

# Postprint

This is the accepted version of a paper published in *Journalism & Mass Communication Quarterly*. This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

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

Karlsson, M., Clerwall, C., Nord, L. (2016)

Do not stand corrected: Transparency and users' attitudes to inaccurate news and corrections in online journalism.

Journalism & Mass Communication Quarterly, 94(1): 148-167

https://doi.org/10.1177/1077699016654680

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-45830

# Do not stand corrected: Transparency and users' attitudes to inaccurate news and corrections in online journalism

Abstract:

The accelerating news cycle means there is a risk that errors become more common, but digital media also allow for correcting errors continuously and being transparent about this. In this study, we investigate Swedish citizens' attitudes toward errors and corrections. The results demonstrate that citizens have strong expectations that news media publish correct information and they have little tolerance for errors. People's background and media use do not affect attitudes toward errors and corrections to any large extent, but media trust explains a small fraction of the results—It is only those who already trust the media that appreciate corrections.

Keywords: accuracy, errors, corrections, immediacy, trust, transparency, accountability

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Acknowledgement: This research was financed by the Swedish Research Council. The authors would like to thank the three anonymous reviewers for their comments.

When the news media misinforms the public it leads to misperceptions of reality amongst its audience members as well as affecting trust and credibility (Arsenault & Castells, 2006; Bugeja, 2007; Maier, 2002). Without trust and credibility, people will turn away from traditional media and, consequently, seek information from other suppliers (Flanagin & Metzger, 2007; Kohring & Matthes, 2007). These other actors may pursue an agenda marked by self-interest rather than the public interest (Arsenault & Castells, 2006). Likewise, without a news consuming citizenry, political actors do not have to deal with undesirable information being made publicly available and have less need to rationalize their behaviour and privileges (Boczkowski & Mitchelstein, 2013; Edelman, 2001; Schudson, 2003). Thus, what the media reports, how accurate it is and how citizens evaluate news reporting in general, and inaccuracies in particular, is of the utmost importance.

As Patterson (2013) points out in his appeal for knowledge-based journalism, a part of the problem is the quality of the information published by the news media, partly caused by the accelerated news cycle. This issue becomes even more pressing since the nature of publishing is shifting as it moves online (Joseph, 2011; Karlsson, 2011; Saltzis, 2012). Online journalism is rapid and inaccurate from time to time but its liquid character also allows for the correction of errors and informing the users about doing so. Thus, digital media allows, at least potentially, for more transparent journalistic production, something that is predicted to counter the falling quality standards and, ideally, restore or even increase trust and credibility (Karlsson, 2010; Lasorsa, 2012; Phillips, 2012).

However, while changes in journalism and the news media are hotly debated within communication research, citizens' perspectives and the demands of journalism are often missing (Boczkowski & Mitchelstein, 2013; van der Wurff & Schoenbach, 2014). In this study we focus on changes in online news and how users perceive those changes. More

specifically, the purpose is to study users' attitudes towards errors and corrections in an online environment.

## Journalism, accuracy and an informed citizenry

The link between professionalism, objectivity and truth-seeking is essential in most definitions of journalism. The basic idea of journalism as a 'fact-based discursive practice' distinguishes it from literature and commercial messages (Chalaby, 1998). The principle of truth-seeking is recognized not only by media theorists, but also by journalists from both old and new media, who in surveys consider 'getting the facts right' as a paramount value (Kovach & Rosenstiel, 2001; Weaver & Willnat, 2011). This idea is further strengthened by the fact that in mediated democracies most citizens expect the media to provide accurate information about current events (Bennett & Entman, 2001).

The first prerequisite of an informed citizenry is access to accurate facts since people rely on this information when making decisions (Kuklinski, Quirk, Jerit, Schwieder, & Rich, 2000; Patterson, 2013; Strömbäck, 2005). Even if obstacles exist in terms of, for instance, powerful sources' influence over content and the market orientation of journalism (Manning, 2001; Shoemaker & Reese, 1996), empirical evidence convincingly shows that the media, especially public service media, make a difference to people's ability to be informed (Aalberg & Curran, 2011).

These obstacles are well known to researchers and still exist. A less explored theme is the changing media landscape and how the digitalization of the media fundamentally alters how journalism is produced, and how public trust in journalism is affected. Challenges facing professional journalism values have been characterized as a process where a traditional journalism model of verification has been gradually replaced by a new model of assertion.

While the former model was based on the principal value of getting things right and a fear of

getting things wrong, the new model is based on the 24/7 media culture where the most important thing is to get news out as quickly as possible. This means that the lines between facts and information and interpretations and speculations are becoming increasingly blurred (Kovach & Rosenstiel, 2010).

Considering the publishing speed in journalism, at least two things are new when it comes to inaccuracy and corrections in the current media landscape. Both are related to the liquid and reprogrammable nature of digital media (Deuze, 2008; Joseph, 2011; Karlsson, 2012). First, the speed with which information can be collected, processed and published is very fast, suggesting that mistakes will be more common. Second, since the material never actually leaves the media organization's database (unless downloaded) it is very easy to correct and erase mistakes or even entire news items instantly.

This development has led some researchers to propose and observe that journalists will cut corners, with sinking quality standards as a consequence (Deuze & Yeshua, 2001; Joseph, 2011; Karlsson, 2011; Salaverria, 2005; Saltzis, 2012; Singer, 2003). In effect, on the one hand, this has added yet another constraint to the media's ability to inform citizens with accurate facts. On the other hand, it has also been argued that this development in the news media can be viewed as an opportunity, as it will make it easier to make corrections and be open about what has been corrected and why, potentially increasing trust and credibility in the eyes of the audience (Kampf & Daskal, 2014; Karlsson, 2010; Lasorsa, 2012; Maier, 2007; Phillips, 2012; Plaisance, 2007). However, the latter argument rests on the assumptions that both news media, and their publics, share a common view of the role that corrections can serve, something that has yet to be verified by empirical research.

## Trust, corrections and accountability

Trust in news media is constitutive (Kohring & Matthes, 2007; Vanacker & Belmas, 2009). Previous research illustrates that trust in media influences media exposure and how people assess content (Tsfati, 2003; Tsfati & Cappella, 2003). If people do not believe that media can fulfill their informative needs, they are less inclined to consume them (Tsfati & Capella, 2005). Similarly, in a study on investigative reporting Willnat and Weaver (1998) found that peoples' general attitudes towards the media predict their attitude towards investigative reporting. As people put their trust in news media they are also trusting the professionalism of journalistic practice to get the news right (Liebes, 2000).

