

PUBLISHED VERSION

Venice Nicole Arboleda Amoroso, Nicole Abigail Cenizal Cham, Paulo Mari Chico Cruz, Candice Ria Estacamento Monsale, Micah Gabriela Tongol San Jose, Jeremaiah Manuel Opiniano

#Trending: A reevaluation of traditional news values given Twitter through a mixed methods approach

Jurnal Komunikasi : Malaysian Journal of Communication, 2018; 34(2):166-188

© UKM Press, National University of Malaysia (UKM). All articles published in this journal are licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) license, unless otherwise stated.

Published version <http://dx.doi.org/10.17576/JKMJC-2018-3402-11>

PERMISSIONS

<http://creativecommons.org/licenses/by/4.0/>



Attribution 4.0 International (CC BY 4.0)

This is a human-readable summary of (and not a substitute for) the [license](#). [Disclaimer](#).

You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.



Under the following terms:



Attribution — You must give [appropriate credit](#), provide a link to the license, and [indicate if changes were made](#). You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions — You may not apply legal terms or [technological measures](#) that legally restrict others from doing anything the license permits.

15 April 2020

<http://hdl.handle.net/2440/124156>

#Trending: A Reevaluation of Traditional News Values Given Twitter through a Mixed Methods Approach

VENICE NICOLE ARBOLEDA AMOROSO
NICOLE ABIGAIL CENIZAL CHAM
PAULO MARI CHICO CRUZ
CANDICE RIA ESTACAMENTO MONSALE
MICAH GABRIELA TONGOL SAN JOSE
JEREMIAH MANUEL OPINIANO
University of Santo Tomas, Philippines

ABSTRACT

Over the years, social media have catered for faster and perhaps more efficient delivery of news. Twitter, one of the most popular micro-blogging sites, is now being used by journalists in spreading and gathering news. And since Twitter takes note of what topics are trending, journalists now have an idea on what their audience would like to know and talk about. However, topics trending on Twitter often do not reflect the dominant news values presented by the journalists in the traditional news media, thus creating a gap between the perceptions of the audience and of the journalist on what are considered to be newsworthy especially on Twitter. This also creates an impression that news and news values are evolving. This exploratory mixed methods research re-evaluates the traditional news values in the age of Twitter. It seeks to determine if such values have evolved and if they remain relevant for journalists in the delivery of news in this entirely new platform. Four news values were identified given a phenomenological approach employed in qualitative interviews. These identified news values were then tested using a survey (N=300) as structural equation modelling was employed to test if these four news values are correlated to newsworthiness, news consumption and news distribution. It was found that the traditional news values relevant in journalists' practice of news judgment and in audience' interaction on Twitter. This study contributes to discourses on news values which are currently being reviewed given how the Internet and social media have influenced journalism.

Keywords: *News values, Twitter, social media, trending news, mixed methods.*

INTRODUCTION

Millions of people worldwide generate and share content almost every second through social networking sites, leading to different types of content vying for attention (Asur et al., 2011). News companies are deep into social media as their news platform (Newman et al., 2012; Dutta-Bergman, 2010; Newman, 2009; De Nies et al., 2012).

Twitter is a news gathering and dissemination platform by journalists, even a primary source of news content (Martin et al., 2015). Twitter provided an ambient environment for both news- and social-related information being shared (Papacharissi & Oliveira, 2011). Twitter's unique feature, trending topics, reflects the "newsworthy" stories (i.e., being most talked about). These "trends" are keywords appearing more frequently in the most recent stream of tweets, acquiring the identity of "news" (Asur et al., 2011).

However, these Twitter trends may not mirror the traditional news values presented by journalists in traditional news media (Papacharissi & Oliveira, 2011). Oftentimes, these dominant trends are somehow unparalleled to the topics considered by journalists to be newsworthy, like politics and local news (Lee & Chyi, 2013). Users' tweets usually concern

their personal lives, driven by affective and self-centered motivations, anger, self-display (Heise et al., 2013), and funny or entertaining stories (Kormelink & Meijer, 2014).

Citizens' active participation in news production somehow poses challenges to journalists, even degrading journalists' autonomy as "gatekeepers" (Beckett, 2009; Shoemaker, 2006). Now, both citizens and journalists have their own criteria of what is "news" worth sharing (Diakopoulos & Zubiaga, 2014; Stray, 2009). This also creates an assumption citizen (Twitter users) had gained the right to determine what events are newsworthy.

Previous studies were done on Twitter's trending topics. For instance, Zhao *et. al* (2011) after comparing topics covered by Twitter and the *New York Times*, found that although both cover a similar range of topic categories, they differed in the way each topic was distributed. Meanwhile, in a study on #egypthashtags during the 2011 Egyptian uprising (Papacharissi & Oliveira, 2011), Twitter-delivered news does not merit only the traditional news values. The news also contains a mix of traditional news values and values specific to Twitter.

Media and news values have been ever changing. The meaning of news is also being redefined (Beckett, 2009). This evolution of news values given social media is caused by audiences, who may have used a different set of criteria in judging news stories (De Nies et al., 2012). And the dilemma for journalists is this: should they abide by traditional news values, or should s/he adjust to the audiences' preferences?

Studies about Twitter have looked at the site's purpose as a tool for citizen journalism, and have analyzed the significance of these topics to users (observing how they evolved over time) (Cheong, n.d.; Becker et al., 2011). However, given evolving news values vis-à-vis social media, how do journalists practice news judgment and deliver news on Twitter? How do audiences think of Twitter's trending topics in terms of newsworthiness is a research pursuit.

This research looks at some of the documented traditional news values (Galtung & Ruge, 1965; Shoemaker, 2006) as they are applied to or reflected on Twitter. This exploratory mixed methods study saw some nine Filipino journalists identify four news values specific to Twitter. Moreover, a survey conducted on audience judgment regarding trending topics, and patterns shown in the consumption and dissemination of news, has also determined whether these four news values have relevance to newsworthiness. Using mixed methods in this paper is a humble methodological contribution to the study of journalism and Twitter.

LITERATURE REVIEW

Journalists play a crucial role in deciding whether the information is news or not (Zoch & Supa, 2014). News judgment is the process in which journalists assess what can be highlighted as important and interesting, and create news as a special and a "superior" form of information (Tuchman, 1972 in Clerwall & Karlsson, 2013). This process is considered sacred, separating journalists from outsiders (O'Neill, 2009). Thus, any changes in the process itself, or in journalists' integrity in their news judgment, may have critical ramifications both for news and for journalism (Clerwall & Karlsson, 2013).

News Values

In news judgment, journalists may have consciously and unconsciously used a set of selection criteria —news values— in assessing the newsworthiness of a story or event (De Nies et al., 2012). News values is “a selection criteria equally applied: first, in the event that has taken place and whether it is to be selected for investigation by a journalist; and second, to the story — competing with other stories for space and broadcast air time (Caple & Bednarek, 2013). The more these news values are satisfied, the more likely an event will be selected (De Nies et al., 2012).

News values are more than just selection criteria; these values are involved in journalists’ daily news judgment practices (Harcup & O’Neill, 2001). These values are also a form of professional ideology conceptualized from a journalist’s routine of practices (Caple & Bednarek, 2013) since news selection does not solely depend on the journalist’s gut feeling (De Nies et al., 2012).

The most cited work on news values has been Galtung and Ruge’s seminal paper (1965). They devised a list of (the first) news values: frequency, threshold, unambiguity, meaningfulness, consonance, unexpectedness, continuity, composition, references to elite persons, elite nations, and persons, and negative news.

Some scholars have also modified Galtung and Ruge’s original news values. One paper trimmed down the 12 news values to eight: impact, timeliness, prominence, proximity, bizarreness, conflict, currency and human interest (De Nies et al., 2012). Bell (1991, in De Nies et al., 2012) added “facticity,” meaning a good story needs facts like names, locations, numbers and figures. News values such as entertainment, values concerning the elite, and sports coverage were also included (McQuail, 2002 as cited in Papacharissi & Oliveira, 2011; Hartley, 1982; Harcup & O’Neill, 2016; De Nies et al., 2012).

