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Fighting misperceptions and doubting journalists' objectivity: A review of fact-checking literature

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Introduction

Fact-checking is a practice that evaluates the accuracy of political claims appearing in public, e.g., in politicians' speeches. In the US, from where much of the fact-checking literature originates, the evaluation is typically performed by journalists, based on various documented sources. The industry has grown enormously in the 2010s. According to Duke Reporters' Lab, the number of active fact-checking organizations has grown from 44 in 2014 to 114 in 2017 (Stencel, 2017). Fact-checking has become a staple part of US political journalism (Graves, 2016). Many organizations today carry out this activity on a full-time basis, not just during elections.

Although fact-checking is a common feature in the US political media, it has also taken notable steps in several other countries (see Mantzarlis, 2015). Whereas fact-checking in the US is significantly in the hands of journalists, in Eastern Europe, NGOs are also involved (Graves and Cherubini, 2016). Moreover, it seems that an international fact-checking movement is emerging. The Poynter Institute organizes an annual event that brings together fact checkers from around the world. The institute has also built up 'The International Fact-Checking Network' to facilitate the development of best practices and principles for journalists who conduct fact-checking around the world (see <https://www.poynter.org/channels/fact-checking>).

But what about fact-checking in academic research? Considering its rapid development and popularity, it is timely to analyse the state of the art of scholarly work in this area. In this review, we identify different types of fact-checking research and present the main findings. The focus is solely on research concerning political fact-checking, leaving out, e.g., studies that concentrate on journalists who correct their own or other journalists' work. Even with this restriction, the existing scholarship spans several disciplines, such as political science, political communication, journalism studies and linguistics.

In order to determine the current state of knowledge, we conducted a content analysis to categorize the reviewed studies by their topic. If a study contained research about other issues in addition to fact-checking, only the fact-checking part was taken into account. We identified three major research topics: 1) the effects of fact-checking 2) fact-checking as a profession and 3) public opinion about fact-checking.

Method

The literature examined in this review is gathered from the Scopus¹ and Web of Science² databases. Conducted on 9 April 2018, the search included all entries until that date. We searched for publications that included the term "fact-checking" among article titles, abstracts or keywords. The focus was only on literature written in English, published in scientific journal articles and books. Dissertations, non-English texts, working papers and conference presentations were excluded. We also probed the bibliographies of the included works to identify more literature that met our selection criteria. As we are interested in fact-checking as a recent phenomenon, we also excluded research about the so-called ad watch coverage, which is considered a precursor to political fact-checking (Graves, 2018)³. The recent

¹ <https://www.scopus.com/>.

² <http://apps.webofknowledge.com/>.

³ For ad watch research, see, e.g., Cappella and Jamieson (1994) and Frantzich (2002).

contributions from the field of computer-assisted fact-checking also fall outside of our scope, because, apart from Ciampaglia et al. (2015), the majority of studies have so far been published as conference proceedings or working papers (e.g., Cohen et al. 2011; Hassan et al. 2017)⁴. While we do not question the scientific quality or relevance of these contributions, for the sake of systematic selection, we consistently excluded non-peer-reviewed papers, which have not been published in scientific outlets. With these restrictions in mind, we do not claim that our coverage is exhaustive, but we feel confident that it is representative of existing, peer-reviewed literature on the topic.

In the following, we summarize the three topics identified in the literature. The main features of the two major topics, the effects of fact-checking and fact-checking as a profession, are also summarized in Tables 1 and 2 below.

The effects of fact-checking

A significant question for fact-checking research concerns whether it can correct false beliefs. Studies offer mixed results. Weeks and Garrett (2014) found, following a telephone survey-based study, that people who had heard a false political rumour and its correction were more likely to consider the rumour untrue than people who had only heard the rumour. Weeks (2015) discovered, in an online experiment, that corrections of misinformation increased participants' belief accuracy, regardless of their partisan motivations (see also Pingree et al., 2014). Similar results were also found in Wood and Porter (2018): when presented with a correction, an average test subject acceded to it, even when it challenged their ideological commitments. Moreover, Nyhan et al. (2013) observed that rectifications reduced belief in false claims among those who viewed the maker of an assertion unfavourably or who viewed the maker of an assertion favourably but had limited political knowledge. Corrections have also been found to be effective in the context of fake news: an online experiment discovered that, on average, corrections make people less convinced by fake news stories (Porter et al, 2018).