Theoretically, this entails a connection between individuals' trust in news and expectations of how news media (ought to) perform. In the case of errors and corrections it is likely that a breach of journalistic professionalism (like an error) will be viewed negatively. A question, then, is to what extent an act of accountability (like a correction) can repair that breach.

Following previous research on trust in news, we might also expect that people with more trust in news media have a different, and perhaps a more positive, view than those with lesser trust, as they might perceive errors as an exception. Or as Vanacker & Belmas (2009, p.117) phrase it "... when the public is convinced that the media have its best interests in mind, inaccuracies, mistakes and ethical lapses will not decrease the standing of the media".

Likewise, the attitude towards corrections might also follow the same pattern as corrections are also content and a journalistic performance. Thus, corrections might only have limited, if any, appeal to those already sceptical towards the media as the corrections could be viewed with suspicion, suggesting there might be differences between those with high and low trust in news.

To be accountable is to answer for one's behavior to someone outside the organization, for instance citizens. Part of being accountable is to admit wrongs and communicate with the public, often in the form of corrections (McQuail, 2005; Plaisance, 2000; Vanacker &

Belmas, 2009). Yet, how media users value accountability mechanisms such as corrections is rarely studied, meaning that we know little about how media's accountability is viewed by one of their key stakeholders (Plaisance, 2000).

Corrections are a form of accountability that ensures that when journalism fails in delivering truthful information to the public it should be equally truthful about these failings or otherwise risk losing the public's trust (Bugeja, 2007; Kampf & Daskal, 2014). Thus, corrections can be understood as an important tool in holding journalists accountable to the public which they serve (Christians, 1985). Corrections, although not a new subject of study, are not very common, as previous research has illustrated (Arsenault & Castells, 2006; Barkin & Levy, 1983; Nyhan & Reifler, 2010). In research, corrections have been studied to see if citizens will change their (mis)beliefs (Nyhan & Reifler, 2010) and not necessarily on how citizens view the erroneous acts per se, however, there are exceptions, detailed in the next section.

While there seem to be a connection between journalistic performance and trust, as Christians points out (1985; see also Glasser & Ettema, 2008), we need to be careful in assuming that codes of conduct – standards that media can be held accountable against – will improve citizen's trust in media and media's overall credibility in society, since what is considered proper conduct can differ between professional journalists and the citizenry. Furthermore, trust and credibility operate at different levels, where there exist medium- (the news organization as a social institution), source- (i.e. the journalist) and message- (i.e. the content) credibility (Flanagin & Metzger, 2007; Sundar, 2008). Corrections that are made to the content by the journalist may not necessarily affect how the public view the news organization, or vice versa, as the link between journalistic performance and the public's trust in media institutions is not established (Hanitzsch, 2013).

# Accuracy, corrections and the news audience

While corrections have been researched from a user perspective previously, corrections in relation to the seriousness of the error or within the specific context of online journalism are under-studied. Nyhan and Reifler (2010, see also Garrett, Nisbet, & Lynch, 2013; McGlone 2005) studied how corrections are conditioned by the audiences' ideological preferences and partisan beliefs. The study showed that liberals would be more welcoming towards corrections that reinforced liberal worldviews but the same was not the case with corrections with a more conservative angle (and vice versa). Although user perspectives on sources have been studied (see Blankenburg, 1970; Maier, 2002, 2005, 2007; Porlezza, Maier, & Russ-Mohl, 2012), it is far more common to focus on corrections per se and their role for journalists and journalism (Barkin & Levy, 1983; Hindman, 2005; Joseph, 2011; Kampf & Daskal, 2014; Karlsson, 2010; Porlezza et al., 2012). From previous research we know that sources seem very sensitive towards even minor errors which affect their perception of news credibility (Maier, 2002; Porlezza et al., 2012). The Pew Research Center (2013) has, for many years, collected citizens' attitudes towards, amongst other things, accuracy in news and whether the news organizations try to cover up their mistakes. The results show that the American public is very sceptical and that a large majority agrees that news organizations often have inaccurate stories or try to cover up mistakes. The latest results are at an all-time low but the results do not say anything about how citizens view different kinds of inaccuracies or what role corrections serve.

From empirical research on the content of online news we know that errors are published and are sometimes, but not always, corrected (Kampf & Daskal, 2014; Karlsson, 2010; Maier, 2007). We also know that online production conditions affect content, so that a journalistic text can be profoundly changed over time, including swapping headlines, factual errors and large ideological shifts amongst other things (Karlsson, 2012; Kutz & Herring, 2005;

Salaverria, 2005). A recent comparative study from Russia, Poland and Sweden showed that journalists believed that the audience had lower demands for verification online and that many journalists themselves thought that verification could be done during, rather than before, publishing, resulting in inaccurate news being disseminated (Anikina, 2015).

Consequently, it seems that fact checking may be more lax online and there are indications that journalists assume that the audience is happy to go along with this. Turning to audience studies, the results are somewhat ambivalent. On the one hand, swift news dissemination is one dimensions of (online) journalism that users most appreciate (Bergström, 2008; Chung & Yoo, 2008; Nguyen, 2010; van der Wurff & Schoenbach, 2014). On the other hand studies from different time periods and settings uniformly find that accuracy is a very important trait of journalism to users (Braman, 1988; Heider et al., 2005; Willnat & Weaver, 1998).

Likewise, two recent studies by van der Wurff & Schoenbach (2013, 2014) found that users were, in general, conservative in their views about changes in journalistic accountability and that users expect news media to be transparent about their mistakes (see also Braman, 1988). These second group of findings suggest that citizens, when asked, expect high (and old) standards as well as accountability from the media, suggesting that the citizens might not be willing to part with the high standards despite the changing publishing rhythm.

A previous study in an experimental setting (Karlsson, Clerwall & Nord, 2014) found that actual corrections did not have an effect on how citizens evaluated a news item. Thus, there may be a rather large gap between the idealized visions that citizens hold of journalism and the impact of actual journalistic performance on citizens' perceptions of credibility. This dimension has not been thoroughly explored hitherto.

In short, previous research on users hints about a citizenry that is sceptical towards inaccuracy in journalism, at least in theory, while the production conditions of online news increase errors, yet are also better at providing corrections. In this context, it may also be

argued, although little previous empirical research has probed this dimension, that users who consume more of their news on digital platforms would be more familiar, and thus more tolerant, with issues of speed, inaccuracy and correction in online news. Evidence from a Pew Research Center report (2013) points in this direction. The report shows that people relying on online news services think that news organizations' are more willing to admit mistakes and not cover them up, compared with news users with a preference for analogue formats. Hence, there may be a socializing effect of online news consumption.

