

Source Attribution and Perceptual Effects

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Abstract: Following a string of recent controversies involving journalists and their sources, public awareness in the UK of sourcing and sourcing practices has increased. There are, however, only a handful of studies that have considered how source attribution may affect audiences' evaluation of the quality or objectivity of news.

This paper examines the influence of source attribution upon perceptions of news credibility. It reports the initial findings of a media experiment designed to test the effect of attributing information to different institutional sources on two component measures of credibility: participants' assessment of the believability and accuracy of news.

Using a between-subjects design (n=147), participants were presented with one of four versions of the same news story, manipulated to attribute key information to different institutional sources. The data indicates that the effect of source attribution, as a subtle or nuanced variation in content, is limited and that attitudinal characteristics are more significant determinants of audiences' perceptions of news credibility. Specifically, the findings show significant relationships between trust in the media, concern over the issue reported and participants' assessment of the believability and accuracy of news.

Keywords: *News sources, Media effects, News credibility*

1. Introduction

Source attribution is the process by which journalists identify those actors who have supplied story information (Gans, 1979, p80). This convention upholds the journalistic standards of objectivity and impartiality. It also empowers audiences by allowing the reader or viewer to assess the credibility of a news report (Friendly, 1958) and appraise the motivations of sources. Consequently, source attribution and, in particular, the use of direct quotation are essential to the professional practice of journalism.

Editors place great value on the independent verification and corroboration of information from sources, with journalism textbooks insisting that for a fact to appear in print it must be authenticated by at least two reliable and independent sources. While the reality may be somewhat different, there is nevertheless a strong commitment within journalism to the principles of direct quotation and, on the part of editors, a reticence to publish stories where its sources seek anonymity.

Recent cases in the UK and the US, most notably the Gilligan/Kelly affair and the Killian documents controversy, have raised a number of questions regarding journalists' use of sources; perhaps none more so than to highlight the dangers of relying on a single unnamed source (See Carlson, 2011). Importantly, these cases have served to heighten public awareness of sourcing. A radio broadcast in

June 2003 on the BBC's Today programme claimed that the UK government had falsified key details in a briefing document which outlined Iraq's military capabilities. The story arose following conversations between the journalist, Andrew Gilligan, and an unnamed source, later identified by the media as Dr David Kelly, a former UN weapons inspector. The repercussions of these allegations and the subsequent death of Dr Kelly were profound. It led to a number of official enquiries and for the BBC to conduct a root-and-branch review of its editorial processes. Significantly, however, it placed the process of newsgathering, the motivations of sources and the role of journalism in society at the centre of media and public discourse.

If we accept that audiences actively scan and monitor sources when processing pieces of news (Sundar, 1998) and that source citations may act as a heuristic for news consumers when analysing the credibility or veracity of a news story (Gibson, 1997) then now seems timely to return to a question that largely remains unanswered. What is the influence of source attribution on audiences' assessment of news credibility?

Communication research has shown that a range of situational and dispositional factors will influence cognitive processing, external distraction and issue-relevant knowledge, for example (Zimbardo, Synder, Thomas, Gold, & Gurwitz, 1979), and that those who lack the motivation or ability to devote extensive cognitive elaboration towards an issue will rely upon peripheral cues when evaluating a piece of communication (Chen, Duckworth, & Chaiken, 1999; Petty & Brinol, 2008; Petty & Cacioppo, 1986). Moreover, that these heuristics act as a powerful tool in decision-making, allowing judgements to be made in the absence of systematic and elaborative processing (Chaiken, Liberman, & Eagly, 1989). This, alongside research examining the effect of source credibility on persuasion (Dholakia & Sternhall, 1977), indicates that sources within news texts may influence audiences' appraisal of news. It is unclear, for example, how the underlying attitudes of a reader or viewer towards a particular source may alter their assessment of a news story quoting this source. Do references to an institution that benefits from higher levels of public trust (the police) enhance credibility? Alternatively, is the integrity of news undermined by citing sources from institutions or organisations that sustain lower levels of public trust? Government or political parties for instance. The working hypotheses for this paper are thus: *that source attribution will influence audiences' perceptions of news credibility. Furthermore, that attribution to sources from an institution that has higher levels of public trust will be perceived as more credible than a story citing sources from an institution public have less confidence in.* The central issue for journalists, therefore, is whether a narrative will be given more weight by audiences due to the sources it cites.