The contrasting nature of results, however suggests that corrections are ineffective, especially when a person is politically motivated to believe the untrue statement. Ideology may increase resistance to corrections (Nyhan and Reifler, 2010)⁵ and those who share a political affiliation with the target of a fact check are less affected by the fact check than others (Jarman, 2016). Additionally, Thorson (2016) found that misinformation can affect people's attitudes, even after it is debunked. People may even accept the correct information, but maintain the attitudes they had before.

This finding has been dubbed the backfire effect. According to Nyhan and Reifler (2010), corrections sometimes strengthen misperceptions among certain ideological subgroups. Instead of giving up their false beliefs as a result of a correction, people might embrace them

⁴ Despite excluding these publications, we recognize that, in many fields, such as in computer science, conference proceedings can be regarded as highly respectable venues for publication. For a review of the state of computational fact-checking, see Babakar and Moy (2016).

⁵ It is debatable whether, e.g., Nyhan and Reifler's (2010) work is fact-checking research or whether it is a study about misperception correction in general. Drawing the line between the two is extremely difficult. We have included some misperception studies, which, in terms of study design, come close to fact-checking. But the misperception literature is vast and thus we cannot take everything into account. This means that many important studies, such as those of Nyhan and Reifler (2015a) and Nyhan et al. (2014), are not included. For a review of the political misperception literature, see Flynn et al. (2017).

even more. Nyhan et al. (2013) found this effect among those who viewed the maker of an assertion favourably and who were politically sophisticated. Jarman (2016) offered slightly similar results: people sharing a political affiliation with a fact-check target were less critical about the checked claim after seeing a fact check, if criticism offered by the fact check was weak⁶. These findings are seen as corroborating the theory of motivated reasoning (Nyhan and Reifler, 2010): people sometimes interpret information in a way that supports their own existing beliefs. The issue is, however, contested as some studies find no evidence of a backfire effect (e.g., Garrett et al., 2013; Weeks and Garrett, 2014; Wood and Porter, 2018).

Yet another strain concentrates on the circumstances that affect the acceptance of corrections. Some studies have demonstrated the significance of the format of fact-checking. Fact checks with a truth scale have more correction power compared to plain text fact checks when checking non-political claims; but, for political claims, there seems to be no difference (Amazeen et al., 2018). Fact-checking videos have been found to be more effective at reducing misperceptions than textual ones (Young et al., 2017). Contextual information and cues (e.g., pictures) may instead decrease the effectiveness of fact-checking (Garrett et al., 2013).

Some studies have assessed the impact of individual characteristics, including personality traits. Fridkin et al. (2016) found that women who saw a critical fact check concerning an attack ad had a more negative view about the ad than other women. The effect was not found among men. Instead, men who saw a confirming fact check concerning an attack ad considered the ad to be more useful than men who did not see the confirmation (Fridkin et al., 2016). Critical fact checks have been found to be more effective than confirming ones (Fridkin et al., 2015) and stronger truth value ratings to be more effective than weaker ones (Jarman, 2016). Low tolerance of negativity increases responsiveness to negative fact checks targeting attack ads, while political sophistication makes people more critical about attack ads that are criticized by fact checkers (Fridkin et al., 2015). Anger and anxiety do not undermine the corrective power of a fact check (Weeks, 2015).

--- Tables 1 and 2 about here ---

It seems possible that fact-checking could have an impact on political knowledge and candidate evaluations. People tend to hold more positive views about candidates who receive positive judgements from fact checkers (Wintersieck, 2017). Reading fact-checking articles increases (self-reported) political knowledge (Dunn et al., 2015), while people who visit fact-checking sites are more politically accurate than those who do not visit them (Gottfried et al., 2013). It is, however, unclear whether this is due to a possible educative impact of fact-checking or to self-selection among visitors on fact-checking sites. Corrections also affect people's confidence in determining the truth or falsity of political claims: corrections increase confidence in one's ability to determine the accuracy of political assertions if the subject of the assertion is considered interesting (Pingree, 2011). If the subject is not interesting, corrections instead reduce this confidence (Pingree et al., 2014). Evidence is also contradictory in terms of whether corrections affect political cynicism (Dunn et al., 2015; Pingree et al., 2013). Margolin et al. (2018) and Shin et al. (2017) examined the effects of fact-checking on Twitter. They found that a receiver is more likely to accept the correction of a fact-check tweet if both users follow each

⁶ Nyhan et al.'s (2017) study is also an important contribution on the subject but is excluded from this analysis due to its publication platform.

other (Margolin et al., 2018) and that political rumours keep spreading even after they have been debunked (Shin et al., 2017).

