Preprint

This is the submitted version of a paper published in *Journalism Studies*.

Citation for the original published paper (version of record):

Karlsson, M., Clerwall, C., Nord, L. (2014)
http://dx.doi.org/10.1080/1461670X.2014.886837

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:
http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-31599
YOU AIN’T SEEN NOTHING YET.

Transparency’s (lack of) Effect on Source and Message Credibility

Michael Karlsson, Karlstad University
Christer Clerwall, Karlstad University
Lars Nord, Mid Sweden University

This is the pre-referred version published in *Journalism Studies*

Abstract

Transparency has been proposed to both change the way journalism is being produced and increase its credibility. However, little research has been conducted to assess the connection between transparency and credibility. This study utilizes an experimental setting (N=1320) to measure what impact transparency have on source and message credibility from the user perspective. The results reveals an almost absence of any transparency effect on both source and message credibility although some small significant effects could be observed primarily regarding internal hyperlinks, comments and contextual information. Although further research is desperately needed in this area the study suggest that transparency does not affect the credibility of journalism in the eyes of the contemporary audience and thus have limited appeal as a new norm in journalism.

Keywords: Transparency, online journalism, experimental study, credibility

Introduction

Credibility is fundamental to news media, without it journalism cannot exist (Cassidy, 2007; Kohring & Matthes, 2007). In recent years many practitioners and researchers have proposed that a new norm, transparency, is changing the way journalism builds credibility. Moreover, it is also suggested that transparency actually improves journalistic credibility and that users will put greater trust in news media as a results of this shift in journalistic practice (Allen, 2008; Gillmor,
Previous research on transparency has investigated journalists’ attitudes and news production settings as well as to what extent transparency is employed in the actual news contents. Although transparency is beginning to be explored, and often praised, on the production and content side no study so far have investigated if different forms of transparency have uniform, if any, effect on how users perceive journalists and news. Thus, a vital link is missing in exploring if a movement towards a transparency norm is likely or even desirable – without user appreciation, or at least consent, transparency’s role in journalism is contested. In this paper we address this research gap, by employing a web-based experimental study to investigate if, and to what extent, different frequently used transparency techniques – such as corrections, timestamps and different forms of user-generated contributions – impinge on journalistic credibility. Consequently, the results will inform what, if any, forms of transparency that could be eligible in journalism practice.

**Routines, norms and credibility**

Routines are a way for journalists and media organizations to reduce an unpredictable and complicated world into something that can be reported in regular and predictable intervals (Lowrey & Latta, 2008). But well-established routines are also central when journalism wants to position itself aside (and above) other actors in the information industry and, subsequently, build legitimacy as credible tellers of truth (Kovach & Rosenstiehl, 2001; Zelizer, 2004). Although credibility, broadly speaking referring to a communicators competence and impartiality, is a somewhat contested term it is still considered essential for journalism’s position as a superior source of information since credibility affect peoples’ willingness to attend to, believe and retain information (Aalberg & Curran, 2011; Kohring & Matthes, 2007). In order to derive, explain and defend how truth is being told it is crucial to employ visible and clearly demarcated indicators of adequate truth-telling whether the norm is transparency or objectivity (Karlsson, 2010; Tuchman, 1972). Traditionally, this has been achieved by, for instance, using different sources, verifiable facts and keeping the journalists personal opinion out of the news text (Schudson, 2001; Shoemaker & Reese, 1996; Soloski, 1997).

However, as mentioned in the introduction, the development of digital journalism and its specific characteristics in conjunction with decreasing trust in media intuitions have prompted calls for a normative shift from objectivity to transparency in journalism. This theoretical proposal also have an empirical dimension as research has shown that online journalism is being actually produced along transparency rather than objectivity criteria (see Karlsson, 2011, for an overview of the arguments). In a review by Karlsson (2010) on previous transparency research
two different forms of transparency is suggested – disclosure and participatory transparency. Disclosure transparency is when the media are being open and elucidate how news are being produced, such as explanation of news selection, correction of published mistakes and disclosure of journalists preferences allowing the audience to see and assess what factors shaped the news production.