## **Research Questions**

The purpose of this paper is to study users' attitudes towards errors and corrections in an online environment. Since there is not a lot of earlier research to rely on we ask research questions rather than posing hypotheses. First of all we want to establish a baseline of users' perspectives on errors in general:

RQ1: What are users' attitudes towards errors published by news outlets online?

Then we move on to see if attitudes change depending on the seriousness of an error and a presence of a correction:

*RQ1a:* How are users' attitudes affected by the seriousness of the error?

RQ1b: How are users' attitudes affected by the presence of a correction?

In addition we want to know how trust, media use, demographic factors play into this, especially in light of previous research on media trust and whether consumption of online news has an effect on attitudes. Consequently the last RQ's asks:

RQ2: How do existing levels of media trust affect attitudes towards errors and corrections?

RQ3: How do existing levels of digital and analogue media use affect attitudes towards errors corrections?

RQ4: How do demographic factors such as age, education or gender affect these attitudes?

## Method

This study was carried out in Sweden as part of a larger research project (also including a web based experimental study and focus groups) examining changes in news journalism through the eyes of citizens with a particular focus on how particularities of online news – instant publishing, interactivity, hyperlinking – affect issues concerning credibility and trustworthiness. The survey part of the study examined, amongst other things, citizens self-articulated attitudes to errors and corrections.

In order to measure attitudes towards errors and corrections, a survey was sent out to a web-based panel representative of the Swedish population from age 16 and above. The survey was set up and managed by the reputable Swedish polling company TNS Sifo during March 2014. In total 7,918 requests were sent out, resulting in 2,091 successful answers (52 % women, 48 % men, ages 16 to 79, m = 51, s = 16)<sup>1</sup> after 3 reminders. Thus, the response rate for the survey was 26.4 %. The low response rate, regrettably something that increasingly plagues social sciences in general, is less than ideal and the results have to be read with this limitation in mind.

The Swedish media system has some distinctive features that are worth noting. On the consumption side, newspaper reading figures are comparatively high as two of three Swedes read a daily newspaper. Public service have a stable position in the broadcast media market, with an television audience market share around 30 % (Medieutveckling, 2015). Internet penetration is very high and about 90 % of Swedish households have a broadband connection (Findahl & Davidsson, 2015). Traditionally strong news providers are increasingly challenged by commercial and more entertainment-oriented competitors, but television news reaches

83 % of the Swedish population every day (Medieutveckling, 2015). This combination of traditional news culture and digital media accessibility makes Sweden an interesting case to examine.

Furthermore, Sweden has been referred to as a country with a 'democratic corporatist' media system, characterized by a mixture of liberal ideas of press freedom and acceptance of some state interventions in the media sector (Hallin & Mancini 2004; Strömbäck et al. 2012). The Public service broadcast media system is financially based on license fees decided by the Swedish Parliament and there is a press subsidy system where the state supports a limited number of newspapers with weak market positions. It is plausible to believe that these linkages between media and politics may have some effect on citizens' expectations of media performances, but at the same time most people probably do not consider media structural conditions in the course of their news consumption.

## Measurements

Substandard quality in journalism can be related to many things – imbalance, bias, hype, and inaccuracy to mention only a few dimensions. Since accuracy 'is the foundation upon which everything else builds' (Kovach & Rosenstiel, 2001, p.43) we utilized factual objective errors (Blankenburg, 1970; Kampf & Daskal, 2014; Maier, 2005; Porlezza et al., 2012). Factual errors also have the advantage of being easy to relay to a survey respondent, compared to subjective errors. We also distinguished between small and large factual errors, which previous research often has not done (Maier, 2002; Maier, 2005), in order to see if user attitudes changed accordingly. Although the study does not exhaust the potential variables in this area, and has to be read with these limitations in mind, it allows user attitudes to be probed more finely than in previous research.

Our six dependent variables were framed in the context of increased publishing speed in online news and were phrased in the following manner (translated from Swedish): Our first variable claimed 'I tolerate errors creeping into the news in order to get the news published as quickly as possible'. This first variable examines the general attitude towards errors in news amongst citizens while the following four variables make the respondent evaluate four very specific scenarios about errors and corrections in online journalism. The first of these four variables claimed 'I tolerate *small* errors in news **only** if the journalist makes a correction afterward [An example was also given: Imagine a news item about a demonstration running riot, incorrectly describing the number of arrested people as 50, although it eventually turned out to be 49]. Another variable was identical apart from the fact that the news item was not corrected. The next pair of variables focused on big errors in the news: 'I tolerate big errors in the news **only** if the journalist makes a correction afterwards [An example was also given: Imagine a news item about a demonstration running riot that incorrectly describes the police as using unprovoked violence although the disturbance really started with demonstrators throwing stones at the police and breaking shop windows]. Another variable was identical apart from the statement that the news item was *not* corrected. The sixth and final dependent variable stated 'I would tolerate an inaccurate news item being deleted from the news site without the journalist/news site acknowledging this'.

We utilized a seven-point Likert scale for all dependent variables. The independent variables of gender, age, education, media use and media trust are developed further in Table 2. Taken together, the dependent variables, we argue, provide an indication of what citizens think of errors, corrections and being misinformed in the context of online news. However, asking several different questions about errors and corrections allows probing how attitudes vary with the severity of the error. This in turn, can serve as a proxy for discussing the effect of errors and corrections on citizens. In that sense, it is probably the differences, if any, in

attitudes between scenarios that say the most about citizens' views. Furthermore, these results of self-reported attitudes also need to be considered in context. In a previous experimental sub study (Karlsson et al, 2014) we found that corrections had no effect and, thus, it is important to follow up citizens' attitudes to errors and corrections to see if the results match.

#### **Results**

First of all we wanted to probe to what extent citizens accept errors in the news in exchange for getting the information fast, and RQ1 asked for user attitudes towards errors in order for news to get published fast (errors ok, if quick to publish). Table 1 shows that a majority (60 per cent) of the respondents place themselves on the negative side of the scale, 23 per cent are on the positive side and, in total, only 2 per cent completely agree it is a tolerable practice. Thus, the Swedish respondents are, unsurprisingly, in general negative towards sacrificing accuracy for swift dissemination of news. This provides a baseline observation that the other results can be viewed against.