While most of the effectiveness literature is focused on the effects that fact-checking has on the general public, Nyhan and Reifler (2015b) studied the effects on politicians. They found that awareness of a possible fact-check threat made legislators more honest. Legislators who were reminded of unfavourable consequences of negative fact-check ratings also received less negative ratings than others. Vargo et al. (2018) focused on fact checkers' influence on the agendas of news organizations, finding that fact-checking journalism was not "influential in determining the agenda of news media overall"⁷.

Fact-checking as a profession⁸

Another body of literature concerns the fact checkers themselves: who they are, what they do and how the discipline has evolved. Graves (2016) offers a history of fact-checking and a description of fact checkers' methods, principles and significance for journalism. Although fact-checking in its current form is a new phenomenon, rebuttals of politicians' claims have long existed, e.g., on op-ed pages. One reason behind the emergence of the fact-checking movement in the US was disappointment in response to the inability of conventional journalism to challenge untruthful political claims. The major journalistic fact checkers claim that they are objective and distinguish themselves from so-called "partisan fact-checkers", i.e., actors with a political agenda who only check one particular side (Graves, 2016: 36-63). Graves (2018) also outlines the global picture of fact-checking. While most US fact checkers have media affiliations, internationally, the field is more diverse.

Although journalism is usually considered as a competitive occupation, fact-checking journalism has many features of cooperation. Fact checkers, e.g., organize joint fact-checking efforts, as well as promote and cite one another (Graves and Konieczna, 2015). Lowrey (2017) has analysed the development of fact-checking through the lenses of population ecology and institutional logic. Until 2010, the fact-checking universe was quite homogenous, but has since grown in a more fragmented manner. But its legitimacy has also increased. Fact checkers are cited more frequently and their motivations are questioned less often (Lowrey, 2017).

The methodology and practices of fact checkers have nevertheless been disputed. Based on a field study among US fact checkers, Graves (2017) described five phases in a typical fact check: 1. choosing claims to check, 2. contacting the target, 3. tracing false claims, 4. consulting experts and sources, 5. publishing the check as transparently as possible. Despite this seemingly robust procedure, Uscinski and Butler (2013) have heavily criticized fact checkers' tendency to pick and choose the claims they check, thus questioning the reliability of the first of these five steps. These authors argue that the lack of a systematic case selection method endangers the reliability of the findings. This runs the obvious risk of producing a false impression of a target's political (dis)honesty. Defenders have responded by pointing out that the purpose of fact-checking is not to establish "who lies most", but to provide

⁷Amazeen (2013) and Graves and Glaisyer (2012) has (among other activities) examined the effects of fact-checking on journalists, but these studies are excluded from the current analysis due to their publication platform.

⁸ It should be noted that much worthwhile research in this area takes the form of reports from organizations such as the American Press Institute, the Duke Reporters Lab, the Poynter Institute and the Reuters Institute, but are excluded because of our case selection method.

information about claims that appear in public (Amazeen, 2015b). Fact checkers have also been criticized for examining claims that cannot be checked reliably, or at all. Causal claims and claims concerning the future are cited as examples (Uscinski and Butler, 2013). An interesting study concerning fact-checkable claims was conducted by Merpert et al. (2018), who tested how well citizens recognize checkable claims in political speech, finding that, on average, participants were able to identify 69% of the statements correctly. University education, young age and working as a researcher increased performance, as did a short training session. Men scored better on the test than women, but only slightly. In particular cases, knowing the identity of the speaker lowered the test scores, depending on the political affiliation of the respondent.

The freedom that fact checkers have when determining the truth value of a claim has also prompted criticism. Sometimes, fact checkers compound multiple claims together or divide one claim into many pieces, a practice which allows for subjective choices and significantly diminishes reliability (Uscinski and Butler, 2013; also see Graves, 2017). To potentially alleviate reliability issues, Shi and Weninger (2016), as well as Ciampaglia et al. (2015), have examined the possibilities of computer-aided fact-checking, while Winneg et al. (2014) have investigated third-party political advertising based on how much it contains claims that fact checkers consider to be deceptive⁹.