Researchers have also elaborated what Galtung and Ruge (1965) proposed. For instance, Shoemaker and Cohen (2006) expounded the notion of significance into four: public, political, economic and cultural significance. De Nies et al. (2012) subdivided negativity into conflict, crime, damage and strategy; and meaningfulness into political, economic, cultural, technological public and geographical significance. Factors such as significance, relevance and importance are also important to news judgment — and all constitute one idea: news must contain the “should know” material (Zoch & Supa, 2014).

Impact of Technology on Journalism and News Values

Digital technologies have conditioned the most traditional, isolated or basic form of news media production (Beckett, 2009). Social then increased the public’s greater news participation, now as creators and distributors of content (De Nies et al., 2012).

However, not all changes technology wrought into journalism were taken positively. The news media have encountered challenges in adapting to this environment (Papacharissi & Oliveira, 2011). On how the new media “affected” dominant forms of news, the situation makes it difficult for journalists to manage and weigh the value of events (De Nies et al., 2012).

This “new media” also changed the core of news production and consumption, thus the domain of traditional media outlets. News is now co-produced by citizens and journalists, and the tag to the news media as “a fourth estate” is now in question (Beckett, 2009).

Furthermore, increasing audience participation made journalists and editors more sensitive to the implications of what their audiences are reading, and why (Anderson, 2009). If given a free choice, audiences would create their own news agenda different from the status quo —setting what stories they want to appear as news, and dictating the contents of the news presented to them (Stray, 2009). Although, Shoemaker (2006) argued the decision on how news should be treated —after people decide which ones are (not) newsworthy— still lies on the "gatekeepers," journalists.

Beckett (2009) also warned this kind of "networked journalism" continues to reshape, and might even destroy the meaning of, journalistic value. This has an impact on editorial values since journalism is facilitating a process of dialogue, not just producing a news product. News values are changing and are being redefined as the current generation is gaining a whole new means of producing and consuming news (Beckett, 2009).

Twitter

Social networking sites have become a powerful means for people to share and exchange information. Twitter gained popularity for its short messages and its speed in spreading information (Zhao et al., 2011). And with the proliferation of fake news, Facebook recently adjusted its algorithms to prioritize "meaningful social interactions" over "relevant content" (Wong, 2018).

Some argued tweets contain essential information —even much useful information like general topics and news (Zhao et al., 2011; Zubiaga et al., 2014). Some even acknowledged Twitter "relevance" as a news source because it emphasizes on rapidly sending short messages (140 characters). Twitter also offers the potential to gain insights into underlying human interests, and international differences in reaction to news and political issues (Wilkinson & Thelwall, 2012). Twitter is also dominated by posts about real-time and real-world events. Twitter is even ahead of traditional media in spreading news or hyping an anticipated event (Kwak et al., 2010; Becker, Naaman & Gravano, 2011).

This leads us to Twitter's feature called trending topics. Zubiaga et al. (2014) define trending topics (carrying the symbol "#" or hashtags [Stavelin, 2013]) as "the top terms being discussed much more than usual in the latest minutes on the site's stream of tweets". These hashtags highlight Twitter's unique characteristic as a social awareness stream, and present a "user-generated collaborative argument" on what is news (Papacharissi & Oliveira, 2011).

A number of scholars (Stavelin, 2013; Papacharissi & Oliveira, 2011; Doval, 2014; Deller, 2011; Wasike, 2013) have researched on Twitter's capability of being a new platform for news delivery and its unique use of the "hashtag". Journalists and news organizations followed suit and use hashtags.

New News Values Given Twitter?

Given Twitter's prominence as a *news distribution* medium, Papacharissi & Oliviera (2011) asked: what news values can describe Twitter's character as a medium for news sharing? Through content and discourse analyses done on the #egypthashtags (launched online during the 2011 civil uprising in Egypt), they found out Twitter-circulated news do not only merit the traditional news values. They contain a mix of traditional news values and values specific only to Twitter. News values identified were instantaneity, crowd-sourced elites, solidarity and ambience (Papacharissi & Oliviera, 2011).

However, Twitter's news environment and the news values present on Twitter remain research gaps. De Nies et al. (2012) argued as users become more informed and active in news production, they are expected to have used a different set of criteria in determining newsworthiness. This leads to asking whether theoretically determined news criteria (e.g., Galtung & Ruge, 1965) still hold for today's media landscape (De Nies et al., 2011), or were there already a new set of news values emerging. This leads to this current paper.

THEORETICAL FRAMEWORK

Galtung & Ruge's Theory of News Selection (1965) serve as the theoretical foundation of this study. This theory devised a list of news values: frequency, threshold, unambiguity, meaningfulness, consonance, unexpectedness, continuity, composition, reference to elite persons, reference to elite nations, reference to persons, and negative news. Succeeding studies saw these 12 news values were re-conceptualized and either trimmed down or expanded (Hartley, 1982; McQuail, 2002 as cited in Papacharissi & Oliveira, 2011; Shoemaker & Cohen, 2006; De Nies et al., 2012; Zoch & Supa, 2014; Harcup & O'Neill, 2016).

Galtung and Ruge's theory also defined three processes in news making: *Selection*, or choosing news that satisfy criteria what is news; *Distortion*, or heightening the news item given the news values identified in a story; and *Replication*, where both selection and distortion take place in a chain of communication, from the event for the reader.

These news values are to be analyzed here, especially in the context of journalistic reporting on Twitter. Thus, researchers seek to assess if these traditional news values remain relevant for journalists in practicing news judgment on Twitter. An evaluation of these earlier-identified news values is to be seen in this paper.

METHODS AND DESIGN OF THE STUDY

This study looks at news values as they are applied to Twitter. News values given Twitter were first identified and explained. These news values were then tested for two aspects: if audiences find Twitter effective in assessing a story as newsworthy, and if these news values directly affect audience participation on Twitter. This mixed methods study (Creamer, 2018) is guided by the following questions:

- RQ1: How do journalists practice news judgment in determining newsworthy stories given Twitter as a platform for news delivery and audience interaction?
- RQ2: What news values are being applied by journalists in reporting and practicing news judgment on Twitter?
- RQ3: What do journalists/editors think of Twitter's trending topics, i.e., subjects deemed newsworthy by users? What do these news values mean to them?
- RQ4: Do audiences choose stories that are of necessity and of great importance?

RQ5: What do audiences prefer to read and to share publicly?

RQ6: Do audiences consider “trending” topics newsworthy?

Using mixed methods hopes to overcome the limitations of using either qualitative or quantitative methods only. Researchers employed here a *sequential, equal priority exploratory mixed methods design*, which sees researchers conduct a qualitative method first and use those findings to implement a quantitative method (Creswell, 2014). This study also gives equal priority to quantitative and qualitative data (Creamer, 2018).

The researchers employed phenomenology, which aims to explain how a phenomenon is perceived by certain actors especially through key informant interviews (Lester, 1999). After the phenomenological interviews and analyses done, researchers implemented a survey to determine audiences’ judgment on the newsworthiness of Twitter’s trending topics, and the effectiveness of news values identified from the interviews.

Selection and Study Site

Filipino journalists and journalism students were asked to participate in this study. Key informant interviews were done with journalists working for various news media platforms. The journalists were chosen because they: a) are active on Twitter; b) utilize Twitter in delivering news; c) have at least 300 followers on Twitter; d) have been using Twitter for at least three years; and e) have been posting tweets or news updates at least five times a week.

Nine female and male journalists based in Metro Manila (the Philippines’ capital region) (see Table 1) —all daily Twitter users— were interviewed.