Participatory transparency, on the other hand, is when the audience actively takes part of the news production through, for instance, commenting, distributing and even intervening in the journalistic process.

**Previous empirical research on transparency**

So far most research have discussed and argued for transparency rather than investigating it empirically although there are some exceptions as Hermida (2009) and Lasorsa (2012) have studied journalist perspectives on transparency and Karlsson (2010) and Rupar (2006) have had their focus on content. All of these studies suggest incremental changes in norms and that the old normative regime still prevails. A common trait for these studies is the focus on the production side on either the producers or the product (i.e. content). Concerning user perspectives on transparency there are very few studies and hence we know little about transparency’s actual buoyancy as a functional norm. Some studies on credibility in an online context touch upon some dimensions of transparency (links, user created content) without necessarily conducting them within the theoretical frameworks of journalism or transparency nor assessing message or source credibility in news stories published at mainstream news sites. Nevertheless, some of these studies illustrate that transparency might have an effect showing, for instance, that external links increases user trust and that the context surrounding a news text also have effect in how users perceive credibility, public opinion and issues (Anderson, Brossard, Scheufele, Xenos, & Ladwig, 2013; Flanagin & Metzger, 2007; Freeman & Spyridakis, 2004; Lee, 2010; Thorson, Vraga, & Ekdale, 2010).

A recent study by van der Wurff and Schönbach (2013) investigate audience perspectives within a broader theoretical framework of accountability and finds that readers appreciate both disclosure and participatory transparency but the former is ranked higher than the latter. The most important transparency technique, according to the Dutch respondents, is that journalists should openly admits mistakes in the news reports. Although the aforementioned study implies that the audience appreciates transparency there is a difference between self-report and actual effects.
Research questions

Transparency and credibility can be studied from several perspectives and in this study we limit ourselves to study how transparency affects reader perceptions of journalists (i.e. source) and news content (i.e. message) credibility as these areas are at focus in the contemporary scholarly debate. In view of the limited empirical research in the area we pose the following general research questions: RQ1 – How does transparency affect the readers’ perception of source credibility? and RQ2 – How does transparency affect the readers’ perception of message credibility?

Method

Previous research has shown that credibility can be studied and measured along a range of dimensions such as message-, source-, and medium credibility. For message credibility typical variables are that the text is factual, well-written, and fair, and for source credibility variables typically being used are that the source is objective, biased/unbiased, and the source separates facts from opinions (Bucoy, 2003; Chung, Kim, & Kim, 2010; Newhagen & Nass, 1989; Sundar, 1999). The study at hand follows in this tradition and emphasizes the effect of transparency on source and message credibility (for a complete list of all variables in the study see the results section).

To be able to isolate the effects of transparency on source and message credibility we employed a web-based experimental study with, in total, 1320 respondents. Experimental web studies allows for reaching a large audience, fast and efficient data-gathering as well as high ecological validity (Flanagan & Metzger, 2007; Lee, 2010). The sampling was random and based on a web panel representative for the Swedish population and the study was carried out in close cooperation with reputable Swedish opinion research company TNS SIFO. In total 5000 invitations were sent out during May 2013, 1816 accepted to participate, but 496 interrupted their participation, leading to 1320 final respondents (55 % men, 45 % women, age m=54\(^1\)).

We used a between-subjects (between-groups) design, and thus respondents where randomly assigned to the treatments, plus one control group. For each group between 62 and 65 respondents were used.