Another area of disagreement concerns the consistency of fact checkers' ratings. Some are worried that, if different fact checkers give dissimilar judgments, this might leave people uncertain, not knowing what to believe (Marietta et al., 2015). The evidence is mixed. Amazeen (2015b, 2016) finds consistency across the output of different fact checkers, while Marietta et al. (2015) report variations from one topic to another. These studies use different samples of fact checks and different methods, which could explain their differing results. That said, Amazeen's methodology has led to some criticism (Marietta et al., 2015; Uscinski, 2015), with claims that the author's standard for fact-checking consistency is low and based on the presence or absence of an inaccuracy, while ignoring its degree. This means that fact checkers are considered to be in agreement with each other if they all rate a particular claim as true or if they all rate a particular claim to be anything but wholly true. Uscinski (2015) has also noted that consistency between fact checkers' ratings could also mean that they are all wrong, suggesting that consistency is a poor measure of fact-checking reliability. In a slightly different vein, Graves et al. (2016) addressed the reliability of fact-checking by mapping out the motivations behind why media outlets engage in fact-checking. They found that journalists are more motivated by the high professional status of fact-checking, rather than by the audience's taste or consumer demand for fact-checking. Meanwhile, Brandtzaeg et al. (2017) offer evidence of journalists' self-assessments about fact-checking. They interviewed Norwegian and Spanish journalists and Norwegian journalism students in order to find out how journalists think about the practice. Although many were unfamiliar with fact-checking before the interviews, the interviewees generally considered fact-checking organizations potentially useful but would not be willing to rely exclusively on fact checkers when verifying information.

Although the literature is overwhelmingly US-centred, two European actors have received scholarly attention, namely, StopFake in Ukraine and Full Fact in the UK. Borne out of the Crimean conflict, StopFake counters (mostly) information it considers to be Russian

⁹ There have also been studies in which scholars use fact-checking as a research method (see Nieminen et al., 2017; Raiskila et al., 2014). These studies, however, do not meet our criteria for analysis due to the language they are written in, and are thus excluded.

propaganda. It publishes only checks where information is false, which, along with sense of civic responsibility, distinguishes it from other fact checkers. StopFake uses various methods: it can show that evidence behind a claim is baseless or highlight inconsistencies in particular pieces of information. Alongside verbal claims, StopFake also debunks pictures (Haigh et al., 2017; Khaldarova and Pantti, 2016.) Meanwhile, Arnold (2017) describes the activity of Full Fact during the 2015 UK general election. Prior to the election, Full Fact published information about relevant topics and reported several fact checks. DeCillia (2018) studied the fact-checking practices of Canadian journalists concerning the reporting of statements by the government and the military about the Afghanistan War. The author found that 76.5% “of the media coverage containing a preferred government or military frame also contained a challenge to or fact-check of that frame”.

In addition to these studies, Amazeen (2017) has taken a global perspective and analysed the factors that foster or impede the emergence of fact-checking organizations around the world. She found that accessibility to the Internet and the degree of democratic governance are two important features that affect the emergence of fact checkers in a country. As these two factors increase, so does the chance for fact checkers to exist. Press freedom and low corruption rates are also associated with the emergence of fact checkers, but only when observed individually. Amazeen argues that these phenomena do not mean that fact-checking is a sign of a healthy democratic culture; rather, she sees fact-checking more as a tool for democracy-building.

Public opinion about fact-checking

A much smaller number of studies has examined what the general public thinks about fact-checking. Brandtzaeg and Følstad (2017) investigated social media users’ opinions about three particular fact checkers. In social media messages, Snopes and FactCheck.org were described mostly in a negative light, while messages about StopFake were mostly positive. Positive perceptions were typically linked with whether people considered the fact checker to be useful, while negative perceptions were typically found among those who considered the fact checker to be untrustworthy (Brandtzaeg and Følstad, 2017.) Another interview-based study concerned political campaign strategists’ opinions about fact-checking (Jamieson, 2013). The very few interviewees who addressed fact-checking perceived the practice rather negatively, referring in particular to inconsistencies in fact checkers’ accuracy ratings.

Shin and Thorson (2017) examined the effects of partisanship on commenting and sharing fact-checking messages on Twitter. Partisanship affects retweeting: in the US, positive fact checks concerning Democrat (Republican) politicians were mostly retweeted by Democrat (Republican) supporters. Meanwhile, Republicans were more likely to express concerns about the fact checker’s potential bias (Shin and Thorson, 2017). Further, Jun et al. (2017) have presented rare evidence of ordinary citizens’ fact-checking behaviour. The presence of others made people less likely to fact-check information that they were confronted with, compared to situations when they were alone, suggesting that people seldom question the accuracy of others’ political statements.