We then asked about how the attitudes towards errors were affected by the seriousness of the error (RQ1a) and the presence of a correction (RQ1b) and Table 1 gives an overview of the results. Small errors that are corrected are well accepted, with 66 per cent of the respondents on the positive side. It seems that while errors are not acceptable in general, as reported above, the users allow some margins if the errors are corrected. Thus, although the users when first asked flat out reject errors they seem to be willing to make trade-offs when the bargain is more detailed. Here, being transparent about mistakes has a positive effect, duly suggested by previous research (Karlsson, 2010; Kampf & Daskal, 2014; Lasorsa, 2012; Phillips, 2012; Plaisance, 2007). Large corrected errors, however, are not accepted, with 74 per cent on the negative side of the scale. Interestingly, this difference in attitudes shows that it is not only the act of correction per se that is important but the magnitude of the error.

Consequently, our respondents put great demands on journalists and their performance *before* news items are published and expect them to have high, albeit not perfect, standards.

#### <Table 1 around here>

Moving on to attitudes towards errors (small and large) that are not corrected, it comes as no surprise that the audience is more sceptical towards errors that are not corrected. 50 per cent of the respondents are more negative than positive when it comes to small errors that are not corrected, while 32 per cent think it could be tolerable to some extent with small errors that are not corrected. Compared to the small-error-but-corrected scenario above the difference is telling and the results clearly show that corrections are appreciated and important. Calculating the 'net effect' of corrections – subtracting the differences between the respondents that express tolerance in the different 'small error groups' – the result is a gain of 34 percentage points in the corrected scenario, a kind of 'transparency effect' considered by previous research.

Moving on to large and uncorrected errors the share of respondents on the negative side is as high as 90 per cent, with 70 per cent completely disagreeing, while only 3 per cent agree that it could be an acceptable practice. Compared to the large-error-but-corrected scenario the outcome is more negative but the vast majority views both practices as unacceptable. The 'net effect' of corrections in this case is only 13 percentage points, but we need to keep the low means in mind here as well. Both types of corrections have an effect on users' attitudes towards errors but the effect is greatest when the errors are small.

Corrections can be viewed as a change to an existing text, as previous research has emphasized, but they could also be a complete withdrawal of a flawed news piece. The last question reported in Table 1 concerns whether or not it is seen as tolerable to remove

erroneous news items from a site, without informing the users and acknowledging that a mistake was made. 63 per cent of the respondents placed themselves on the negative side of the scale, while 19 per cent think it is a tolerable practice. Judging by user responses, it is evidently a better option – yet not a good one – to withdraw a news item rather than correct a big error, regardless of whether the correction is being communicated or not. This points, like the rest of the results, to the fact that our respondents are rather critical towards any big errors slipping through at all.

So far our results show that the audience are negative towards errors, but they are forgiving when it comes to small errors that are corrected. In all other cases, a large majority of the respondents have little sympathy for inaccuracies in journalism. In particular it can be noted that corrections in themselves are not a cure for bad journalistic practice, as they cannot mend large errors.

Now, Table 1 above gives us a general idea about attitudes towards errors, the seriousness of the errors and the presence of corrections, answering RQ1, RQ1a and RQ1b. The next step is to analyze how media trust (RQ2), media use (RQ3), gender, age and education affect attitudes towards errors and corrections (RQ4). For the purpose of a clear presentation, the respondents were divided into groups based on their age. The groups are based on 10 year intervals, with the exception of '29 years or younger' and '60 years or older'. The categories for education are based on the Swedish education system (with 9 years' education as a minimum).

#### <Table 2 around here>

Table 2 above shows the mean value for answers on a 7-point scale (from 'completely disagree' to 'completely agree'). Media trust (RQ2) was measured through two variables, one

concerning general trust in journalists ('In general, how high is your trust in Swedish journalists?'), and the other concerning general trust in news media ('News media can be trusted'). The two variables were checked for scale reliability (Cronbach's alpha = 0.818) and then computed as an index of media trust. For simplicity of presentation the variable was recoded to 'low' (values 1–2 on a 1-7 scale) and 'high' (values greater than or equal to 6). The mean for each variable is presented in Table 2, with a quite clear, and significant, indication that that respondents with a high general trust in the media tend to have a higher tolerance for errors.

RQ3 asked how existing levels of digital and analogue media use affect attitudes towards errors and corrections. Media use was measured using in total six variables, three for digital media (personal computer, tablet, and mobile phone), and three for analogue media (TV, radio, and newspapers), and in the analysis high users of digital media (5 days or more per week on any digital platform) are set against low users of digital media (less than 5 days per week) and all users of analogue media. Table 2 above shows that media use only has a significant effect on the mean value for 'small errors that are corrected' (p<.05). Thus, the patterns we have seen earlier – tolerance of small errors – is even more prevalent in high digital users. In all other cases, all users are equally sceptical, suggesting that our respondents hold a traditional 'vetting before dissemination' viewpoint.

RQ4 asked how demographics affected attitudes towards errors and corrections. As Table 2 shows there is no significant difference between men and women. Looking at age we can see that there are significant differences between age groups, where older respondents are less forgiving when it comes to errors. For education there are only significant differences between the groups when it comes to large, but corrected errors, small and large errors that are not corrected, and if it is seen as ok to remove an erroneous item without informing the

users. Although the numbers vary, there is an indication that the higher the education, the lower the tolerance towards errors.

Given the significant differences in means for media trust, media use, age, education (for 'small errors that are corrected'), a closer investigation is merited. For this, regression analysis was carried out, using media trust, media use, age and education as predictors.

<Table 3 around here>

Even though the four predictors explain a significant proportion of the variance, the  $R^2$  is very low, 0.074, and thus there are other factors that foster tolerance for errors in online news.

To summarize, the findings show that media trust affects tolerance for errors – those more trusting in media have a more positive attitude towards both errors and corrections – but this effect is very small and that the other measured factors have an even smaller or, more commonly, no effect.

# Discussion and conclusion – the limited effect of transparency

Errors in the news media matter and are a complex issue. Citizens, quite obviously, have little sympathy for them and corrections cannot make up for bad journalism in the first place. Thus, at least at first glance, it seems imperative to ensure that high standards are maintained in the information published despite recent changes in the media system pointing in the opposite direction (Joseph, 2011; Karlsson, 2011; Patterson, 2013). Otherwise it is possible that citizens will abandon journalism, as trust and credibility in the news media will be affected if their performance falls short of their own and citizens' standards (Arsenault & Castells, 2006; Bugeja, 2007; Kohring & Matthes, 2007; Maier, 2002).