This paper reports the initial findings of a study to examine these hypotheses. It begins with a brief review of the existing research in this area, before outlining a method for testing the effects of source attribution. It will then examine the influence of references to different institutional sources on two component measures of credibility: participants' assessment of the believability and accuracy of news.

2. Literature review

While there is a significant body of research investigating journalists' interaction with their sources (Gans, 1979; Schlesinger, 1990) and the practice of sourcing, through both the gathering (Ericson, Baranek, & Chan, 1989; Hall, Critcher, Jefferson, Clarke, & Roberts, 1978) and reporting stages of

news production (Martin-Kratzer & Thorson, 2007; Sheehy, 2008; Stenvall, 2008), there is very little research on the influence of sources on audience perception of news.

Previous research in this area has tended to focus on two journalistic variables, the use of direct and extracted quotes and named over anonymous sources, to examine the effect of subtle variations in content on news and issue perception. Gibson and Zillman (1993), for example, found that direct quotation and personal testimony made an issue more salient to readers of print news. A later study similarly identified the persuasive influence of quotes, noting that direct quotation could sway readers in favour of an issue when compared with a news report that only contained paraphrased quotes (Gibson, 1997). Both these studies, however, found that opinions of story quality were uninfluenced by the presence of direct over paraphrased quotes. Examining the effect of extracted quotations, Gibson, Hester and Shannon (2001) also found that in certain situations they could increase support for the position advocated in the quote.

The findings of research investigating the use of named over anonymous sources are more mixed. A study by Culbertson and Somerick (1977) showed that source identification did not influence audiences' assessment of the perceived accuracy or truthfulness of a news article. Hale (1984), similarly, identified no difference in the believability of three versions of the same newspaper story that used different levels of source identification. A more recent investigation confirmed these findings, demonstrating that there was very little difference between respondents' ratings of the credibility of a whistle-blowing story quoting unnamed sources over one that cited named sources (Smith, 2007). Conversely, an earlier study found that source attribution did alter news perception but that it depended on story type (Fedler & Counts, 1981).

3. Methodology

The study recruited undergraduate students to participate in a media experiment designed to investigate whether readers' perceptions of print news are influenced by source attribution. Participants were asked to read two print news articles and complete a short questionnaire. The first news story, which reported declining prices in the UK housing market, acted as a dummy article; with the second, describing a police raid and alleged security threat, manipulated to attribute key information to one of three institutional source types.

3.1 Sample and stimulus material

In total 147 students (53.1% male) participated in the study. Data were collected over ten separate sessions with groups ranging in size from 10 to 35 participants. These sessions were held at either the beginning or end of timetabled teaching periods, where it was explained that students had the opportunity, should they wish to do so, to participate in a research project exploring trust in the media. Students were recruited from a range of different degree programmes in Media and Tourism.

The researcher created a story reporting a police raid and search of several addresses in London in response to a specific security threat. The article was intended to broadly replicate both broadsheet and tabloid coverage of crime and security. Overall, however, by attempting to achieve balance between these two contrasting forms and to retain control over the independent variable in the study, the article was presented in a more neutral style than one may normally associate with British print journalism.

The article was presented in four different versions so that information relating to the arrests and the alleged security threat were attributed to three different source types: security sources; government sources; and police sources. In addition, a neutral condition *no sources* did not attribute information to an institutional source. Instead, the source was either removed from the statement or replaced by the following phrases:

'It is believed'

'According to reports'

For the security sources condition the statements were attributed to either a security source or official; to a government source or official in the government sources condition; or to a police source or official in the police sources condition. In addition, all four versions contained six supplementary references: two attributed to a metropolitan deputy police commissioner, with the first discussing the security threat and the second commenting on the decision to instigate the police operation. Each version included four further quotes from local residents describing the police raids, expressing their shock at the arrests and commenting on those arrested by the police.