Table 1: Pen portrait of interviewed journalists.

| Respondent | Years in journalism | Nature of respondent’s news organization | Years using Twitter |
|------------|---------------------|---|---------------------|
| R1 | 5 | Online news site counterpart of a broadsheet | > 8 |
| R2 | 3.5 | Online news site | 5 |
| R3 | > 20 | Broadcast | 6 |
| R4 | 5 | Online news site counterpart of a broadcast network | 4 |
| R5 | 3 | Broadcast | 6 |
| R6 | 20 | Broadcast | 8 |
| R7 | 10 | Broadcast | 3 |
| R8 | 16 | Online news site counterpart of a broadcast network | 4 |
| R9 | 4 | Online news site counterpart of a broadcast network | 6 |

Meanwhile, survey respondents are students from various colleges of a comprehensive university in Manila, the University of Santo Tomas (UST). These respondents, aged 16-to-23 years, belong to an active age group on Twitter. Respondents are also aware of important issues locally. Finally, respondents can differentiate between worthy and unworthy news topics. Snowball and referral sampling were employed to gather 300 respondents.

Data Measures

Interview questions were developed using an *aide memoire*; guided by axial coding, relevant on news judgment and audience interaction helped researchers craft interview questions (*a priori*). News judgment was used to determine if journalists still use traditional news values despite the changes brought about by Twitter in reporting news.

Meanwhile, the survey listed 15 topics that trended on Twitter in several months (covering the years 2015 and 2016). Events included a presidential election, an international event the Philippines hosted, a major sporting event, among others. A day-to-day monitoring of Twitter trends was done to check if trended topics are qualified based on the following: a) They got listed among the 20 trending topics; and b) They are reported in traditional news media. The questionnaire then asked respondents their views on the 15 trending topics in relation to the news values (identified by key informant interviewees), to newsworthiness, to consumption, and to news distribution.

Procedures

The majority of journalist-participants were interviewed at their newsrooms, with interviews ranging from 45 minutes to 1.5 hours. Interviews were done from January to March 2015.

After a pre-test of the survey instrument, researchers went to different colleges in the university to distribute the questionnaire. Respondents were first asked if they have an active Twitter account before answering the survey before they became eligible for participation. The survey was conducted from February to March 2016.

Ethical Considerations

This research was approved by the ethics review committee of the journalism program of UST. For the key informant interviews, the identities of the nine journalists were coded (e.g., R1, etc). For the survey, informed consent forms were also handed out to survey respondents.

Meanwhile, the trending topics researchers used in the survey hold no ethical issues since these were publicly posted on Twitter.

Analysis

Qualitative interviews with journalists were fully transcribed in order to decipher the richness and fullness of texts. Researchers used a repertory grid to identify relevant statements from respondents, to which cool and warm analyses were conducted. Themes were then identified as accurately as possible using the inductive method, i.e., findings were the source of themes developed. Correspondence technique and member checking were done to validate qualitative findings.

To check the effect of news values to newsworthiness, to consume and to news distribution, structural equation modelling (SEM) was used. The primary value of SEM is an overall evaluation of a hypothesized model (*refer to Figure 2 in the Findings section*). SEM's emphasis is "on testing a whole model may be a kind of antidote to (an) overreliance on statistical tests of individual hypotheses" (Kline, 2005).

SEM uses various model-fit statistics to determine the fitness of the hypothesized model. Five model-fit indices were used: chi-square, root mean square error of approximation (RMSEA), comparative fit index (CFI), normed-fit index (NFI), and the

goodness-of-fit index (GFI). The point of these indices and their minimum coefficients is the fitness of the researchers' hypothesized model.

To consider the trending topics that are worthy and unworthy, average scores per variable were computed. The researchers provided a qualitative description on the qualification of newsworthiness based on the survey averages: 1-2 "very unworthy of news reportage;" 2-3: "unworthy;" 3-4: "worthy;" and 4-5 "very worthy." The Statistical Package for the Social Sciences (SPSS) was used in processing survey data.

FINDINGS OF THE STUDY

A Model on Twitter's News Values

This research attempted to describe news values present in Twitter as observed by nine Filipino journalists when they practice news judgment and audience interaction. Through the thickness and richness of the descriptions provided by respondents, four interesting themes emerged.

These four themes led researchers to develop the *Journalists' Gun and Bullet Model of News Values on Twitter*. This features four news values: *necessity, preference, instantaneity and authenticity*. The model also summarizes the nature of journalistic reporting on Twitter, giving much emphasis on the values of instantaneous and authenticity.

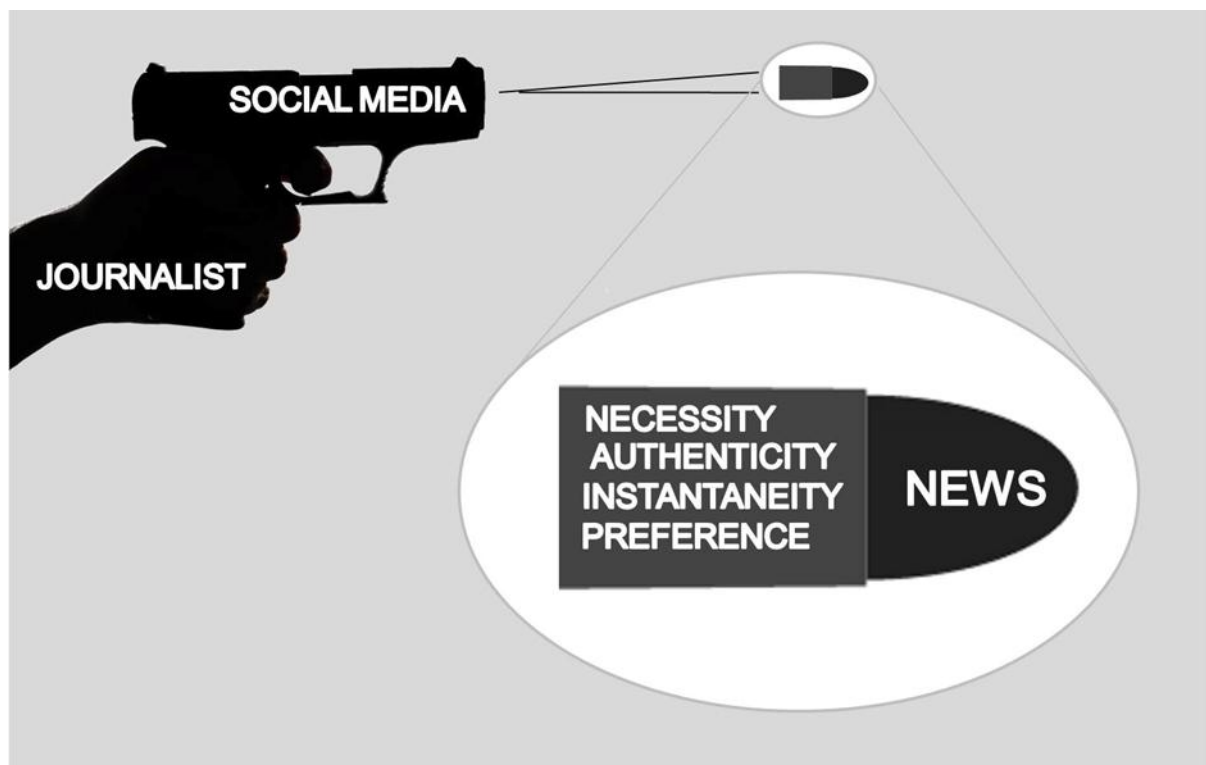


Figure 1: Journalists' gun and bullet model of news values on Twitter.

Necessity: What Audiences Need to Know

Informing the public about daily events is a journalist's primary job. Journalists also act as educators who feed people with information they need to know. Although social media, especially Twitter, reflect more of what audiences want, most journalists interviewed still necessity whenever they report news on Twitter.

When asked how journalists would define and understand the news, most answers were public-centered, focusing on the values of impact [R2, R5] and relevance of the news to how audiences make decisions in daily lives [R1, R6].