Discussion

Most fact-checking studies focus either on the possible correcting power of fact-checking in debunking political inaccuracies or on fact-checking as a journalistic phenomenon. Although the studies about correction potential offer somewhat mixed results, the overall impression is

that fact-checking can increase accuracy in political communication. There are, however, many contrasting findings, which can, at least partly, be explained by differences in methods, measures and experimental details. While the literature relies on proper methods and consists of well-executed analyses, we sense a need for commonly accepted definitions and methodological benchmarks in order to increase comparability across studies in the future. Under the topic dealing with journalistic professionalism in fact-checking, some authors also express doubts about the reliability of fact-checking methods and the empirical findings they produce. This criticism is mainly directed at journalistic practices involved in fact-checking, rather than the scholarly literature that studies it.

The review also makes it obvious that the fact-checking literature is mainly focused on US actors. Of the 48 studies analysed here, 42 (88%) had at least one contributor who was affiliated with a US university, college, research centre or corporation. In addition, 37 studies (77%) targeted the US context, i.e., the study participants were US citizens or the analytical focus was solely on US-based actors. This is not only due to our sampling technique, which was restricted to English-language publications. Fact-checking as a recent phenomenon originated from the US media landscape, where it has quickly become an essential part of political journalism (Graves, 2016, 2018). Other countries, however, are catching up fast and more comparative work involving different countries and media systems will undoubtedly emerge in the near future.

Reviewing the current state of the literature highlights a few central lines of inquiry, which will likely guide further scholarly work. First, the potentially corrective impact of fact-checking is an intriguing question in the current climate in many Western democracies, which are wrestling with problems of fake news and the spread of false information (see especially Lazer et al., 2018). This is an expansive research agenda, which will, among many other topics, incorporate the study of fact-checking. Second, based on the review, it also seems clear that there is need for more work, especially comparative analyses, concerning the journalistic practice of fact-checking. It is, by now, clear that there is variation in how journalists conduct and report fact-checking, although journalists themselves tend to consider the practice as quite objective. Based on this review, it seems to us that a global fact-checking movement among journalists could be emerging, as countries outside the US are catching up. Whether this will lead to more fragmentation or more coherence in terms of fact-checking procedures is among the key questions for scholarship in the future.

In conclusion, it is apparent to us that scholars are slowly recognizing the potential of fact-checking as a scientific research topic. The debate between those expressing doubts about the reliability of journalistic fact-checking and its defenders will undoubtedly continue, with the dialogue hopefully leading to scientific advances. In an optimistic scenario, we are not too far from a better understanding of the true significance of fact-checking in the context of the political behaviour of democratic publics.

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Table 1: The effects of fact checking.

Study	Data	Method	Main findings or contribution
Amazeen et al (2018)	Online survey, USA	Experimental survey	Fact-checks with truth scale were more effective than plain text fact-checks when correcting misperceptions about nonpolitical claims.
Dunn et al (2015)	Lab experiment, participants U.S. students (25 or under)	Pre-test/post-test experiment	Reading fact-checks increases (self-reported) political knowledge.
Fridkin et al (2016)	Online survey, USA	Experimental survey	Gender affects the effects of fact checking.
Fridkin et al (2015)	Online survey, USA	Experimental survey	Critical fact-checks are more effective than confirming fact-checks. Tolerance of negativity and political sophistication affects the effects of fact checking.
Garrett et al (2013)	Online survey, USA	Experimental survey	Contextual information may decrease the correcting impact of a fact-check.
Gottfried et al (2013)	Telephone survey, USA	Telephone survey	Visiting fact checking sites increases accuracy in political issues.
Jarman (2016)	Online survey, USA	Experimental survey	Partisanship and the strength of a fact check affects the impact of fact checking.
Margolin et al (2018)	Twitter messages	Statistical methods	Twitter followers are more likely to accept a fact-check tweet than non-followers.
Nyhan and Reifler (2010)	Online survey, participants U.S. students	Experimental survey	Corrections do not always change people's misperceptions. Partisans are especially resisting and sometimes corrections even backfire.
Nyhan and Reifler (2015)	Fact-checks targeting U.S. state legislators	Field experiment	Awareness of a possible fact-check threat made legislators more honest.
Nyhan et al (2013)	Online survey, USA	Experimental survey	Partisanship and political knowledge affect the impact of a fact check.
Pingree (2011)	Online survey, participants U.S. students	Experimental survey	Corrections affect people's confidence in determining the truth in politics.
Pingree et al (2013)	Online survey, participants U.S. students	Experimental survey	Corrections affect people's confidence in determining the truth in politics. Corrections increase political cynicism.