3.2 Procedure, data analysis and measures

The data collection sessions began with a brief set of instructions before participants were asked to complete a short questionnaire. Embedded in the questionnaire was a set of pre-test questions, the experimental design, which comprised the two newspaper articles (the treatment and dummy article described above) and post-treatment ratings of the articles.

Participants' perceptions of news credibility was the main dependent variable. This was measured by asking participants to rate on a five-point Likert scale their opinions of the believability and accuracy of the treatment article.

As this was a broad exploratory study, a range of other indicator variables, which could act as moderators of news perception, were considered. This paper will therefore also explore the correlations between selected variables and participants' ratings of news credibility. The reported variables are:

Mean trust in news: a pre-test measure of participants' ratings of a range of broadcast and online news organisations.

Mean trust in newspapers: a pre-test measure of participants' ratings of trust in 10 daily and Sunday newspapers.

Trust in newspapers to report security issues accurately and objectively: a pre-test measure of participants' ratings of trust in newspapers to report news and issues relating to security accurately and objectively.

Concern over security issues: a mean score derived from participants' ratings of perceived level of concern over five recent security issues.

4. Results

4.1 Participants' ratings of news credibility

Table 1 and Table 2 provide a summary of the descriptive statistics for each of the four treatment conditions.

Table 1: Believability Descriptive Statistics

Condition	M	SD	Median	Possible Range	N
Neutral	2.97	.885	3	1-5	38
Security Sources	2.86	.882	3	1-5	37
Government Sources	3.06	.873	3	1-5	35
Police Sources	3.0	.816	3	1-5	37

Note. Ratings were made on a 1 to 5 scale with 1=not very believable and 5=very believable.

Table 2: Accuracy Descriptive Statistics

Condition	M	SD	Median	Possible Range	N
Neutral	2.61	.775	2.5	1-5	38
Security Sources	2.83	.941	3	1-5	36
Government Sources	2.80	.833	3	1-5	35
Police Sources	2.70	.996	3	1-5	37

Note. Ratings were made on a 1 to 5 scale with 1=not very accurate and 5=very accurate.

The initial findings indicate that the effects of source attribution were limited. Despite the different mean ratings reported above, the one-way ANOVA in Table 3 and Table 4 show that the effects of source attribution were not significant. Participants' ratings of believability ($F(3,143) = .33, p = .81$) and accuracy ($F(3,142) = .5, p = .68$) did not differ significantly at $p < .05$ between the four treatment conditions.

Table 3: Analysis of Variance for Believability of the Article

	Sum of Squares	df	Mean Square	F	P
Between Groups	.707	3	.236	.327	.806
Within Groups	103.184	143	.722		
Total	103.891	146			

Note. $p < .05$

Table 4: Analysis of Variance for Accuracy of the Article

	Sum of Squares	df	Mean Square	F	P
Between Groups	1.174	3	.391	.498	.684
Within Groups	111.409	142	.785		
Total	112.582	145			

Note. $p < .05$

At this first level of analysis there is no evidence to suggest that attribution to one of the three institutional source types influenced participants' perceptions of the believability and accuracy of the story. The data does not support the working hypothesis that attribution to institutional sources that have greater levels of public trust (the police) will be perceived as more credible than a story citing sources from a less-trusted institution (the government).

4.2 Correlations

As this is an exploratory study, other indicator variables will be used to inform subsequent multilevel modelling. *Table 5* shows an index of the correlations between selected indicator variables and participants' (across the four treatment conditions) mean ratings of believability and accuracy.