With the public becoming more vocal in expressing their “wants” and opinions on social media, one respondent believed a journalist should never be easily swayed by audiences’ demands especially when forming the news agenda. Highlighted here is the media’s role of informing and educating audiences, and of making them think of things that really matter [R1].

Audiences’ clamor that journalists also give the former information they want did not change journalists’ quality of thinking in judging news stories, and in weighing events to be covered [R1, R2, R4, R7, R9]. A respondent said a journalist must always ask “Why should people care?” when exercising news judgment [R2], and they must discern if a particular event is useful or important [R9]. News stories must also help audiences answer questions like “Why should I know?”, “Why should I care” and “Really?” [R7]. News is also considered newsworthy when it affects the majority of people, and if it is probable to happen to anyone [R5]. Moreover, a respondent upheld journalist will always report the news deemed as necessary for the public to know, regardless if audiences give attention to this news or not:

What can we do? People don’t want to watch it, but we have to report it. [R6]

Preference: What Audiences Want to Know

Social media has fueled the public to voice out its wants and opinions even more. Yet journalists put more emphasis on information audiences need to know. However, it does not mean journalists disregard what their audiences prefer to know and talk about.

Twitter’s trending topics feature (“#”) reflects what users discuss. Trending topics reflect the audiences’ preference and their age, like young people [R1, R3, R4 & R6].

This development manifests why trending topics feature entertainment stories that involve prominent celebrities [R1, R5, R6]. The majority of Twitter users are teenagers mostly interested in entertainment, like a “hottest love team” [R1, R4]. Other trending topics like sports [R9] and odd news [R3] also emerged. Yet despite audiences’ clamor for these topics they want, some trending topics are on politics and other significant events [R6, R8].

Respondents’ varied views on Twitter’s trending topics have also been observed. One described trending topics as *basura* (Filipino for trash) [R4]; another said it would be pure luck if there are news-related personalities who trended [R6]. For others, trending topics can be a tool for reporting and initiating audience-journalist conversations [R1, R2, R3, R9].

While some use the trending topics as a basis in reporting, others would still prefer traditional news sources. Some respondents do not access trending topics [R5] and do not want media organizations to “ride” with it [R4]. One said these trending topics serve as “reaction to their impassioned engagement to news events” [R9].

Although audience preference is one key factor in news delivery, journalists remain firm in what events are covered (putting a premium on their discretion). Respondents said audiences’ preference should be considered but should not be the sole factor in setting the news agenda [R9]; that is still under the discretion of editors, producers and newsroom managers — the gatekeepers [R1, R5, R6, R9].

Instantaneity: Advanced Timeliness

Papacharissi and Oliveira (2011) used the term "instantaneity" to refer to rapid information dissemination and access online, like on Twitter. Interviewees also identified this theme.

Twitter gained reputation as a hassle-free platform to connect in just a few clicks, anytime, anywhere. As one's phone or tablet instantly gets updates, even though users get stuck in traffic jams, they still receive information which users appreciate well [R6].

Twitter also helped news organizations in news gathering and delivery, enabling journalists to produce real-time updates — even beating live television [R5]. On this score, reporting may be done without the constraint of deadlines and in continuous bursts, depending on the duration of the event [R1].

Moreover, instantaneity also created changes in the way news is looked upon. Twitter heightened "timeliness." The instantaneous nature of news delivery, access and gathering is definitely something that is "very valuable" since news must always be new and fresh [R2]. Due to Twitter's real-time update feature, there are times journalists are outrun by a regular audience [R5].

Authenticity

The main job of any journalist is to decipher and verify the truth and present it as objective as possible. Given Twitter, journalists interviewed now put more emphasis on a news item's authenticity. Some think netizens tend to be "careless" in posting information on Twitter, disregarding whether that news is verified or not [R3, R5].

This has led to the rise of trolls and fake news [R1, R7], making journalists take "extra precautions" in falling for stories framed as "news" by netizens who tweet these. It is the journalist's job to verify information coming from social media audiences [R3, R5, R6, R8]; One termed this process as "'triangulation' or sourcing out" [R7].

Some journalists tend to misinterpret netizens' habit of giving them information, creating an impression journalist should report the said information "as it is." Still, journalists may have to make sense of the information:

They did not say this is what you should report. What they are saying is that we got this story, now it's up to you to make something out of it that can enlighten all of us. [R6]

Before, a journalist could just report what was happening; now, we have to tell you why it matters. We have to make sense of it because there's so much noise and there are so many sources. [R2]

Moreover, a respondent acknowledged the audience-driven nature of news but remained firm that a journalist should always exercise her/his authority in the news making process:

Tweets can give journalists sources... can help dig up past, or keep track of ongoing stories. True, news has become audience-driven. However, Twitter... and what's next on social media should not be the sole factors in making editorial decisions. [R8]

Testing Trending Topics' Newsworthiness

Following the four news values of the *Journalists' Gun and Bullet Model of News Values on Twitter*, this study tested if these news values are effective in audiences' determination of newsworthiness, in their news consumption, and in their news distribution. Descriptive data from the survey revealed that the instantaneity got the highest mean (M = 3.632) among the four news values (see Table 2). Researchers then tested the following hypotheses (see Figure 2):

H_{1a} to H_{1d}: Necessity, preference, instantaneity and authenticity positively affect what news stories are to be consumed and distributed by audiences.

H_{2a} to H_{2d}: Necessity, preference, instantaneity and authenticity positively affect what news stories are to be considered as newsworthy.

H_{3a} and H_{3b}: Audiences' consumption and distribution of news stories correlate with their perception of newsworthiness.

Table 2: Descriptive statistics, news values.

| | Mean | Std. Deviation |
|----------------|----------|----------------|
| Necessity | 3.329317 | .5045920 |
| Preference | 3.445987 | .5886554 |
| Instantaneity | 3.632013 | .6599344 |
| Authenticity | 3.456667 | .5766966 |
| Newsworthiness | 3.326222 | .5111116 |

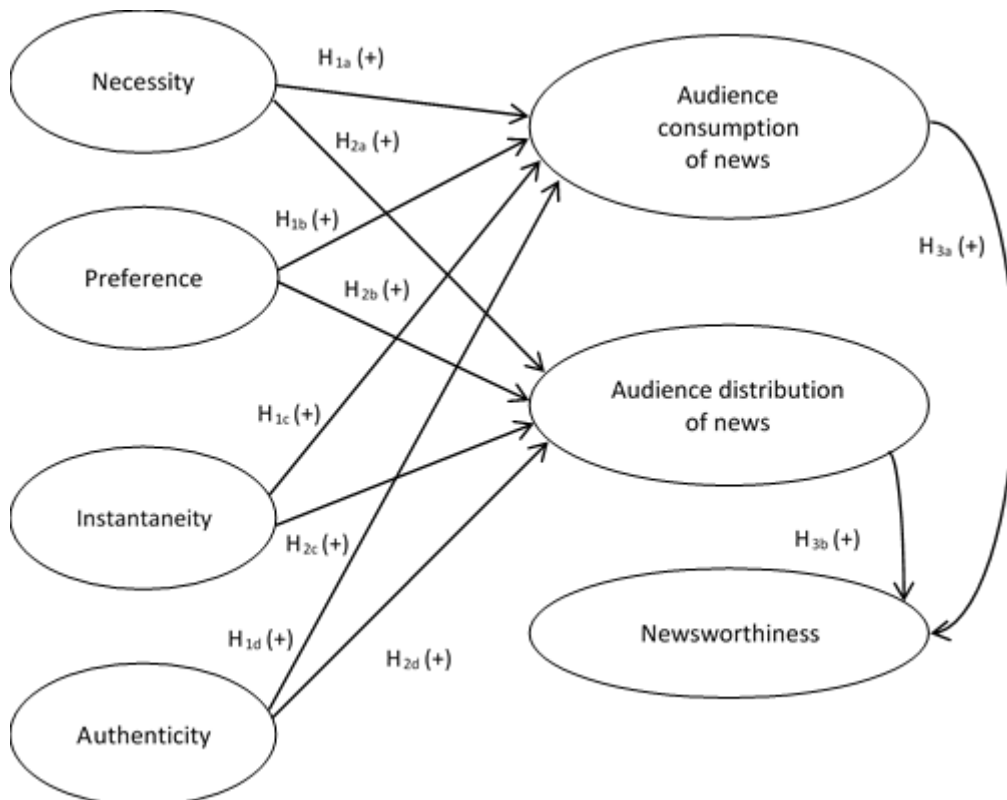


Figure 2: Hypothesized model.