The control group was exposed to a plain journalistic text with a headline, a preamble, the story, and the name of the author (the first name being, at least in Sweden, the gender neutral name “Kim”). For the text, an anonymous municipality and a fake newspaper name was used (i.e., the Swedish equivalents of, Middletown and The Middletown Post). The text, 311 words

\(^1\) Although the web panel is representative for the Swedish population, the sample for the study deviates a bit. In the Swedish population there are 49.9 percent men, and 50.1 percent women, and the average age is 41 years. The higher average age in our sample is probably due to the fact that younger people are less inclined to participate in studies.
long, was written by a professional journalist in order to make it as realistic as possible, and
described the municipality’s plans to build an indoor waterpark for 145 million Swedish kronor
and some basic information on how big the waterpark would be and where it was to be located.
In addition, two politicians from different parties where quoted, given an equal amount of space,
disagreeing whereas the waterpark was necessary or not. The topic was chosen since quite many
smaller cities have, after heated debates, used tax funds to build/support various types of
arenas/waterparks.

The treatment groups comprised the same version of the text, with additional indicators
for disclosure transparency (e.g. timestamps, explained angle of story, and corrections) and
participatory transparency (e.g. user-comments and different types of user-generated content)
added. The following treatments, derived from Karlsson’s (2010) compilation of transparency
techniques as well as some other related research, were used in the study (the number in the list
corresponds to the number of the treatment, the control group is 1):

Disclosure transparency (10 treatments)

2. **Correction**: information about a correction that had been made to the text, in this case
the cost of the waterpark was changed.

3. **Earlier version of the text available**: information about, and link to, an earlier, shorter
version, of the text thus in effect showing the gradual build-up of a news story common
in online news.

4. **Explanation of the selection process**: a piece of text informing the reader about how
and why the article was written (i.e. why it was deemed interesting to the public) –
affecting many inhabitants in Medelstad and spending of tax money.

5. **Explanation of the angle/framing in the text**: a piece of text informing the reader
about why the paper has used the angle (political coalitions disagreeing on the issue) used
in the text.

For treatments 6 to 8 the articles was complemented with a piece of text informing the reader
about the journalist’s own values towards the building of the waterpark. The values presented
were negative, positive and neutral/undecided (i.e. the journalist weighing arguments for and
against while not taking an own stand on the issue).

6. **Disclosure of the journalist’s values – negative**

7. **Disclosure of the journalist’s values – positive**

8. **Disclosure of the journalist’s values – neutral/undecided**
Treatments 9-12 investigated if adding a timestamp and hyperlinks affected credibility.

9. Timestamps; added timestamps about when the text was published and updated. This is a rather common practice in online news and shows that news stories are work in progress.

10. Internal link; the article was complemented with an internal link to a previous (short) article dealing with the same topic. This article focused on the old bathhouse and the need to replace or renovate it and that the different political coalitions had opposing view on the issue.

11. External link; the article was complemented with a link to a PDF-document presenting the municipality’s investigations into the building of the waterpark. The document was based on an authentic eight-page report from the municipality of Karlstad, Sweden, but was slightly tweaked (and anonymized) to fit our setting.

12. Internal & external links; in this treatment the article was complemented with both an internal and an external link, with the same setup as treatments 10 and 11.

Participatory transparency (8 treatments)
Treatments 13 to 18 complemented the article with various user comments. For treatments 13-15 the comments focused on the phenomenon (i.e. the building of the indoor waterpark, and the politicians being either positive or negative towards the new waterpark) presented in the article. For treatments 16-18 the comments focused on the writer of the article. For each treatment 2 to 4 comments were used. In order to make the comments as realistic as possible we searched comments sections on several traditional online news sites that had articles published on waterparks. We were able to use some, slightly tweaked, comments and constructed some of our own based on the general spirit of the comments.

13. User comments – negative towards the waterpark.

14. User comments – positive towards the waterpark.

15. User comments – mixed positive/negative comments towards the waterpark.

16. User comments – negative towards the writer.

17. User comments – positive towards the writer.

18. User comments – mixed positive/negative comments towards the writer.

Treatment 19 took the journalist out of the equation and replaced it with a reader.