Table 5: Correlations between audience factors and dependent measures

	Believability of the news article	Accuracy of the news article	Mean trust in news	Mean trust in newspapers	Trust in newspapers to report security issues	Concern over security issues
Believability of the news article	1.000	.499**	.411**	.327**	.178*	.331**
Accuracy of the news article	.499**	1.000	.259**	.245**	.239**	.271**
Mean trust in news	.411**	.259**	1.000	.607**	.289**	.265**
Mean trust in newspapers	.327**	.245**	.607**	1.000	.284**	.319**

	Believability of the news article	Accuracy of the news article	Mean trust in news	Mean trust in newspapers	Trust in newspapers to report security issues	Concern over security issues
Trust in newspapers to report security issues	.178*	.239**	.289**	.284**	1.000	.334**
Concern over security issues	.331**	.271**	.265**	.319**	.334**	1.000

Note: ** denotes correlation is significant at the $p < 0.01$ level (1 tailed).

* denotes correlation is significant at the $p < 0.05$ level (1 tailed).

The data indicated significant positive correlations between trust in the media and participants' ratings of believability, with participants who reported higher levels of trust in broadcast and online news ($r = .411$, $p = .000$) and newspapers ($r = .327$, $p = .000$) more likely to rate the article as believable. The data also showed significant but weaker relationships between trust in newspapers to report security ($r = .178$, $p = .016$) and concern over security issues ($r = .331$, $p = .000$) and participants' ratings of the overall believability of the article.

Mean trust in news ($r = .259$, $p = .000$) and mean trust in newspapers ($r = .245$, $p = .002$) were also positively correlated with participants' ratings of accuracy. Although not as strong as the relationships between trust and believability, these findings still show that credibility of the story is related to underlying trust in the media. Other variables that were positively associated with accuracy were trust in newspapers to report security issues ($r = .239$, $p = .002$) and concern over security issues ($r = .271$, $p = .001$).

5. Discussion

At this first level of analysis there is some scepticism as to the effects of source attribution on news perception. The findings outlined above do not support the working hypothesis that source attribution influences audiences' evaluation of news. Moreover, that attribution to institutions that benefit from greater levels of public trust will enhance audiences' assessment of news credibility. The data does, however, indicate that there are other factors associated with news perception and suggests areas for further research.

To a large extent, these findings are consistent with previous research examining the influence of source attribution on audiences' assessment of news credibility (Culbertson & Somerick, 1977; Hale 1984 Smith, 2007). It does, however, contrast with the findings of research on the use of direct quotation as an exemplar (Gibson & Zillman, 1993) and the impact of sources on consumers of online news (Sundar, 1998).

One possible explanation for these findings may lie in the selection of content and the issue reported. Research that has established a causal link between source attribution and both news and issue perception has tended to use news content reporting less controversial topics than the one explored here: for example, amusement park safety (Gibson & Zillman, 1993), a US Supreme Court ruling on a child custody case and an entertainment report highlighting a television celebrity's move from one television network to another (Sundar, 1998). It could therefore be argued that selecting an issue such as policing and security obscured any effect source attribution may have had on story perception. As part of a larger study on media coverage of security, there were sound contextual and methodological grounds for selecting this issue; however, at one level the results indicate that story type mitigates the effect of source attribution upon news perception (Fedler & Counts, 1981; Hale, 1984).

This interpretation demonstrates that importance of the narrative (content) over subtleties in presentation. Much of the traditional effects-based research has explored the influence of wider interpretative frames upon audience perception. For example, studies examining the framing effects of political campaigns (Valentino, Beckmann, & Buhr, 2001), political discourse (Cappella & Jamieson, 1997; Schuck & de Vreese, 2006) and security and terrorism (Woods, 2011) have all involved significant variations in content across the different experimental conditions. Thus, it could be argued that it was the content itself and the narrative frames employed to interpret the issue that were more significant in determining participants' perceptions of news credibility.

This points out a potential methodological limitation with the present study. Since it examined the influence of subtle variations in content rather than the content itself, it is possible that the dependent measures employed in the study did not reflect the size of effect produced by the experimental manipulation. Further research examining the minor effects of content would therefore need to develop more sophisticated scales of measurement to reflect this nuanced approach.

