and public affairs issues in doing so. Ultimately, news organizations and journalists need to understand who these individuals are—this particular group of reciprocal engagers in news networks who go beyond personal beliefs about reciprocity to enact them in mediated social environments—and how their practices are connected with the consumption, creation, and exchange of news.

Future research is needed to reveal the nature of such audiences and the precise form of reciprocity in which they engage, vis-à-vis journalists and others on SNS. For instance, if reciprocity were associated with community building, then it would be useful to investigate whether audience members have particular experience in managing communities, such as blogs and other digital platforms for interaction. Moreover, if reciprocity were associated with social media practice and not merely personal perception, as we have suggested here, then it would be helpful to better understand the technical skill level of respondents: How savvy are they online? Thus, there are limits to what a single study like this can accomplish in conceptualizing reciprocity. As scholars have pointed out, there are a number of individual- and network-based nuances to reciprocity that make it challenging to assess such a multidimensional concept. Yet the work of several of these scholars has helped advance measures of reciprocity in social networks, both online and off-line (Molm, 2010; Perugini et al., 2003). As Lewis and colleagues (2014) argued, journalism research may draw upon this previous research to develop measures that reflect both the context of news, media, and network dynamics as well as various types of reciprocity, such as that expressed directly (one-to-one), indirectly (one-to-many), or via sustained interactions among social actors over time.

As yet, there remains much to discover regarding the role that reciprocity may play in social media and society as well as the particular context of news and audiences, especially as journalism becomes interconnected with social media spaces that are known for dialogical forms of interaction (Lewis, 2015). As news organizations look to capitalize on opportunities for engagement with SNS audiences, it may well be that nurturing forms of reciprocity—seeking and sharing in a give-and-take fashion of favor and goodwill—could be crucial to engendering greater trust, community, and connectedness. Just as there has been a resurgence in brand research, specifically looking at how companies can develop networks of “brand ambassadors” among their users/fans on SNS (Coddington & Holton, 2014; Holton & Coddington, 2012), so, too, should there be a focus on how communities formed around news and information may be built and sustained. This research provides a first step by indicating that reciprocity, specifically as enacted through social media, may influence the consumption and, even more, the creation of media, both in general and in the specific context of news.

References

- Ammann, R. (2011). Reciprocity, social curation, and the emergence of blogging: A study in community formation. *Procedia—Social and Behavioral Sciences*, 22, 26–36. doi:10.1016/j.sbspro.2011.07.053
- Bachmann, I., Correa, T., & Gil de Zúñiga, H. (2012). Profiling online content creators: Advancing the paths to democracy. *International Journal of E-Politics*, 3(4), 1–19. doi:10.4018/jep.2012100101
- Bachmann, I., & Gil de Zúñiga, H. (2013). News platform preference as a predictor of political and civic participation. *Convergence: The International Journal of Research into New Media Technologies*, 19(4), 496–512. doi:10.1177/1354856513493699
- Bakshy, E., Rosenn, I., Marlow, C., & Adamic, L. (2012, April). *The role of social networks in information diffusion*. Paper presented at the Association of Computing Machinery World Wide Web Conference, Lyon, France. Retrieved from <http://arxiv.org/pdf/1201.4145v2.pdf>
- Bergström, A. (2011). *The scope of user-generated content: User contributions within online journalism*. New York, NY: Routledge.
- Bode, L., Vraga, E. K., Borah, P., & Shah, D. V. (2013). A new space for political behavior: Political social networking and its democratic consequences. *Journal of Computer-Mediated Communication*, 19(3), 414–429. doi:10.1111/jcc4.12048
- Borger, M., van Hoof, A., & Sanders, J. (2014). Expecting reciprocity: Towards a model of the participants' perspective on participatory journalism. *New Media and Society*. (Online First.) doi:10.1177/1461444814545842