On a more positive note it seems that these two social groups, professionals and citizens, are on the same page when it comes to (in)accuracy in journalism and that this, in turn, provides a platform for a code of conduct that resonates well within both camps (Christians, 1985). A key question, then, is to what extent journalists and citizens will influence content in view of what previous research has pointed out in terms of production conditions which will not be any better in an digital environment (e.g. Arsenault & Castells, 2006; Manning, 2001; Schudson, 2003; Shoemaker & Reese, 1996). It is beyond the scope of this study to provide answers to this question but the future is looking gloomy especially in view of the general downsizing and de-skilling of the news media and journalism (Ryfe, 2012).

Although previous research studies are right in that corrections are easier to make in the digital environment, it is very doubtful, based on these results, that openness about these mistakes will increase trust unconditionally or even to any large extent (Kampf & Daskal, 2014; Karlsson, 2010; Maier, 2007). Judging from our survey of Swedish citizens, journalists should get their stories right straight off the bat, but might be forgiven for getting some of the details wrong, if they eventually get them right. Hardly surprisingly, people do not like being fed inaccurate news and, a key finding from our study, corrections can only occasionally serve as a remedy. Furthermore, this is not, to any large extent, dependent on gender, age, education, media use or media trust – the expectation for accurate news and the obligation on the news media and journalists to deliver them is firmly rooted within many different groups, since our regression analysis above can only account for a small percentage of the variation.

The audience has not grown accustomed to errors in online news despite them being around for around twenty years in Sweden. Thus, the Polish, Russian and Swedish journalists in Anikina's study (2015) who think that verification can be done after publishing and that users have a higher tolerance for errors online are not on the same page as our respondents.

On the contrary, users seem very attached to the traditional ways of journalism – verifying

information before publishing it – reflecting previous research on similar normative issues (Nguyen, 2010; van der Wurff & Schoenbach, 2013).

We can also note that those who are more distrustful of the media do not have their mistrust remedied to any large extent by news media being forthright about their mistakes. In fact those with low media trust are even *less* forgiving about mistakes and corrections than those with high trust, corrections do not seem to win back those with low media trust. Why this is the case is impossible to tell within the current study but perhaps they mistrust corrections as well, as they emanate from the same social institution. Another possible explanation is that their mistrust is so fundamental that they believe the media gets most stories wrong and that one or two corrections won't change that. In that sense, these results resemble earlier studies where negative attitudes towards the media predicted a negative attitude towards investigative journalism (Willnat & Weaver 1998) or where mistrust in media affects media exposure and how content is viewed (Tsfati, 2003; Tsfati & Cappella, 2003). In other words, anything the media does, however praiseworthy in theory, are viewed through the lenses of existing attitudes that are not easily changed whether positive or negative.

Concerning the scholarly debate on whether journalism is moving towards another or changed normative and accountability system (Kampf & Daskal, 2014; Karlsson, 2011; Plaisance, 2007) our interpretation of the results is that the old rules still apply. Citizens are conservative in their expectations of what journalism should provide. Transparency about errors may have a small effect. Consequently, there is not much room for journalists to cut corners even though that opportunity amply exists online and is a path too often travelled, as previous research illustrates (Karlsson, 2012; Kutz & Herring, 2005; Salaverria, 2005).

While most of the results from the study suggest that the practice of online journalism and citizens' expectations are on a collision course there is some fruitful common ground to be

found. If news sites commit errors the public is quick to forgive them should the errors be corrected and, most importantly, are small. Thus, while errors are an inseparable part of journalism and even more so online it seems, judging from the responses, that journalists and media organizations can find corrections a useful accountability tool. To be accountable is to answer for one's behaviour and to have a dialogue about one's performance with people outside the organization (McQuail, 2005; Plaisance, 2000; Vanacker & Belmas, 2009). The results from this study underline the significance of this dialogue and also that finding a reasonable equilibrium between journalistic performance and citizens' expectations will be as delicate as it is important.

This study also raises questions about the relationship between the different layers of trust and credibility – medium, source and message – and what really shapes trust in the first place. It is easy to agree with Hanitzsch's assessment (2013, p.207ff): 'The troubled nature of the relationship between news-media performance and trust in journalism might well have to do with our quite limited knowledge about the nature of trust and what it essentially means to have trust in an institution.' On a similar note, we need to keep in mind that survey research, such as this, can only investigate self-reported attitudes. Thus, when asked to articulate their attitudes towards errors and corrections, respondents will be triggered to report ideal constructs – their own and societal. In our previous experimental study (Karlsson et al., 2014), we found no effect in content or source credibility when a news item was corrected<sup>2</sup> suggesting that corrections have no real effect, at least in an experimental setting. This raises questions of how important journalistic performance is in an everyday situation in relation to an abstract idealized incarnation of journalism deliberately asked for in a survey. It is also a question of how observant and engaged users are when they consume news items and if a correction effect can only be achieved after repeated exposure, if at all. Related, there might be long-term effects of various forms of accountability techniques or systems but that would

require longitudinal and comparative data. The connection between what journalists actually do, what people state about journalistic qualities and actual effects on trust and credibility is opaque and in need of further exploration.

There are limitations to this study as it only covers Swedish citizens and draws its conclusions from a survey with a relatively low response rate. One wonders if our respondents are overrepresented by people who take an interest in the news media and if their outlook is different from that of non- or low media consumers. Then again, our study does contain variation in all variables yet there are still no signs of any major differences between groups. Furthermore, the results may have been influenced by the questions, wording and examples used in the survey that could have caused confounding interpretations.

Nevertheless, the findings from this study – especially the strong opposition to inaccuracies overall and the limited effect of corrections – are interesting enough to pursue further in future research. One path could be to expand the dimension of digital users to see if involvement in form of, for instance, commenting, sharing, answering polls and more would add explanatory strength. A future study should also include more qualitative approaches to audiences' views on these issues in addition to extending a quantitative approach in time and space.

Another strand of research worth further exploration is the stratification and 'net effect' of different kinds of corrections. As our results show, citizens' attitudes towards errors and corrections depend on the level of error and there are more kinds of errors and more nuances to apply than the ones measured in this study. Additionally, it would be interesting to further investigate the differences between citizens with high and low media trust and their views. This study only used a limited number of measurements but this was still enough to distinguish a complexity that needs to be further explored to inform the debate about what role corrections can fill when news media underachieves, especially since citizens seem to be

willing to make some trade-offs. Finally, more research is needed to link journalistic performance with trust in journalism as a social institution.

## References

- Aalberg, T., & Curran, J. (2011). How Media Inform Democracy. New York: Routledge.
- Anikina, M. (2015). Ideals and values of modern journalists: The search for balance. In G.