News Values and Newsworthiness, Consumption and Distribution

The survey tested the validity of the four news values from the Journalists' Gun and Bullet Model in judging a story's newsworthiness. Correlations employed showed the four news values are significantly correlated with each other (see Table 3). Moreover, these news values are significantly correlated to newsworthiness, news consumption and distribution. Likewise, newsworthiness, consumption and distribution are significantly correlated with each other.

Table 3: Correlations of news values with newsworthiness, consumption and distribution.

| | Necessity | Preference | Instantaneity | Authenticity | Newsworthiness | Consumption | Distribution |
|----------------|-----------|------------|---------------|--------------|----------------|-------------|--------------|
| Necessity | 1 | | | | | | |
| Preference | .742** | 1 | | | | | |
| Instantaneity | .534** | .690** | 1 | | | | |
| Authenticity | .702** | .729** | .698** | 1 | | | |
| Newsworthiness | .740** | .699** | .437** | .649** | 1 | | |
| Consumption | .684** | .624** | .437** | .605** | .742** | 1 | |
| Distribution | .629** | .526** | .311** | .477** | .641** | .751** | 1 |

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4: Newsworthiness of trending topics (mean scores).

| Trending topics | Necessity | Preference | Instantaneity | Authenticity | Newsworthiness | Consumption | Distribution |
|----------------------------|-----------|------------|---------------|--------------|----------------|-------------|--------------|
| #PiliPinasDebates2016 | 4.70 | 4.45 | 4.52 | 4.41 | 4.71 | 4.45 | 4.28 |
| #PrayforMannyPacquiao | 2.76 | 2.97 | 3.42 | 3.03 | 2.96 | 3.04 | 2.55 |
| #JADINEISREAL | 2.38 | 2.77 | 3.21 | 2.86 | 2.25 | 2.47 | 2.21 |
| #DuRiam | 2.97 | 3.25 | 3.49 | 3.12 | 2.91 | 3.10 | 2.80 |
| #MissUniverse2015 | 3.87 | 3.99 | 4.06 | 4.01 | 4.08 | 4.03 | 3.71 |
| #FreeKesha | 3.42 | 3.39 | 3.44 | 3.46 | 3.48 | 3.36 | 3.13 |
| #ApecHotties | 2.41 | 2.85 | 3.12 | 2.83 | 2.45 | 2.60 | 2.43 |
| #LoveWins | 3.52 | 3.56 | 3.83 | 3.60 | 3.62 | 3.54 | 3.25 |
| #BlackLivesMatter | 3.85 | 3.67 | 3.64 | 3.74 | 3.83 | 3.62 | 3.44 |
| #HappyBirthdayJustinBieber | 2.25 | 2.70 | 3.00 | 2.86 | 2.18 | 2.37 | 2.21 |
| #YolandaPH | 4.72 | 4.54 | 4.55 | 4.46 | 4.67 | 4.52 | 4.34 |
| #PrayforParis | 4.57 | 4.49 | 4.51 | 4.44 | 4.52 | 4.39 | 4.23 |
| #MMFF2015 | 3.13 | 3.26 | 3.38 | 3.23 | 3.04 | 3.01 | 2.74 |
| #CharlieHebdo | 3.25 | 3.18 | 3.24 | 3.20 | 3.16 | 3.05 | 2.90 |
| #AlDubEBTamangPanahon | 2.12 | 2.62 | 3.07 | 2.61 | 2.03 | 2.17 | 1.99 |

Newsworthiness of Trending Topics

Respondents judged the newsworthiness of 15 topics based on the four news values (see Table 4). Trends regarded as most necessary, preferred and instant is #PilipinasDebates2016, #YolandaPH and #PrayforParis. The same topics were also considered the most newsworthy which respondents will most likely read and share. However, the rankings of these trends varied per variable but with minimal differences. The trending topic #YolandaPH carries the highest mean score among all trending topics tested. The trending topic #AIDubEBTamangPanahon, for a young Filipino showbiz pair featured in a daily noontime show (that reached its peak in 2016, and even set a world record for the most number of tweets), received the lowest mean score in all variables except for instantaneity. The lowest mean score judged based on instantaneity is #HappyBirthdayJustinBieber.

Correlations

Results showed necessity, preference, instantaneity, authenticity, newsworthiness, consumption and distribution have a mutual relationship. Each variable is related to one another and considered a strong indicator of newsworthiness. If one variable is ought to change, for example, another variable might follow. Except for instantaneity, all four news values significantly and positively related to newsworthiness (see Figure 3).

Although instantaneity is a good indicator of newsworthiness, instantaneity has a negative effect on newsworthiness. This may be probably due to the life span of trending topics: since these topics become "most talked about" during a certain moment, a topic will only trend for so long.

Moreover, audiences' judgment on newsworthiness based on the four news values directly affected their consumption and news distribution. This means audiences will most likely read and share stories they preferred and perceived as true and necessary.

The trending topics #YolandaPh (calamities), #PilipinasDebates2016 (elections), and #PrayforParis (terrorist attack) are "very worthy" of news reportage as they average got mean scores between 4 and 5 on newsworthiness (refer to Table 4). Other examples of trending topics considered as newsworthy are #MissUniverse (under "political" and "social" themes) and #JADINEISREAL (under "entertainment" theme).

Providing a clear explanation why some political and social topics are deemed newsworthy, while entertainment topics the opposite despite trending worldwide, is beyond the scope of this study. However, based on the rankings of trending topics, newsworthy stories may be defined as stories that are crucial to the public's knowledge.

The Structural Equation Model (SEM)

The hypothesized model (refer to Figure 2) specified that each news value (necessity, preference, instantaneity and authenticity) affects the newsworthiness, consumption and news distribution by audiences surveyed. The emerging model (see Figure 3) showed all news values are significantly related to each other along with newsworthiness, consumption and distribution. The fit indices — Chi square df (1.734), RMSEA (0.50), NFI (.997), CFI (.999), and GFI (.995) — show the emerging model is suited to indicate a good construct of the variables.

Necessity ($\beta = 0.43$), preference ($\beta = 0.33$) and authenticity ($\beta = 0.21$) have positive effects on newsworthiness. This indicates that stories are true, are in relation to the audience's needs and wants, and are considered newsworthy. However, instantaneity has a negative effect on newsworthiness ($\beta = -0.15$).

Necessity ($\beta = 0.44$), preference ($\beta = 0.18$) and authenticity ($\beta = 0.16$) were also observed to have significant relationships with news consumption. Moreover, news distribution (e.g., sharing or re-tweeting of news stories) is also affected by news values such as necessity ($\beta = 0.53$) and preference ($\beta = 0.13$).

However, there is no relationship among instantaneity, news consumption and distribution. Results also show there is no significant relationship between authenticity and news distribution.