- Bruno, N. (2011). *Tweet first, verify later? How real-time information is changing the coverage of worldwide crisis events*. Oxford, UK: Reuters Institute for the Study of Journalism. Retrieved from <https://reutersinstitute.politics.ox.ac.uk/about/news/item/article/tweet-first-verify-later-new-fell.html>
- Bruns, A. (2008). The active audience: Transforming journalism from gatekeeping to gatewatching. In C. Paterson & D. Domingo (Eds.), *Making online news: The ethnography of new media production* (pp. 171–197). New York, NY: Peter Lang.
- Canter, L. (2012). The misconception of online comment threads: Content and control on local newspaper websites. *Journalism Practice* 7(5), 604–619.
- Carlson, M., & Lewis, S. C. (Eds.). (2015). *Boundaries of journalism: Professionalism, practices and participation*. London, UK: Routledge.
- Caumont, A. (2013, October 16). *12 trends shaping digital news*. Washington, DC: Pew Research Center. Retrieved from <http://www.pewresearch.org/fact-tank/2013/10/16/12-trends-shaping-digital-news/>
- Coddington, M., & Holton, A. E. (2014). When the gates swing open: Examining network gatekeeping in a social media setting. *Mass Communication and Society*, 17(2), 236–257.
- Deuze, M. (2008). Corporate appropriation of participatory culture. In N. Carpentier & B. D. Cleen (Eds.), *Participation and media production: Critical reflections on content creation* (pp. 27–40). Newcastle, UK: Cambridge Scholars.
- Domingo, D. (2011). Managing audience participation: Practices, workflows, and strategies. In J. B. Singer, A. Hermida, D. Domingo, A. Heinonen, S. Paulussen, T. Quandt, Z. Reich, & M. Vujnovic (Eds.), *Participatory journalism: Guarding open gates at online newspapers* (pp. 76–95). Malden, MA: Wiley-Blackwell.
- Ekdale, B., Namkoong, K., Fung, T. K. F., & Perlmutter, D. D. (2010). Why blog? (then and now): Exploring the motivations for blogging by popular American bloggers. *New Media and Society*, 12, 217–234.
- Ellis, J. (2014, March 26). *New technology, new money, new newsrooms, old questions: The state of the news media in 2014*. Cambridge, MA: Nieman Journalism Lab. Retrieved from <http://www.niemanlab.org/2014/03/new-technology-new-money-new-newsrooms-old-questions-the-state-of-the-news-media-in-2014/>
- Fader, P. S., & Winer, R. S. (2012). Introduction to the special issue on the emergence and impact of user-generated content. *Marketing Science*, 31(3), 369–371.

- Fuchs, C. (2014). *Social media: A critical introduction*. Los Angeles, CA: SAGE Publications.
- Gaudeul, A., & Giannetti, C. (2013). The role of reciprocation in social network formation, with an application to LiveJournal. *Social Networks, 35*, 317–330.
- Gil de Zúñiga, H., & Valenzuela, S. (2011). The mediating path to a stronger citizenship: Online and offline networks, weak ties, and civic engagement. *Communication Research, 38*, 397–421.
- Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*, 161–178.
- Hargittai, E., & Walejko, G. (2008). The participation divide: Content creation and sharing in the digital age. *Information, Communication and Society, 11*, 239–256.
- Harrison, J. (2010). User-generated content and gatekeeping at the BBC hub. *Journalism Studies, 11*, 243–256.
- Hayes, A. F. (2014). *PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling*. Manuscript submitted for publication.
- Hermida, A. (2011). Fluid spaces, fluid journalism: Lessons in participatory journalism. In J. B. Singer, D. Domingo, A. Heinonen, A. Hermida, S. Paulussen, T. Quandt, Z. Reich, & M. Vujnovic (Eds.), *Participatory journalism: Guarding the open gates at online newspapers* (pp. 177–191). Malden, MA: Wiley-Blackwell.
- Hermida, A. (2012). Tweets and truth: Journalism as a discipline of collaborative verification. *Journalism Practice, 6*, 659–668.
- Hermida, A. (2014). Twitter as an ambient news network. In K. Weller, A. Bruns, J. Burgess, M. Mahrt, & C. Puschmann (Eds.), *Twitter and society* (pp. 359–372). New York, NY: Peter Lang.
- Holton, A. E., & Coddington, M. (2012). Recasting social media users as brand ambassadors: Opening the doors to the first "Social Suite." *Case Studies in Strategic Communication, 1*(1), 3–23.
- Holton, A. E., Coddington, M., & Gil de Zúñiga, H. (2013). Whose news? Whose values? Citizen journalism and journalistic values through the lens of content creators and consumers. *Journalism Practice, 7*, 720–737.
- Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. *Journal of Communication, 59*, 19–39.
- Jenkins, H., Ford, S., & Green, J. (2013). *Spreadable media: Creating value and meaning in a networked culture*. New York, NY: New York University Press.