  Nygren & B. Dobek-Ostrowska (Eds.), *Journalism in Change: Journalistic Cultures*in Poland, Russia and Sweden (pp. 153–178). Peter Lang.
- Arsenault, A., & Castells, M. (2006). Conquering the minds, conquering Iraq: The social production of misinformation in the United States a case study. *Information, Communication & Society*, 9(3), 284–307. doi:10.1080/13691180600751256
- Barkin, S., & Levy, M. (1983). All the News That's Fit to Correct: Corrections in the "Times" and the "Post". *Journalism Quarterly*, 60(2), 218–225.
- Bennett, W. L. & Entman, R. M. (2001). *Mediated Politics. Communication in the Future of Democracy*. Cambridge: Cambridge University Press.
- Bergström, A. (2008). The reluctant audience: Online participation in the Swedish journalistic context. *Westminster Papers in Communication and Culture*, *5*(2), 60–80.
- Blankenburg, W. (1970). News accuracy: Some findings on the meaning of errors. *Journal of Communication*, 20(4), 375–386.
- Boczkowski, P. J., & Mitchelstein, E. (2013). *The News Gap. When the Information Preferences of the Media and the Public Diverge*. Cambridge: MIT Press.
- Braman, S. (1988). Public Expectations of Media versus Standards in Codes of Ethics. *Journalism & Mass Communication Quarterly*, 65(1), 71–77.

  doi:10.1177/107769908806500109

Bugeja, M. (2007). Making Whole: The Ethics of Correction. *Journal of Mass Media Ethics*, 22(1), 49–65. doi:10.1080/08900520701315285

- Chalaby, J. (1998). The Invention of Journalism. London: Macmillan.
- Christians, C. (1985). Enforcing media codes. *Journal of Mass Media Ethics*, 1(1), 14–21.
- Chung, D. S., & Yoo, C. Y. (2008). Audience Motivations for Using Interactive Features:

  Distinguishing Use of Different Types of Interactivity on an Online Newspaper. *Mass Communication and Society*, 11(4), 375–397. doi:10.1080/15205430701791048
- Deuze, M. (2008). The Changing Context of News Work: Liquid Journalism and Monitorial Citizenship. *International Journal of Communication*, 2, 848–865.
- Deuze, M., & Yeshua, D. (2001). New Ethical Dilemmas: Lessons from The Netherlands. *Journal of Mass Media Ethics*, 16(4), 273–292. doi:10.1207/S15327728JMME1604
- Edelman, M. (2001). *The Politics of Misinformation*. Cambridge: Cambridge University Press.
- Findahl, O. & Davidsson, P. (2015). *Svenskarna och Internet 2015*. Stockholm: Internetstiftelsen.
- Flanagin, A. J., & Metzger, M. J. (2007). The role of site features, user attributes, and information verification behaviors on the perceived credibility of web-based information. *New Media & Society*, *9*(2), 319–342. doi:10.1177/1461444807075015
- Garrett, R. K., Nisbet, E. C., & Lynch, E. K. (2013). Undermining the Corrective Effects of Media-Based Political Fact Checking? The Role of Contextual Cues and Naïve Theory. *Journal of Communication*, 63(4), 617–637. doi:10.1111/jcom.12038

- Glasser, T. L., & Ettema, J. S. (2008). Ethics and Eloquence in Journalism. *Journalism Studies*, 9(4), 512–534. doi:10.1080/14616700802114183
- Hanitzsch, T. (2013). Journalism, participative media and trust in a comparative context. In C. Peters & M. Broersma (Eds.), *Rethinking Journalism. Trust and participation in a transformed news landscape* (pp. 200–209). Abingdon: Routledge.
- Heider, D., McCombs, M., & Poindexter, P. M. (2005). What the Public Expects of Local News: Views on Public and Traditional Journalism. *Journalism & Mass Communication Quarterly*, 82(4), 952–967. doi:10.1177/107769900508200412
- Hindman, E. (2005). Jayson Blair, The New York Times, and Paradigm Repair. *Journal of Communication*, 55(2), 225–241.
- Joseph, N. L. (2011). Correcting the Record. *Journalism Practice*, *5*(6), 704–718. doi:10.1080/17512786.2011.587670
- Kampf, Z., & Daskal, E. (2014). Communicating Imperfection: The Ethical Principles of News Corrections. *Communication Theory*, 24(2), 165–185. doi:10.1111/comt.12035
- Karlsson, M. (2010). Rituals of Transparency. Evaluating online news outlets' uses of transparency rituals in the United States, United Kingdom and Sweden. *Journalism Studies*, 11(4), 535–545.
- Karlsson, M. (2011). The immediacy of online news, the visibility of journalistic processes and a restructuring of journalistic authority. *Journalism*, 12(3), 279–295. doi:10.1177/1464884910388223

Karlsson, M. (2012). Charting the liquidity of online news: Moving towards a method for content analysis of online news. *International Communication Gazette*, 74(4), 385–402. doi:10.1177/1748048512439823

- Karlsson, M., Clerwall, C., & Nord, L. (2014). You ain't seen nothing yet. *Journalism Studies*, 15(5), 668–678. doi:10.1080/1461670X.2014.886837
- Kohring, M., & Matthes, J. (2007). Trust in News Media: Development and Validation of a Multidimensional Scale. *Communication Research*, 34(2), 231–252.doi:10.1177/0093650206298071
- Kovach, B., & Rosenstiel, T. (2001). *The Elements of Journalism. What Newspeople Should Know and the Public Should Expect*. New York: Crown Publishers.
- Kovach, B. & Rosenstiel, T. (2010). Blur. How to Know What's True in The Age of Information Overload. New York: Bloomsbury.
- Kuklinski, J. H., Quirk, P. J., Jerit, J., Schwieder, D., & Rich, R. F. (2000). Misinformation and the Currency of Democratic Citizenship. *The Journal of Politics*, 62(3), 790–816.
- Kutz, D., & Herring, S. (2005). Micro-longitudinal analysis of Web news updates. In Proceedings of the 38th Hawaii International Conference on System Sciences (Vol. 00, pp. 1–10).
- Lasorsa, D. (2012). Transparency and Other Journalistic Norms on Twitter. *Journalism Studies*, *13*(2), 402–417. doi:10.1080/1461670X.2012.657909
- Liebes, T. (2000). Inside a News Item: A Dispute Over Framing. *Political Communication*, 17(3), 295–305. doi:10.1080/105846000414296

- Maier, S. (2002). Getting It Right? Not in 59 Percent of Stories. *Newspaper Research Journal*, 23(1), 10–24.
- Maier, S. (2005). Accuracy matters: A cross-market assessment of newspaper error and credibility. *Journalism & Mass Communication Quarterly*, (2), 533–551.
- Maier, S. (2007). Setting the Record Straight. *Journalism Practice*, 1(1), 33–43. doi:10.1080/17512780601078845
- Manning, P. (2001). News and News Sources. A Critical Introduction. London: Sage.
- McGlone, M. (2005). Quoted out of context: Contextomy and its consequences. *Journal of Communication*, 55(2), 330–346.
- Medieutveckling (2015). Rapport från myndigheten för radio och tv.
- Nguyen, A. (2010). Harnessing the potential of online news: Suggestions from a study on the relationship between online news advantages and its post-adoption consequences.