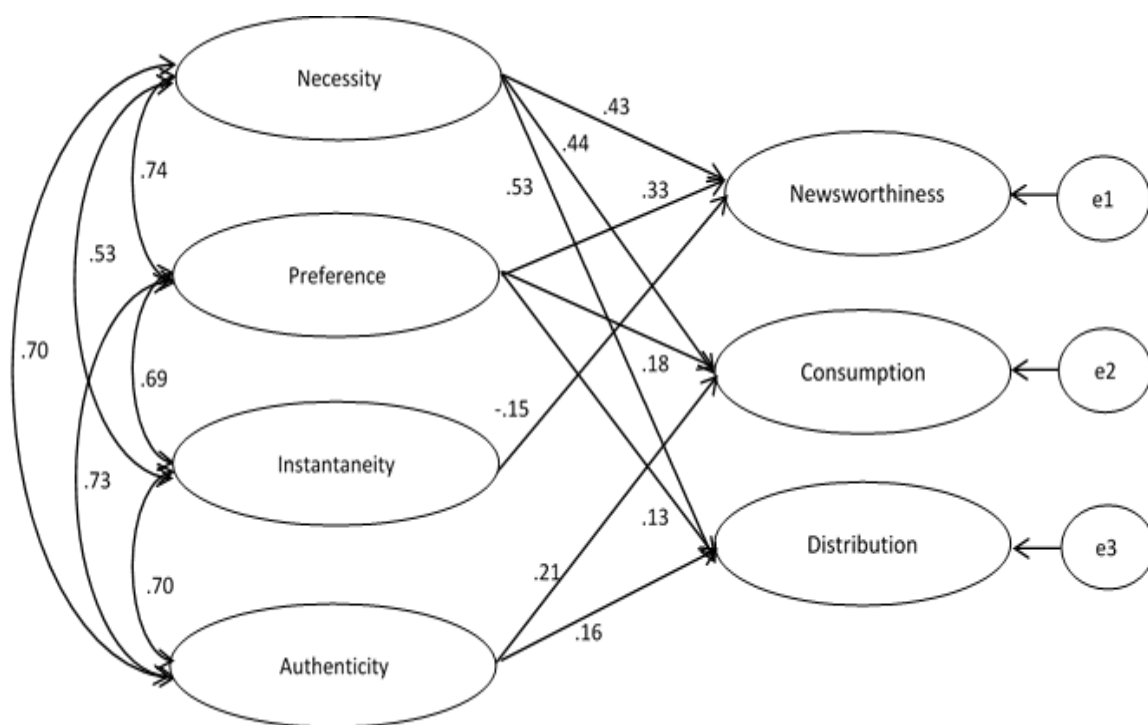


Figure 3: Emerging model.

DISCUSSION

The essence of news judgment and reporting on Twitter may lie on four news values. The *Journalists' Gun and Bullet Model of News Values on Twitter* summarize the core news values used by Filipino journalist-respondents in practicing news judgment: necessity, preference, instantaneity and authenticity. These values are seemingly not new and are offshoots of traditional news values (e.g., Galtung & Ruge, 1965).

Though Twitter changed the nature of reporting (Papacharissi & Oliveira, 2011), journalist-respondents argued news reported on Twitter must still contain the necessary information the public must know. Newsworthiness still lies on how a story affects the public. Journalist-respondents often ask "Why does this story matter to the audience?" in weighing a story's importance. This observation is similar to Galtung and Ruge's (1965) discussion of "meaningfulness," highlighting the news' significance and proximity of news. Shoemaker and Cohen (2006) also affirmed a story's public significance, while Zoch and Supa's (2014) idea is news is a "should-know" material.

In pursuing the news, journalist-respondents do not need to manually check if each news value is present in a story. However, they have that instinct or gut-feel (De Nies et al., 2012) shaped by their knowledge of these news values.

Journalist-respondents also agreed to Beckett (2009): audiences and journalists now co-produce the news. As well, respondents agreed the news values are changing, the meaning of news is being redefined, and this current generation has a whole new means of producing and consuming news.

Now that Twitter is a platform for news gathering and delivery, and audiences actively participate in news production (De Nies et al., 2012), journalist-respondents and their respective news organizations now consider the kinds of topics audiences want to know. Yet publishing or airing a news story is still under the editors and producers' discretion. This affirms Shoemaker (2006): it is up to these "gatekeepers" on what should be done after audiences decide what kind of information is newsworthy or not.

Twitter has opened the door to a more interactive news media rather than the authoritative nature it had before (Beckett, 2009). Since Twitter limits users to post 140-character tweets (Becker, Naaman & Gravano, 2011), the challenge for journalists is to present the news completely, accurately and with context. Moreover, to further gain audiences' attention, tweets may have to be composed in a more engaging manner. Composing tweets in a conversational tone are one way, so is writing catchy leads. Journalist-respondents also presented news creatively by using pictures, hashtags and external links. Furthermore, they feed audiences with continuous bursts of information, especially during live news coverage assignments.

Some journalist-respondents see trending topics "newsworthy" because of prominent personalities and political events found in the list, like identified political issues (e.g., a major public corruption scandal). These trends can also serve as sources of information for journalists.

The four news values also speak a lot about Filipino culture. Filipino Twitter users were observed to be more interested in entertainment and sports rather than politics. This supports Zhao et al. (2011) that netizens "tweet more on their personal lives and pop culture rather than world events." However, some respondents think trending topics are irrelevant (*basura* or garbage, says a respondent) in journalism since these do not manifest the kind of thinking their audiences do and should have.

However, journalist-respondents' experiences contradict what Beckett (2009) said about how news values are "changing." Journalist-respondents expressed the essence of these news values remains unchanged. Although, some of these news values are more emphasized and amplified than the others (e.g., timeliness, prominence). This view affirms Anderson (2009): news judgment and the news values are resistant to change.

The four news values identified somewhat differ (except for "instantaneity") from the previous news values (e.g., Papacharissi & Oliveira, 2011). This is not to mention that some of the news values identified are not somehow new. The context of Papacharissi & Oliveira (2011) was a civil uprising. Due to Twitter's speed, instantaneity is a new term for timeliness. Crowd-sourced elites still refer to the news value "reference to persons." "Solidarity" and "ambience" (emotion) generally fall under "meaningfulness" as these supposed "new" news values are relevant in the context of a revolution. These also fall under "threshold" as war is a national event and its magnitude dramatically affects people's camaraderie and emotions. Generally, all four news values Papacharissi & Oliveira (2011)

proposed fall somewhere in the list of original news (Galtung & Ruge, 1965) and of other related studies (e.g., Shoemaker, 2006).

Journalist-respondents affirmed the same set of traditional news values are still being used in news production, even on Twitter. What “changed” are the platform and the journalists’ priorities, not the news values themselves. Although audiences have become more active in news production (De Nies et al., 2012), Twitter did not create a new set of news values.

News Values on Twitter as Applied by News Audiences

Following the *Journalists’ Gun and Bullet Model of News Values on Twitter*, this study tested if audiences find the model’s four values useful in assessing stories’ newsworthiness, and in affecting news consumption and distribution on Twitter.

SEM results showed these values are also being applied by audiences in practicing news judgment on Twitter. Although instantaneity is significantly related to newsworthiness, this news value did not come out as significant. This somehow questions Papacharissi & Oliveira (2011) who think Twitter is a tool to spread the news because of “rapid information, dissemination and access online.”

Trending topics such as #PiliPinasDebates2016, #MissUniverse, #FreeKeshia, #LoveWins, #BlackLivesMatter, #YolandaPH and PrayforParis were considered newsworthy by audience-respondents based on the four news values. This is parallel to the opinion of some of the journalist-respondents that prominent personalities and political events featured make these trending topics newsworthy. Meanwhile, trending topics that fall under entertainment and pop culture (e.g., #JADINEISREAL) were deemed as unworthy of news reportage — affirming one journalist-respondent’s argument some trending topics are “garbage.” However, this observation countered Zhao et al.’s (2011) claims netizens clamor for entertainment and lifestyle news more than political and national news.

Considering that survey respondents are young college students, survey results affirmed the views of the journalist-interviewees: trending topics reflect the preference and the age group on Twitter.