- Johnson, T. J., & Kaye, B. K. (2009). In blog we trust? Deciphering credibility of components of the Internet among politically interested Internet users. *Computers in Human Behavior, 25*, 175–182.
- Jönsson, A. M., & Örnebring, H. (2011). User-generated content and the news: Empowerment of citizens of interactive illusion? *Journalism Practice, 5*, 127–144.
- Kaye, B. K. (2007). Blog use motivations: An exploratory study. In M. Tremayne (Ed.), *Blogging, citizenship, and the future of media* (pp. 127–148). New York, NY: Routledge.
- Kushin, M. J., & Yamamoto, M. (2010). Did social media really matter? College students' use of online media and political decision making in the 2008 election. *Mass Communication and Society, 13*, 608–630.
- Lauterbach, D., Truong, H., Shah, T., & Adamic, L. (2009, August). *Surfing a web of trust: Reputation and reciprocity on CouchSurfing.com*. Paper presented at the International Conference on Computational Science and Engineering, Vancouver, Canada.
- Lewis, S. C. (2012). The tension between professional control and open participation: Journalism and its boundaries. *Information, Communication and Society, 15*(6), 836–866.
doi:10.1080/1369118X.2012.674150
- Lewis, S. C. (2015). Reciprocity as a key concept for social media and society. *Social Media + Society, 1*(1). doi:10.1177/2056305115580339
- Lewis, S. C., Holton, A. E., & Coddington, M. (2014). Reciprocal journalism: A concept of mutual exchange between journalists and audiences. *Journalism Practice, 8*, 229–241.
doi:10.1080/17512786.2013.859840
- Lotan, G., Graeff, E., Ananny, M., Gaffney, D., Pearce, I., & boyd, d. (2011). The Arab Spring: The revolutions were tweeted: Information flows during the 2011 Tunisian and Egyptian revolutions. *International Journal of Communication, 5*, 1375–1405.
- Lussier, J. T., Reader, T., & Chawla, N. V. (2010). User generated content consumption and social networking in knowledge-sharing OSNs. In S.-K. Chai, J. Salerno, & P. L. Mabry (Eds.), *Advances in social computing* (pp. 228–237). Berlin, Germany: Springer.
- McChesney, R. W. (2013). *Digital disconnect: How capitalism is turning the Internet against democracy*. New York, NY: New Press.
- Media Insight Project. (2014). The personal news cycle. Arlington, VA: American Press Institute. Retrieved from <http://www.mediainsight.org/Pages/the-personal-news-cycle.aspx>

- Meyer, H. K., & Carey, C. (2014). In moderation: Examining how journalists' attitudes toward online comments affect participation and the creation of community. *Journalism Practice, 8*(2), 213–228.
- Mitchell, A. (2014, March 26). *State of the news media 2014: Overview*. Washington, DC: Pew Research Center. Retrieved from <http://www.journalism.org/2014/03/26/state-of-the-news-media-2014-overview/>
- Mitchell, A., & Guskin, E. (2013). *Twitter news consumers: Young, mobile, and educated*. Washington, DC: Pew Research Center. Retrieved from <http://www.journalism.org/2013/11/04/twitter-news-consumers-young-mobile-and-educated/>
- Molm, L. (2010). The structure of reciprocity. *Social Psychology Quarterly, 73*(2), 119–131.
- Molm, L. D., Schaefer, D. R., & Collett, J. L. (2007). The value of reciprocity. *Social Psychology Quarterly, 70*(2), 199–217.
- Napoli, P. M. (2011). *Audience evolution: New technologies and the transformation of media audiences*. New York, NY: Columbia University Press.
- Nel, F., & Westlund, O. (2013). Managing new(s) conversations: The role of social media in news provision and participation. In M. Friedrichsen & W. Mühl-Benninghaus (Eds.), *Handbook of social media management* (pp. 179–200). Berlin, Germany: Springer.
- Östman, J. (2012). Information, expression, participation: How involvement in user generated content relates to democratic engagement among young people. *New Media and Society, 4*, 1004–1021.
- Papacharissi, Z. (2014). Toward new journalism(s): Affective news, hybridity, and liminal spaces. *Journalism Studies, 16*(1), 27–40. doi:10.1080/1461670X.2014.890328
- Papacharissi, Z., & de Fatima Oliveira, M. (2012). Affective news and networked publics: The rhythms of news storytelling on #Egypt. *Journal of Communication, 62*, 266–282.
- Parks, M. R. (2011). Social network sites as virtual communities. In Z. Papacharisi (Ed.), *A networked self: Identity, community, and culture on social network sites* (pp. 105–123). New York, NY: Routledge.
- Perugini, M., Gallucci, M., Presaghi, F., & Ercolani, A. P. (2003). The personal norm of reciprocity. *European Journal of Personality, 17*(4), 251–283. doi:10.1002/per.474
- Peters, C., & Broersma, M. (Eds.) (2013). *Rethinking journalism: Trust and participation in a transformed news landscape*. London, UK: Routledge.