19. Reader-created news article; for this treatment the byline was “This article was written by one of our readers, Kim Persson”.

6
For treatments 20 and 21 we tested if adding a user-generated picture would affect source and/or message credibility. However, in order to make sure that we actually tested the “UGC-effect” and not a “picture-effect” we used one treatment (20) where the photography was tagged as “Image provided by a reader”, and another (21) where the photography was tagged as being shot by the writer/journalist.

20. User-generated image – photograph: Contributed by one of our readers

In the analysis we tested differences in control group versus treatment 20 and 21, as well as for differences between treatment 20 and 21, but there were no significant differences for any of the tested variables.

Before the test was put into the field it was first tested on fellow researchers, and then it was tested on 300 random test persons from the web panel (these 300 were then excluded from the sample for the real test). From the first test (on fellow colleagues) we got some suggestions about changes in formulation of questions. These were taken under consideration and some questions were altered. The second test (on 300 random test persons) did not indicate any problems, and consequently the test went live.

The experimental setup comprised three parts: (1) a pre-test survey, with variables concerning trust, media use, news consumption, various demographic variables and an accompanying letter promising anonymity, a short description of the setup and framing the study as investigating user perceptions on news media and politics in general, (2) the treatments, and (3) a post-test survey, with variables concerning source, message and actor (not presented in this paper) credibility. The participants had to answer all questions and could not leave the treatment until 30 seconds had passed.

Since the data from the test did not hold for interval- or scale, nor were normally distributed, we analyzed the test results using non-parametric tests (Kruskal-Wallis for non-parametric “ANOVA-test”, and Mann-Whitney for non-parametric “t-test”). We tested for differences in how message and source credibility was perceived by the participants in the different treatments.

Results – Source credibility
To start, the different treatments were analyzed on source credibility where the respondents were asked to rank (1=not at all through 7= totally) to what degree they found the source (the writer) to
be: professional (M=4.19, SD=1.3); partisan/partial (M=3.56, SD=1.43); trustworthy (M=4.23, SD=1.219); objective (M=4.07, SD=1.27); separates facts from opinion (M=4.05, SD=1.384); fair (M=4.10, SD=1.269). The respondents were also asked to give an overall judgment about their trust/confidence in the writer (1=very low through 7=very high), M=4.12, SD=1.171. The use of transparency only made a significant impact on the perception of the source being partisan (see Table 1 below).

Table 1 - Kruskal-Wallis test for significance of differences between treatment groups

<table>
<thead>
<tr>
<th></th>
<th>Professional</th>
<th>Partisan</th>
<th>Trustworthy</th>
<th>Objective</th>
<th>Separates facts from opinion</th>
<th>Fair</th>
<th>Overall trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-2</td>
<td>25,213</td>
<td>30,311</td>
<td>14,115</td>
<td>18,214</td>
<td>19,073</td>
<td>20,864</td>
<td>21,786</td>
</tr>
<tr>
<td>df</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.154</td>
<td>0.048</td>
<td>0.777</td>
<td>0.508</td>
<td>0.452</td>
<td>0.344</td>
<td>0.295</td>
</tr>
</tbody>
</table>

Table 1 shows the Kruskal-Wallis test for significance between treatment groups and the only effect of the treatments relates to the partisanship of the writer.

The Kruskal-Wallis test only reveals if there is a difference between the groups, but nothing about where the difference occurs, nor with what effect. For a deeper understanding Mann-Whitney tests were used to investigate differences between the control group and individual treatments. In the exploratory investigation into possible effects, significant differences were found on four occasions. Two of the treatments had impact on sense of partiality (use of internal link, and user-comments positive towards the writer), as the Kruskal-Wallis test indicate, but in addition two treatments had an impact on trustworthiness (user-comments negative towards the journalist) and perceived professionalism (reader-generated news story).