The relationships reported above between the attitudinal variables and perceptions of news credibility are strong enough to make some inferences about the impact of these factors upon story perception. Importantly, these open up several areas for further analysis and research.

The findings from this study suggest that it is underlying trust in the news media that conditions individual response to a story, rather than the types of sources that are cited within a narrative. There are, however, subtleties within this relationship. First, for both mean trust in broadcast and online news and mean trust in newspapers there were stronger positive relationships with participants' ratings of believability than with accuracy. This could be explained by the different connotations implied by each term. Although the two concepts of believability and accuracy have been used in similar studies of story perception (Fedler & Counts, 1981; Sundar, 1998), they reflect different aspects of credibility in the context of this study. *Believability*, it could be argued, is more closely associated with perceptions of the veracity of the story. *Accuracy* leans more towards an assessment of the quality of the report and whether the facts or the details of the story were perceived to be a correct and an accurate reflection of the events. The difference between these two facets of credibility suggests a general belief in the story against a more specific assessment of the details reported within the story. Therefore, although some participants felt the story was believable, there was less confidence in the accuracy or credibility of reportage.

Second, the results demonstrated that credibility was more strongly related to trust in broadcast and online media than to trust in newspapers. This finding is unexpected. Since the experimental design aimed to replicate participants' experience of reading newspaper content, one would assume that if the study were to establish a relationship between trust and the two dependant measures then the relationships would be stronger with trust in newspapers than trust in broadcast and online news. However, in many ways the article was perhaps a more accurate reflection of online content and, in particular, the style favoured by BBC News Online. As outlined above, the treatment article was presented in such a way that it could not be associated with a particular newspaper title. Not only without branding but also in a style that was more neutral than one would normally identify with British print journalism. The rationale for this approach was to maintain control over the independent variable in the study. The neutral style of the piece, however, may have led participants to feel as though they were reading an article taken from BBC Online rather than, as stated, one that was taken from a recent newspaper. As a consequence, stronger relationships were found between trust in broadcast and online news and the two dependent measures than with trust in newspapers.

In addition, the findings show that concern over security issues was positively related to participants' perceptions of credibility. If we consider the two facets of credibility, in line with the findings on trust, concern evidenced a stronger positive relationship with participants' perceptions of the believability of the article than accuracy. Participants who reported greater concern over security issues were more likely to find the article believable and accurate. Although the difference between these two relationships were slight, it may indicate that concern over the issue reported may have a greater influence upon a general assessment of story believability than a more specific appraisal of how accurately these events were described in the article.

These findings indicate further areas for analysis by showing that those participants who were more concerned about an issue may have had these anxieties validated by news reporting this issue. Certainly, research examining the consequences of threat upon cognitive processing and behaviour has found that risk may either increase an individual's sensitivity to subsequent communication (Cacioppo & Gardner, 1999) or may lead to an exaggeration of that risk (Lichtenstein, Slovic, Fischhoff, Layman, & Combs, 1978). It would therefore seem plausible to suggest that concern over an issue will bias processing of subsequent narratives relating to this threat. These biases, as the findings demonstrate, will determine how an individual responds to subsequent news that confirms that threat and outweighs the influence of subtle variations in content.

Overall, the initial findings of this exploratory study are that for print news reports sources are incidental to the narrative and attitudinal characteristics of audiences. It was proposed that that the story and audience dynamics were more significant indicators of news perception than subtle variations in the presentation of a story.

With sourcing integral to the professional practice of journalism, two implications arise from this research. The first is that this study, when considered alongside previous research, suggests that source attribution by itself has very little influence on audiences' assessment of the credibility of news. While direct attribution and full identification is considered the best way of allowing audiences to evaluate the

credibility of a news narrative, the findings from this study indicate that other factors are more significant determinants of audiences' perceptions of news credibility.

6. References

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