Limitations

This study centered on the experiences of nine Filipino journalists and 300 Filipino college students. Meanwhile, no other topics that had gone viral in other social media platforms were included in the survey. In choosing trending topics, researchers did not consider the number of tweets corresponding to each hashtag (because the count continuously changes). Moreover, this study is limited only to testing the validity of the *Journalists’ Gun and Bullet Model of News Values on Twitter*. Nevertheless, news values identified and tested here are a humble contribution to ongoing reflections on news values and social media.

CONCLUSION

This research attempted to look at news values given Twitter’s trending topics. Through phenomenology, this study revealed four news values in a *Journalists’ Gun and Bullet Model of News Values on Twitter*, which carried four Twitter-induced news values: necessity, preference, instantaneity and authenticity. Also, a survey of university students (N=300) showed the four news values were efficient in determining if a news topic will be consumed and distributed by audiences.

The qualitative findings reveal the conclusion that four news values nuanced to Twitter may not be necessarily novel despite the nature of Twitter and social media. Quantitative findings, for their part, point to the conclusion that the four news values are efficient in pushing news audiences to consume and distribute the news. Thus saying, the mixed methods meta-inference or integrated conclusion (Creamer, 2018) of this study is that Twitter-induced news values may have shown the timeliness of news criteria. That is even with rising audience participation in news making.

Researchers hope this paper proved helpful to journalists in their assessment of their methods and priorities in delivering news via Twitter, and probably in the broader social media realm. This study can also help journalists adapt to Twitter, and acquire a better understanding of Twitter audiences' behavior. Hence, having knowledge of news values that may be dominant on Twitter can improve a journalist's effectiveness as an information disseminator, an educator and a truth-seeker.

Employing sequential, equal priority mixed methods here may have contributed to the search for other research methods to analyze journalism, news audiences and social media. Different methods may be used in future research, such as content analysis of trending topics and the tweets posted by journalists and audiences. The four news values presented in this paper can be further tested and built up from — especially in other countries' settings— to determine whether these remain unchanged or are relevant or irrelevant. Also, future studies can tackle newsworthiness from a different perspective, may it be from the audience's or the journalist's. This exploration will provide a wider perspective and understanding on newsworthiness. Finally, an inquiry on the depths of the effects on these news values to newsworthiness and to consumption and distribution is encouraged.

BIODATA

Venice Nicole Arboleda Amoroso is a journalism graduate of the University of Santo Tomas (2015). Email: venicenicoleamoroso@yahoo.com.ph

Nicole Abigail Cenizal Cham is a journalism graduate of the University of Santo Tomas (2016). Email: nicoleabigailcham@yahoo.com

Paulo Mari Chico Cruz is a journalism graduate of the University of Santo Tomas (2015). Email: pmccruz94@gmail.com

Candice Ria Estacamento Monsale is a journalism graduate of the University of Santo Tomas (2016). Email: monsalecandice1821@yahoo.com.ph

Micah Gabriela Tongol San Jose is a journalism graduate of the University of Santo Tomas (2015). Email: micahgabrielasanjose@gmail.com

Jeremaiah Manuel Opiniano is assistant professor and coordinator of the undergraduate and graduate degree programs in Journalism at the University of Santo Tomas in Manila. Email: ustjournalism@gmail.com

REFERENCES

- Anderson, C. (2009). *Web production, news judgment, and emerging categories of online newswork in metropolitan journalism*. Columbia University Graduate School of Journalism. Retrieved from <https://pdfs.semanticscholar.org/0aee/8aa3fc970a135eff49f15751588c67482523.pdf>
- Artwick, C. (2013). Reporters on Twitter: Product or service? *Digital Journalism*, 1(2), 212-228.
- Asur, S., Huberman, B., Szabo, G., & Wang, C. (2011). Trends in social media: Persistence and decay. *Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media* (pp. 434-437), Barcelona, Spain, 17-21 July.
- Bachmann, I., & Harlow, S. (2012). Opening the gates: Interactive and multimedia elements of newspaper websites in Latin America. *Journalism Practice*, 6(2), 217-232. doi: <https://doi.org/10.1080/17512786.2011.622165>
- Bandari, R., Asur, S. & Huberman, B. (2012). The Pulse of news in social media: Forecasting popularity. *Proceedings of the Sixth International AAAI Conference on Weblogs and Social Media* (pp. 26-33), Dublin, Ireland, 4-7 June.
- Becker, H., Naaman, M., & Gravano, L. (2011). Beyond trending topics: Real-word event identification on Twitter. *Proceedings of the Fifth International AAAI Conference on Weblogs and Social Media* (pp. 438-441), Barcelona, Spain, 17-21 July.
- Bolls, P., Myers, J., Sternadori, M., & Wise, K. (2009). When words collide online: How writing style and video intensity affect cognitive processing of online news. *Journal of Broadcasting & Electronic Media*, 53(4), 532-546.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In Bollen, K. A. & Long, J. S. (Eds.), *Testing structural equation models* (pp. 136–162). Beverly Hills, California, USA: Sage.
- Bruns, A., & Burgess, J. (2012). Researching news discussion on Twitter: New methodologies. *Journalism Studies*, 13(5&6), 801-814.
- Canter, L. (2013). The misconception of online comment threads: Content and control on local newspaper websites. *Journalism Practice*, 7(5), 604-619. doi: <https://doi.org/10.1080/17512786.2012.740172>
- Cheong, M. (n.d.). What are you tweeting about?: A survey of trending topics within Twitter. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.158.4679&rep=rep1&type=pdf>
- Cig, U., & Cig, E. C. (2011). News industry and journalism ethics. *Turkish Journal of Business Ethics*, 4(8), 52-60.
- Chyi, H. I., & Lee, A. M. (2013). Online news consumption: A structural model linking preference, use and paying intent. *Digital Journalism*, 1(2), 194-211. doi: <https://doi.org/10.1080/21670811.2012.753299>
- Clerwall, C., & Karlson C. (2013). Negotiating professional news judgment and 'clicks.' *Nordicom Review*, 34(2), 67-76.
- Coughlan, J., Hooper, D., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *Journal of Business Research Methods*, 6(1): 53-60.
- Creamer, E. (2018). *A fully integrated mixed methods research*. Thousand Oaks, United States: SAGE Publications.