The respondents’ sense of the source being partisan was significantly lower in the treatment group with internal link (treatment 10) than in the control group (U=1447.5, r=-0.07, p<0.05). The second treatment group affecting on sense of partiality was when the article was presented together with user comments that were positive towards the journalist (treatment 17). Compared to the control group the positive comments towards the journalist decreased the respondents’ sense of partisanship (U=1551.5, r=-0.06, p<0.05). When the article was presented together with user comments being negative towards the journalist (treatment 16), it affected the trustworthiness of the source negatively (U=1973, r=-0.06, p<0.05). Finally, when the article was presented as having been written by a reader (treatment 19, i.e. an instance of user-generated content, and participatory transparency), the source was deemed less professional compared to the control group (U=1564, r=-0.05, p<0.05).
It is important to notice that while finding significant differences for some aspects of transparency, the effects are very small. Also, the four significant differences presented here make up for a very small portion of all treatments and variables.

**Results – Message credibility**

The different treatments were then analyzed on message credibility. The respondents were asked to rank to what degree (1 = not at all through 7 = totally) they found the article to be: based on facts (M=4.21, SD=1.325); trustworthy\(^2\) (M=4.39, SD=1.267); biased (M=3.98, SD=1.301); informative (M=4.38, SD=1.214); objective (M=4.12, SD=1.281); fair (M=4.04, SD=1.149); correct (M=4.12, SD=1.149); separated facts from opinion (M=4.08, SD=1.392); professional (M=4.09, SD=1.315); well-written (M=4.24, SD=1.287); useable (M=4.14, SD=1.319); interesting (M=4.12, SD=1.438); sensationalistic (M=3.55, SD=1.439). Also, the respondents were asked to give a judgment about the overall quality of the article, ranging from 1 (Very bad) to 7 (Very good), M=4.00, SD=1.183.

Again, testing for overall differences between treatment groups, the Kruskal-Wallis test was employed. The test did not find any significant differences on any variable pertaining to message credibility. However, a closer, exploratory look, using Mann-Whitney test showed significant differences on different variables for different treatments. These differences are presented below (ordered by treatment).

Explaining the angle/framing of the article (treatment 5) affected the perception of the article positively. It was perceived as more well-written (U=1568.5, r=-0.06, p<0.05), useable (U=1560, r=-0.06, p<0.05), and more interesting (U=1550, r=-0.06, p<0.05). The treatment also improved the overall judgment, in relation to the control group (U=1600, r=-0.06, p<0.05).

If the journalist expressed his/her positive values towards the project (treatment 7) it had a positive affect on respondents’ perception of the article as being fair (U=1636, r=-0.06, p<0.05) and useable (U=1632, r=-0.06, p<0.05). Conversely, there was no corresponding negative effect if the journalist presented his/her negative values towards the project (treatment 6).

The journalist’s neutral/undecided expression (treatment 8) towards the project, seemed to have an positive effect on whether or not the articles was perceived as being sensationalistic, in comparison with the control group, i.e. the treatment 8 article was perceived as less sensationalistic than the control group (U=1538, r=-0.06, p<0.05).

As with source credibility, the use of links has an impact. When using internal and external links (treatment 12) the article was perceived as more fair (U=1443, r=-0.07, p<0.05),

---

2 The Swedish word “trovärdig” refers to “trustworthy”, “believable”, and “credible”. Thus, although, in English, these three words have different connotations, they are all translated to “trovärdig” in Swedish.
and also the overall quality got a higher mark than for the control group (U=1498, r=-0.06, p<0.05). However, it was only the use of internal and external links, that had a significant – the use of internal (treatment 10) or external (treatment 11) links did not.

Finally, when the article was presented with comments being negative towards the journalist (treatment 16), it had a negative effect on being based of facts (U=1537, r=-0.07, p<0.05).