  \*\*Journalism, 11(2), 223–241. doi:10.1177/1464884909355910
- Nyhan, B., & Reifler, J. (2010). When Corrections Fail: The Persistence of Political Misperceptions. *Political Behavior*, *32*(2), 303–330. doi:10.1007/s11109-010-9112-2
- Patterson, T. (2013). *Informing the news. The need for knowledge-based journalism*. New York: Vintage Books.
- Pew Research Center (2013). 'Amid Criticism, Support for Media's "Watchdog" Role Stands

  Out' <a href="http://www.people-press.org/2013/08/08/amid-criticism-support-for-medias-watchdog-role-stands-out/">http://www.people-press.org/2013/08/08/amid-criticism-support-for-medias-watchdog-role-stands-out/</a> website accessed 26<sup>th</sup> September 2014.

Phillips, A. (2012). Transparency and the ethics of new journalism. In P. Lee-Wright, A. Phillips, & T. Witschge (Eds.), *Changing Journalism* (pp. 135–148). London: Routledge.

- Plaisance, P. L. (2007). Transparency: An Assessment of the Kantian Roots of a Key Element in Media Ethics Practice. *Journal of Mass Media Ethics*, 22(2-3), 187–207. doi:10.1080/08900520701315855
- Porlezza, C., Maier, S. R., & Russ-Mohl, S. (2012). News Accuracy in Switzerland and Italy. *Journalism Practice*, 6(4), 530–546. doi:10.1080/17512786.2011.650923
- Ryfe, D. M. (2012). *Can Journalism Survive? An Inside Look at American Newsrooms*.

  Cambridge: Polity.
- Salaverria, R. (2005). An Immature Medium: Strengths and Weaknesses of Online

  Newspapers on September 11. *International Communication Gazette*, 67(1), 69–86.

  doi:10.1177/0016549205049179
- Saltzis, K. (2012). Breaking News Online. *Journalism Practice*, 6(5-6), 702–710. doi:10.1080/17512786.2012.667274
- Schudson, M. (2003). The sociology of news. New York: Norton.
- Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the message: Theories of influences on mass media content* (pp. xiv, 313). White Plains: Longman.
- Singer, J. B. (2003). Who are these Guys? The Online Challenge to the Notion of Journalistic Professionalism. *Journalism*, *4*(2), 139–163. doi:10.1177/146488490342001
- Statistics Sweden (2014). http://www.scb.se/en\_/ website accessed 1st October 2014.

Strömbäck, J. (2005). In Search of a Standard: Four models of democracy and their normative implications for journalism. *Journalism Studies*, 6(3), 331–345. doi:10.1080/14616700500131950

- Strömbäck, J., Nord, L. & Shehata, A. (2012). Swedish Journalists: Between

  Professionalization and Commercialization. In D. H. Weaver & L. Willnat (Eds.), *The Global Journalist in the 21<sup>st</sup> Century* (pp. 306-319). New York: Routledge.
- Sundar, S. (2008). The MAIN model: A heuristic approach to understanding technology effects on credibility. In M. J. Metzger & A. J. Flanagin (Eds.), *Digital media, youth, and credibility* (pp. 73–100). Cambridge: MIT Press. doi:10.1162/dmal.9780262562324.073
- Tsfati, Y. (2003). Media Skepticism and Climate of Opinion Perception. *International Journal of Public Opinion Research*, 15(1), 65–82. doi:10.1093/ijpor/15.1.65
- Tsfati, Y., & Cappella, J. N. (2003). Do People Watch what they Do Not Trust?: Exploring the Association between News Media Skepticism and Exposure. *Communication Research*, *30*(5), 504–529. doi:10.1177/0093650203253371
- Tsfati, Y., & Capella, J. (2005). Why Do People Watch News They Do Not Trust? The Need for Cognition as Moderator in the Association Between News Media Skepticism and Exposure. *Media Psycology*, 7(3), 251–271. doi:10.1207/S1532785XMEP0703
- Vanacker, B., & Belmas, G. (2009). Trust and the Economics of News. *Journal of Mass Media Ethics*, 24(2/3), 110–126. doi:10.1080/08900520902885277

- Van der Wurff, R., & Schoenbach, K. (2013). Audience Expectations of Media

  Accountability in the Netherlands. *Journalism Studies*, (June), 1–17.

  doi:10.1080/1461670X.2013.801679
- Van der Wurff, R., & Schoenbach, K. (2014). Civic and Citizen Demands of News Media and Journalists: What Does the Audience Expect from Good Journalism? *Journalism & Mass Communication Quarterly*, 91(3), 433–541. doi:10.1177/1077699014538974
- Weaver, D.H. & Willnat, L. (Eds.) (2011). *The Global Journalist in the 21st Century*, New York: Routledge.
- Willnat, L., & Weaver, D. (1998). Public Opinion on Investigative Reporting in the 1990s:

  Has Anything Changed since the 1980s? *Journalism & Mass Communication*Quarterly. doi:10.1177/107769909807500302

<sup>&</sup>lt;sup>1</sup> For 2013, the mean age of the population of 16 to 79 year olds in Sweden was 38.5, and there was a 50/50 percent divide between men and women. Also, the general level of education was lower in the population than in the sample (Statistics Sweden, 2014). Together, this means that the sample in the study is skewed towards older, more educated woman.

<sup>2</sup> In this study a factual error was used where the cost of a water-park was changed.

Table 1. Attitudes towards errors in online journalism (percent, N = 2091)

	Errors ok if quick to publish	Small, but corrected	Large, but corrected	Small, not corrected	Large, not corrected	Ok to remove erroneous items without informing the users
Completely		_	• 0	_,		
disagree	24	5	38	24	70	32
2	19	5	22	14	15	18
3	17	6	14	12	5	13
Neutral	17	18	12	17	8	19
5	16	25	8	14	1	8
6	5	20	3	10	1	5
Completely						
agree	2	21	3	8	1	6
Total	100	100	100	99	101	101
Mean	3.05 (1.66)	4.97 (1.644)	2.5 (1.64)	3.43 (1.959)	1.58 (1.107)	2.92 (1.826)

Comment: Scale 1-7. The first part displays relative frequencies. The total varies due to the rounding of decimals. The bottom part shows the mean value for each question, with standard deviation in parentheses.