Pingree et al (2014)	Online survey, participants U.S. students	Experimental survey	Corrections affect people's confidence in determining the truth in politics.
Porter et al (2018)	Online survey, USA	Experimental survey	Corrections made people less convinced by fake news stories.
Shin et al (2017)	Twitter messages	Social Network Analysis, descriptive analysis	Political rumors spread in Twitter even after they have been debunked.
Thorson (2016)	Online survey, USA	Experimental survey	Misinformation can affect people's attitudes even after debunking.
Vargo et al (2018)	News from GDELT's Global Knowledge Graph	Big data methods	Fact-checking journalism is not influential in determining the agenda of news media overall.
Weeks (2015)	Online survey, USA	Experimental survey	Corrections were effective regardless of feelings anger and anxiety or partisanship among experiment participants.
Weeks and Garrett (2014)	Telephone survey, USA	Telephone survey	Corrections reduced belief in false rumors regardless of political predispositions.
Wintersieck (2017)	Lab experiment, participants U.S. students	Laboratory experiment	Good judgments by fact-checkers increased positive attitudes toward candidates.
Wood and Porter (2018)	Online survey, USA	Experimental survey	Corrections were effective, even when they challenged participants' ideological commitments. No backfire effect was discovered.
Young et al (2017)	Online survey, USA	Experimental survey	Fact checking videos reduced misperceptions more than textual fact-checks.

Table 2: Fact-checkers and their work.

Study	Data	Method	Main findings or contribution
Amazeen (2015b)	Fact-checks of three U.S. fact-checkers	Content analysis	Fact-checkers are consistent in their fact-checks. Rejoinder to Uscinski's and Butler's (2013) fact checking critique.
Amazeen (2016)	Fact-checks of three U.S. fact-checkers	Content analysis, statistical methods	Attack ads are most likely to get fact-checked. Fact-checkers are consistent in their fact-checks.

Amazeen (2017)	Statistics from Internet World Stats, Freedom House etc.	Statistical methods	High levels of Internet accessibility and democratic governance create more chances for fact-checking organizations to emerge.
Arnold (2017)	Full Fact's work	Descriptive analysis	An overview about Full Fact's work.
Coddington et al (2014a)	Journalists' twitter messages	Content analysis, statistical methods	Fact checking is relatively rare in Twitter.
Coddington et al (2014b)	Journalists' twitter messages	Content analysis, statistical methods	Fact checking is relatively rare in Twitter.
DeCillia (2018)	Canadian media coverage (2006–2009) concerning the Afghanistan war	Content analysis	Of the media coverage that contained a preferred military or government frame, 76.5% contained also a fact-check of or a challenge to that frame.
Graves (2018)	Fieldwork among U.S. fact-checkers.	Fieldwork-based analysis	Internationally, fact-checkers differ from each other in many respects.
Graves (2016)	Fieldwork among U.S. fact-checkers, interviews	Mixed textual and ethnographic methods	A short history of fact checking and a description of fact-checker's methods, principles and place in journalism.
Graves (2017)	Fieldwork among U.S. fact-checkers	Fieldwork-based analysis	A description of the different phases of fact checking.
Graves and Konieczna (2015)	Fieldwork among U.S. fact-checkers	Fieldwork-based analysis	Fact-checkers cooperate in many ways.
Graves et al (2016)	Fact-check coverage of U.S. newspapers	Field experiment	Reminder of the high professional status of fact checking increases media outlets' fact checking coverage.
Haigh et al (2017)	StopFake's website, interviews	Mixed qualitative methods	An overview about StopFake.
Khaldarova and Pantti (2016)	StopFake's fact-checks	Content analysis	An overview about StopFake.
Lowrey (2017)	Fact checking sites	Content analysis	Diversity of fact checking field has increased in recent years and its legitimacy has grown over time.

Marietta et al (2015)	Fact-checks of three U.S. fact-checkers	Content analysis	Consistency of the conclusions by fact-checkers varies from topic to topic.
Merpert et al (2018)	Online survey, Argentina	Experimental survey	University education, young age, working as a researcher, short training session and being male all increased the recognition of checkable claims.
Uscinski (2015)	Fact-checks, research literature	Rejoinder to Amazeen (2015)	Rejoinder to Amazeen's (2015) critique.
Uscinski and Butler (2013)	Fact-checks of (U.S.) fact-checkers	Content analysis	Criticism of fact-checkers' methods.