Overall, the measures for message credibility follow those of source credibility. There are few and weak effects, and different treatments affect different variables. Thus, the facilitation of various “techniques” for disclosure and participatory transparency does not seem to have any greater impact on message or source credibility.

Controlling the correlations between pre-test and post-test variables we can see that other factors than transparency (i.e. the treatments) explain the post-test outcome. Broadly, trust in the (Swedish) media system (message=0.284**, source=0.318**), journalists (message=0.226**, source=0.272**) and politicians (message=0.276**, source=0.272**) in general as well as attitudes towards publicly funded waterparks (message=0.155**, source=0.137**), have larger explanatory strength.

**Discussion**

The most crucial finding from this study is that various practices of transparency have, in fact, almost no effect on source and message credibility. Therefore, transparency cannot, at least not currently based on these results, be considered as an enhancer of journalistic credibility compared to traditional journalistic norms. Transparency will neither revolutionize or reform journalism credibility in short or middle-long terms.

However, the effects are not totally absent, although few and small, and when they occur the findings suggest that they indeed, as previous research suggests (Gillmor, 2004; Karlsson, 2011; Kovach & Rosenstiehl, 2001), have a positive effect on how the audience perceive journalism and news. Links in particular seem important as effects of those could be found in both source and message credibility. Further, user comments also had effects – both positive and negative. Additionally, some contextual information about why the piece was produced or the journalists’ stance on the issue had positive effects. In essence, the results show that different incarnations of transparency have different effects. Equally important, transparency does not decrease journalistic credibility to any large extent, save negative user comments and replacing the journalist with a reader, and, thus, could be added as a journalistic tool without harm.

---

*p<0.01*
Previous research (Flanagin & Metzger, 2007) suggest that medium credibility is important—what kind of (news) organization the information stems from. Perhaps the position of an established institution in society is more important in assessing credibility than actual journalistic performances. Thus, the findings raise a more general question about the connection between journalistic enactments at the micro-level, measured in this study, and trust in media/journalists/news in general. Possibly, the process of cultivating a new norm among the audience work on a longer time frame and at levels that is hard to capture in an experimental setting.

Moving beyond the specific meeting between the journalistic text and the individual user under scrutiny here, transparency might serve another function when journalism comes under attack from various social coalitions much like objectivity has served as a recognized line of defense for news media (Tuchman, 1972).

Interestingly, the most important transparency technique in the van der Wurff and Schönbach study (2013) on users attitudes is the journalists’ willingness to admit mistakes. In our study corrections had no effects what so ever. The difference between the studies might be related to cultural specifics but another viable option is that there is a difference between user attitudes towards transparency and actual transparency effects. However, our findings correspond well with the Dutch respondents preference for disclosure over participatory transparency.

Regarding the broader issue of the absence of effects in the current study there are several things that might affect the results. As this study takes place in a static clean experimental setting there might be other dimensions that are important in how transparency affects credibility. Design elements of the website may be important on where and with what salience the comments, corrections and links are presented (in this study everything beside the timestamps and user-generated picture was placed after the news text as is common practice in contemporary Swedish online news). As might, for instance, the number of and intensity of the comments. Users may not pay attention to the things included in the treatment, or not viewing them as important or relevant. Further research into these dimensions are needed.

A common argument against experimental studies is that internal validity may be achieved at the expense of external validity (cf. Pedhazur & Pedhazur Schmelkin, 1991). However, the study is based on a large and representative sample of the Swedish population and all participants were randomly assigned to the different treatment groups. Therefore, we argue that the internal, as well as the external, validity of the study is high.

Having said that, experiments are by their nature artificial, and in this study there are limitations concerning the number and variations of treatments and size of the treatment groups. Other
treatments, with other combinations of transparency techniques, not investigated in this study, or other research settings might yield another outcome. In closing, we need more research on how the audience view transparency with regards to representative samples of attitudes towards transparency as well as in-depth data on the views of and reasoning’s about transparency and further experimental studies.

References