Table 2. Mean tolerance value (1-7 Likert scale) for different kinds of errors in online news, divided by gender, age, education, media trust, and media use (standard deviation in parentheses)

	Errors ok if quick to publish	Small, but corrected	Large, but corrected	Small, not corrected	Large, not corrected	Ok to remove erroneous items without informing the users
Gender <sup>3</sup>	•					
Female (1095)	3.1	4.97	2.5	3.48	1.6	2.95
	(1.706)	(1.659)	(1.652)	(1.983)	(1.169)	(1.865)
Male (996)	3	4.96	2.5	3.38	1.56	2.87
	(1.607)	(1.628)	(1.627)	(1.932)	(1.035)	(1.782)
Total (2091)	3.05	4.97	2.5	3.43	1.58	2.92
	(1.660)	(1.644)	(1.640)	(1.959)	(1.107)	(1.826)
Age <sup>4</sup>						
<=29 (319)	3.31*	5.38*	2.49*	3.56*	1.54*	2.91*
	(1.692)	(1.597)	(1.578)	(1.935)	(1.103)	(1.644)
30-39 (177)	2.94*	5.24*	2.25*	3.32*	1.36*	2.46*
	(1.623)	(1.469)	(1.513)	(1.859)	(0.869)	(1.610)
40-49 (432)	2.97*	5.1*	2.41*	3.58*	1.49*	2.98*
	(1.557)	(1.557)	(1.612)	(1.994)	(1.035)	(1.829)
50-59 (451)	2.86*	4.88*	2.39*	3.57*	1.59*	2.93*
	(1.651)	(1.602)	(1.613)	(1.982)	(1.078)	(1.849)
>=60 (712)	3.14*	4.69*	2.69*	3.22*	1.7*	2.98*
	(1.705)	(1.729)	(1.714)	(1.943)	(1.207)	(1.924)
Total (2091)	3.05	4.97	2.5	3.43	1.58	2.92
	(1.660)	(1.644)	(1.640)	(1.959)	(1.107)	(1.826)
Education <sup>4</sup>						
9 years (203)	3.14	4.75	2.75*	3.43*	1.93*	3.18*
	(1.758)	(1.838)	(1.700)	(1.945)	(1.371)	(1.778)
11 years (283)	3.21	4.95	2.75*	3.75*	1.87*	3.21*
	(1.688)	1.598)	(1.726)	(2.028)	(1.268)	(1.842)
12 years (504)	3.1	5.04	2.48*	3.42*	1.58*	2.82*
	(1.685)	(1.629)	(1.627)	(1.988)	(1.140)	(1.770)
2 years university (340)	2.89	4.84	2.26*	3.19*	1.57*	2.94*
	(1.591)	(1.655)	(1.495)	(1.909)	(1.101)	(1.871)
3 years university (761)	3.01	5.05	2.46*	3.43*	1.39*	2.78*
	(1.631)	(1.605)	(1.645)	(1.928)	(0.881)	(1.833)
Total	3.05	4.97	2.5	3.43	1.58	2.92
	(1.660)	(1.644)	(1.640)	(1.959)	(1.107)	(1.826)

Media trust <sup>3</sup>						
Low (159)	2.51*	4.38*	2.06*	2.95*	1.4*	2.46*
	(1.655)	(1.961)	(1.595)	(2.018)	(1.010)	(1.842)
High (352)	3.18*	5.1*	2.58*	3.54*	1.61*	3.01*
	(1.635)	(1.533)	(1.625)	(1.930)	(1.105)	(1.803)
Total (511)	3.06	4.97	2.49	3.43	1.57	2.91
	(1.658)	(1.641)	(1.632)	(1.959)	(1.091)	(1.822)
Media use (digital/analogue) <sup>3</sup> Low digital + all	2.99	4.86*	2.58	3.36	1.62	3.00
analogues (936)	(1.605)	(1.648)	(1.663)	(1.942)	(1.138)	(1.874)
High digital (1155)	3.10	5.06*	2.44	3.49	1.55	2.85
	(1.701)	(1.636)	(1.619)	(1.972)	(1.081)	(1.785)
Total (2091)	3.05	4.97	2.5	3.43	1.58	2.92
	(1.660)	(1.644)	(1.640)	(1.959)	(1.107)	(1.826)

#### Comments:

<sup>1)</sup> Media trust is a binary variable constructed from an aggregate of two variables (trust in journalists in general, trust in news media in general. A seven-point scale (1-7) was used. However, for the purpose of the analysis only the values 1-2 (low trust) and 6-7 (high trust) were used.

<sup>2)</sup> Media use is a binary variable with high users of digital news (5 days or more per week) as one group, and 'low' (less than 5 days per week) digital plus all analogue users as the other.

<sup>3)</sup> The asterisks (\*) indicate that there are significant differences between the two groups (read vertically), tested with Independent-Samples T-test, p<.05.

<sup>4)</sup> The asterisks (\*) indicate that there are significant differences between all groups (read vertically), tested through ANOVA, p<.05

Table 3. Effects of age, education, media trust, and media use on tolerance of errors in online news. Regression analysis (OLS) (standard error in parentheses)

	Errors ok if quick to publish	Small, but	Large, but corrected	Small, not corrected	Large, not	Ok to remove erroneous item without informing the users
Age	002	016***	.006**	007**	.006***	.002
	(.002)	(.002)	(.002)	(.003)	(.001)	(.002)
Education	057	.031	073**	049	125***	100***
	(027)	(.026)	(.026)	(.032)	(.018)	(.030)
Media trust	.223 ***	.260***	.0186***	.206***	.034*	.146***
	(0.181)	(.024)	(.025)	(.030)	(.017)	(.028)
Media use	.124	.099	082	.048	003	115
	(0.73)	(.071)	(.072)	(.086)	(.048)	(.081)
Constant	2.241***	4.425***	1.622***	2.997***	1.577***	2.560***
R <sup>2</sup>	.041	.075	.037	.026	.034	.021
N	2041	2041	2041	2041	2041	2041

Comment: Significance codes: \*p<.05, \*\*p<.01, \*\*\*p<.001. Each dependent variable uses a 7-point Likert scale where 7 = 'Strongly agree' and 1 = 'Strongly disagree'. Media trust is based on a computed variable on a scale from 1 to 7, where 7 indicates very high trust. There are missing answers for media trust, reducing N to 2041.