- Pew Research Center for the People and the Press (2012, September). *Trends in news consumption 1991–2012: In changing news landscape, even television is vulnerable*. Washington, DC: Author. Retrieved from <http://www.people-press.org/files/legacy-pdf/2012%20News%20Consumption%20Report.pdf>
- Pew Research Center for the People and the Press. (2013, July). *July 2013 political survey, methodology*. Washington, DC: Author. Retrieved from <http://www.people-press.org>
- Robinson, S. (2011). Journalism as process: The organizational implications of participatory online news. *Journalism and Communication Monographs, 13*, 138–210.
- Schmidt, J. (2007). Blogging practices: An analytical framework. *Journal of Computer-Mediated Communication, 12*, 1409–1427.
- Shih, T.-H., & Fan, X. (2008). Comparing response rates from Web and mail surveys: A meta-analysis. *Field Methods, 20*, 249–271.
- Singer, J. B. (2014). User-generated visibility: Secondary gatekeeping in a shared media space. *New Media and Society, 16*, 55–73.
- Skalland, B. (2011). An alternative to the response rate for measuring a survey's realization of the target population. *Public Opinion Quarterly, 75*(1), 89–98.
- Susarla, A., Oh, J.-H., & Tan, Y. (2012). Social networks and the diffusion of user generated content: Evidence from YouTube. *Information Systems Research, 23*, 23–41.
- Thornham, H., & McFarlane, A. (2014). Claiming content and constructing users: User-generated content and BBC Blast. In D. Buckingham, S. Bragg, & M. J. Kehily (Eds.), *Youth cultures in the age of global media* (pp. 186–201). New York, NY: Palgrave Macmillan.
- Vis, F., Faulkner, S., Parry, K., Manyukhina, Y., & Evans, L. (2014). Twitpic-ing the riots: Analysing images shared on Twitter during the 2011 UK riots. In K. Weller, A. Bruns, J. Burgess, M. Mahrt, & C. Puschmann (Eds.), *Twitter and society* (pp. 385–398). New York, NY: Peter Lang.
- Williams, A., Wardle, C., & Wahl-Jorgensen, K. (2011). "Have they got news for us?" Audience revolution or business as usual at the BBC. *Journalism Practice, 5*, 85–99.
- Wojcieszak, M., & Smith, B. (2014). Will politics be tweeted? New media use by Iranian youth in 2011. *New Media and Society, 16*, 91–109.
- Wunsch-Vincent, S., & Vickery, G. (2007). Participative Web: User-generated content. Report prepared for the Organisation for Economic Co-operation and Development, Paris, France.

Appendix
Demographic Profile of Study Survey and Other Comparable Surveys

	Present study survey, December 2013 to January 2014 (%)	Pew Research Center for the People and the Press Political Survey, July 2013 (%)	U.S. Census American Community Survey 2012 (one-year estimates) (%)
<i>Age</i>			
18–24	5.0	10.1	10.0
25–34	13.5	11.3	13.4
35–44	15.7	11.9	13.0
45–64	43.0	38.8	26.4
65 and older	22.8	28.6	13.7
<i>Gender</i>			
Male	50.0	49.9	49.2
Female	50.0	50.1	50.8
<i>Race/ethnicity</i>			
White	76.2	72.2	73.9
Hispanic	7.5	11.2	16.9
African American	10.5	10.3	12.6
Asian	2.9	2.5	5.0
<i>Education</i>			
High school or less	19.3	32.5	41.6
Some college	34.5	27.6	29.2
Bachelor's degree	30.5	22.6	18.2
Graduate degree	8.8	14.9	10.9
<i>Household income:</i>			
Less than \$49,999	46.0	45.9	51.9
\$50,000 to \$99,999	36.5	26.1	32.7
\$100,000 or more	17.4	17.2	15.4