- Creswell, J. (2014). *A concise introduction to mixed methods research* (1st ed.). United Kingdom: Sage Publications.
- De Nies, T., D'heer, E., Coppens, S., Van Deursen, D., Mannens, E., & Van de Walle, R. (2012). *Bringing newsworthiness into the 21st century*. Presented at the Web of Linked Entities Workshop in conjunction with the 11th International Semantic Web Conference (ISWC 2012) (pp. 106-117), Boston, USA, 11 November. Retrieved from <http://ceur-ws.org/Vol-906/paper11.pdf>
- Deller, R. (2011). Twittering on: audience research and participation using Twitter. *Journal of Audience and Reception Studies*, 8(1), 216-245.
- Diakopoulos, N., & Zubiaga, A. (2014). Newsworthiness and network gatekeeping on Twitter: The role of social deviance. *Proceedings of the Eighth International Conference on Weblogs and Social Media* (pp. 587-590). Palo Alto, California, United States: The AAAI (Association for the Advancement of Artificial Intelligence) Press.
- Doval, M. (2014). Spanish and Portuguese journalists on Twitter: best practices, interactions, and most frequent behaviors. *Observatorio Journal*, 8(3), 169-182.
- Dutta-Bergman, M. J. (2004). Complementarity in consumption of news types across traditional and new media. *Journal of Broadcasting & Electronic Media*, 48(1), 41-60. doi: https://doi.org/10.1207/s15506878jobem4801_3
- Fresno, V., Martinez, R., Spina, D., & Zubiaga, A. (2011). Classifying trending topics: A typology of conversation triggers on Twitter. *Proceedings of the 20th ACM Conference on Information and Knowledge Management* (pp. 2461-2464), Glasgow, Scotland, 24-28 October.
- Galtung, J., & Ruge, M. H. (1965). The structure of foreign news: The presentation of the Congo, Cuba and Cyprus crises in four Norwegian newspapers. *Journal of Peace Research*, 2(1), 64-91.
- Goran-Bazarea, L., Lazarou, G., Marin, I., Munteanu, A., & Parlea-Buzatu, D. (2011). The expansion of communication flows, social contagion in networks, and online news media. *Economics, Management and Financial Markets*, 6(2), 343-352.
- Hall, S. ([1973] 1980). Encoding/decoding. In Hall, S., Hobson, D., Lowe, A., & Willis, P. (2004) (Eds.), *Culture, media, language: Working papers in cultural studies, 1972-79* (pp. 128-138). London, United Kingdom: Routledge.
- Harcup, T., & O'Neill, D. (2016). What is news? *Journalism Studies*, 18(12), 1470-1488. doi:10.1080/1461670x.2016.1150193.
- Hegina, A. (2015, October 26). 'AlDub' posts record-breaking 41-M 'Tamang Panahon' tweets. *Philippine Daily Inquirer online*. Retrieved from <http://http://entertainment.inquirer.net/181964/aldub-posts-record-breaking-41-m-tamang-panahon-tweets/>.
- Heise, N., Loosen, W., Reimer, J., & Schmidt, J. (2013). Including the audience: Comparing the attitudes and expectations of journalists and users towards participation in German TV news journalism. *Journalism Studies*, 15(4), 411-430. doi: <https://doi.org/10.1080/1461670X.2013.831232>
- Hermida, A. (2010). Twittering the news: The emergence of ambient journalism. *Journalism Practice*, 4(3), 297-308.
- Jacobson, S. (2013). Does audience participation on Facebook influence the news agenda? A case study of The Rachel Maddow Show. *Journal of Broadcasting & Electronic Media*, 57(3), 338-255.

- Jaing, J., & Zhao, W. X. (2011). An empirical comparison of topics in Twitter and traditional media (Technical Paper Series, Singapore Management University School of Information Systems). Retrieved from [http://www.mysmu.edu/faculty/jingjiang/papers/TechReport\(Zhao2011\).pdf](http://www.mysmu.edu/faculty/jingjiang/papers/TechReport(Zhao2011).pdf)
- Kaplan, A., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, 53, 59-68.
- Keen, A. (2007). *The cult of the amateur: How today's internet is killing our culture*. New York, USA: Currency.
- Kerrigan, F., & Graham, G. (2010). Interaction of regional news-media production and consumption through the social space. *Journals of Marketing Management*, 26(3-4), 302-320.
- Kline, R. B. (2005). *Principles and practice of structural equation modelling* (2nd ed.). New York, USA: Guilford Press.
- Kormelink, T., & Meijer, I. (2014). Tailor-made news: Meeting the demands of news users on mobile and social media. *Journalism Studies*, 15(5), 632-641. doi: <https://doi.org/10.1080/1461670X.2014.894367>
- Lester, S. (1999). An introduction to phenomenological research. Stan Lester Developments, Taunton. Retrieved from <http://www.sld.demon.co.uk/resmethy.pdf>
- Martin, C., Corney, D., Goker, A., & MacFarlane A. (2015). Mining newsworthy topics from social media. In Gaber, M. M., Cocea, M., Wiratunga, N., & Goker, A. (Eds.), *Studies in computational intelligence, volume 602: Advances in social media analysis* (pp. 21-43). Berlin, Germany: Springer Verlag.
- Newman, N. (2009). *The rise of social media and its impact on mainstream journalism: A study of how newspapers and broadcasters in the UK and US are responding to a wave of participatory social media, and a historic shift in control towards individual consumers* (Working paper, Reuters Institute for the Study of Journalism). Retrieved from <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/The%20rise%20of%20social%20media%20and%20its%20impact%20on%20mainstream%20journalism.pdf>
- Newman, N., Dutton W. H., & Blank, G. (2012). Social media in the changing ecology of news: The fourth and fifth estates in Britain. *International Journal of Internet Science*, 7(1), 6-22.
- Nozato, Y. (2002). *Credibility of online newspapers*. Paper presented at the 2002 Convention of the Association of Educators in Journalism and Mass Communication, Miami, Florida, USA, 7-10 August. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.105.6673&rep=rep1&type=pdf>
- Papacharissi, Z., & Oliveira, M. D. (2011). Affective news and networked publics: The rhythms of news storytelling on #Egypt. *Journal of Communication*, 62(2), 266-82. doi: 10.1111/j.1460-2466.2012.01630.x
- Paulussen, S., & Harder, R. (2014). Social media references in newspapers: Facebook, Twitter and YouTube as sources in newspaper journalism. *Journalism Practice*, 8(5), 542-551. doi: <https://doi.org/10.1080/17512786.2014.894327>
- Potts, L., & Jones, D. (2011). Contextualizing experiences: Tracing the relationships between people and technologies in the social web. *Journal of Business and Technical Communication*, 25(3), 338-358. doi: <https://doi.org/10.1177/1050651911400839>

- Shoemaker, P. (2006). News and newsworthiness: A commentary. *Communications*, 31(1), 105–111.
- Shoemaker, P., & Cohen, A. (2006). *News and the world: Content, practitioners and the public*. New York, United States: Routledge.
- Shoemaker, P. J., Eichholz, M., Kim, E., & Wrigley, B. (2001). Individual and routine forces in gatekeeping. *Journalism and Mass Communication Quarterly*, 78(2), 233-246.
- Stassen, W. (2010). Your news in 140 characters: Exploring the role of social media in journalism. *Global Media Journal: Africa Edition*, 4(1), 116-131.
- Stavelin, E. (2013). *The pursuit of newsworthiness on Twitter*. Paper presented at Norsk Informatikkonferanse, Stavanger, Norway, 18-20 November. Retrieved from <http://www.nik.no/2013/1-2-NEWVERSION-NewsworthinessOnTwitterNIK2013.pdf>
- Stray, H. (2009). What is news when the audience is the editor? Retrieved from <http://jonathanstray.com/papers/What%20Is%20News%20When%20the%20Audience%20is%20Editor.pdf>
- Thelwall, M., & Wilkinson, D. (2012). Trending Twitter topics in English: An international comparison. *Journal of the American Society for Information Science and Technology*, 63(8), 1631-1646. doi: 10.1002/asi.22713
- Tsagkias, M., de R. & Weerkamp, W., (2011). Linking online news and social media. *Proceedings of the Fourth ACM International Conference on Web Search and Data Mining* (pp. 565-574), Hong Kong, China, 09-12 February. New York USA: ACM.
- Vis, F. (2013). Twitter as a reporting tool for breaking news: Journalists tweeting the 2011 UK riots. *Digital Journalism*, 1(1), 27-47.
- Wahl-Jorgensen, K., & Hanitzsch, T. (Eds.). (2009). *The handbook of journalism studies*. New York, USA: Routledge.
- Wasike, B. S. (2013). Framing news in 140 characters: How social media editors frame the news and interact with audiences via Twitter. *Global Media Journal: Canadian Edition*, 6(1), 5-23.
- Wong, J. C. (2018). Facebook overhauls news feed in favor of 'meaningful social interactions'. *The Independent*. Retrieved from <https://www.theguardian.com/technology/2018/jan/11/facebook-news-feed-algorithm-overhaul-mark-zuckerberg> (accessed on 10 June 2018).
- Zhao, W. X., He, J., Jiang, J., Li, X., Lim, E.P., Weng, J., & Yan, H. (2011). Comparing Twitter and traditional media using topic models. *Proceedings of the 33rd European Conference on Advances in Information Retrieval* (pp. 338-349). Berlin, Germany: Springer Verlag.
- Zoch, L., & Supa, M. (2014). Dictating the news: understanding newsworthiness from the journalistic perspective. *Public Relations Journal*, 8(1), 1-28.