

# THE NEWS READABILITY PROBLEM

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*The low readability of news has often been attributed to production and format features, such as deadline pressures and news story organizational features. This study, however, puts the blame elsewhere. News stories written by nine high-profile journalists and later revealed as deceptive were more readable and contained more direct quotations (another readability indicator) than authentic stories generated by the same news organizations. Because the stories were written under similar production and format conditions, these findings indicate that low readability is due to the challenge of journalism to convey information only about the real world. Not so constrained, deceptive “news” portrays a simpler world.*

**KEYWORDS**          deception; ethics; journalism; plagiarism; readability; writing

## **Introduction**

Despite efforts to get journalists to produce stories that are easy to read, the opposite appears to be true. News stories tend to be harder to read than other types of prose, and the trend is toward increasingly less readable news stories. This study attempts to isolate the cause of the news readability problem.

Readability can be enhanced by reducing either the grammatical burden or the vocabulary burden of a text. Short grammatical structures are generally easier to follow. Short words and phrases are generally more familiar. The ease with which one can read a text depends largely on the writer’s ability to simplify words and sentences (Dubay, 2004; Fountas and Pinnell, 1999; Meyer, 2004, pp. 109-123; Severin and Tankard, 1992, pp. 109-126). At any one historical time, however, news stories generally contain longer words than other writings (Fowler, 1978; Lively and Pressey, 1923) and also longer sentences (Gray and Leary, 1935; Seib, 1976). Even more perplexing is that the news readability problem is getting worse. While non-news stories have gotten progressively more

readable over time (Danielson and Lasorsa, 1989; Gitlin, 2003, p. 99; Sherman, 1893), news stories have become less readable (Danielson et al., 1992; Stevenson, 1973). Interestingly, the newspaper's decreasing readability has been found to be due largely to increases in its vocabulary burden (Danielson et al., 1992).

A number of explanations have been made for the news readability problem, but no empirical evidence has been offered to support them. Danielson et al. (1992) suggested five possible reasons why news stories are less readable than novels and why news has been getting progressively less readable. These five factors occur at four of the five levels of influence that Shoemaker and Reese (1996) have identified as affecting media content (individual, media routines, organizational, extra-media and ideological).

First, at the individual level of influence, reporters have become progressively better educated, compared to the general population. Despite pleas to write for their readers, journalists may yield to the instinct to write for themselves and others like them (Miljan and Cooper, 2003; Weaver and Wilhoit, 1991).

A change at the organizational level could also be responsible for the news readability problem. The introduction of each new major communication medium—radio, television, the Internet—has forced the print news media to adapt their mission to the competition. With other media taking on the role of speedily headlining the news, newspapers and news magazines have become more valued for their ability to contextualize and analyze events that have been briefly described elsewhere. Since exposition is generally less readable than narration, the interpretative and explanatory characteristics of modern news stories may come at a cost of readability (Fishkin, 1985).

A third possible reason for the news readability problem may be a change at the media routine level. Confidence in a central professional norm, journalistic objectivity, has eroded, replaced with a more relativistic view (Bennett, 1988; Schiller, 1979; Schudson, 2003; Tuchman, 1972). Psychological studies have demonstrated the effects of motives, moods, previous experiences, cultural expectations and attitudes on one's ability to perceive, attend and remember.<sup>1</sup> As Danielson et al. (1992, p. 437) put it:

Truths once considered self-evident are today more cautiously evaluated by journalists, who recognize that their observations may not be the only possible ones. Events are no longer regarded as objectively defined and thereby perfectly observable.... Accordingly, they are more cautious about stating 'facts' or expressing opinions.... The result is more carefully worded messages, often couched in less simple language.

Related to this third possible explanation for the news readability problem is another one that also occurs at the media routine level. Since journalists today are more willing to recognize that their observations may not be the only ones

possible, they have grown increasingly more dependent on outside sources, often technical experts (Barker-Plummer, 1988; Gans, 1980; Sigal, 1973). This may lead to transcribing the jargon of experts rather than translating their words into plain language, resulting in a loss of readability.

Danielson et al. (1992) also suggested that a change at the extra-media level could account for the decreasing readability of the news. The news media over time have been forced to communicate information about an increasingly complex world. Scientific and technological advancements, governmental bureaucracies, globalization and other factors beyond the control of news organizations themselves have resulted in news less connected to the everyday lives of readers. Information-processing studies demonstrate that familiarity with a topic is a central factor in understanding something new about it (Graber, 1988). In the early part of the 20th century, Walter Lippmann (1922) recognized that too much is expected of journalists, who strive to describe a too-complicated world. Since then, the challenge has increased. In noting how the real world differs from the fictional world of evening dramatic television, Gerbner and Gross (1976, p. 42) said, "Unlike the real world, where personalities are complex, motives unclear, and outcomes ambiguous, television presents a world of clarity and simplicity." The freedom to describe an unreal world, one with few qualifications and caveats, might make it easier for non-news producers to write more readably than news reporters and columnists whose content is substantially more constrained. The requirement that they convey information about an increasingly complex real world could explain the news readability problem.

Two additional media routines might play a role in the low readability of news. First, a production feature of news is its immediacy, its emphasis on the latest facts. Timeliness is an important news value. Even if print news media are disadvantaged by the alacrity of rival channels, deadlines are a certainty in all news media (Kovach and Rosenstiel, 2007). Perhaps speed leads to less attention to readability on the part of reporters. Secondly, a format feature of news is its inverted pyramid style, with the lead packed with the most important information. Perhaps such news story organizational patterns lead to less readable prose (Gillman, 1994). Indeed, Stapler (1985) found that lead paragraphs in news stories in 12 metropolitan dailies were more difficult to read than the next three paragraphs.

While each of these seven explanations for the news readability problem is plausible, it has proven difficult to determine the prime suspect. However, guidance is offered by the empirical literature that shows that news stories at any one time are less readable than fictional tales (Danielson et al., 1992). Perhaps fiction is more readable primarily because it is not constrained to describe the real, complex world. The present study tests these ideas by comparing the readability of two sets of stories identical in all but one way. Some of the stories were true news stories while the rest were what appeared to be true news stories when published but which later were deemed deceptive.

## Readability and authenticity in news

Before examining this issue of authenticity in reporting, let us reconsider readability as a linguistic measure, particularly for news texts. While challenges to the validity and reliability of readability measures have occurred (Fry, 1986; Smith, 1983; Smith and Smith, 1984), the preponderance of evidence generally supports their diagnostic value. The validity and reliability of readability measures were tested and supported by early investigators (Gunning, 1952; Kearl, 1948). Three decades later, in one of the first reported uses of computers to measure readability, Porter (1982) reliably calculated the readability of a large number of texts using four distinct readability measures. More recently, Weeks and Wallace (2002) found strong consistencies between the Flesch measure and the FOG measure across 110 journal articles. The use of computers to calculate readability automatically resolves fully the question of the reliability of the measure. Once programmed, the computer will produce the same score on the same text every time. The validity question, however, is likely to endure. As Sherman (1893, pp. ix-x) observed, "There is a very natural antipathy to treating aesthetics by scientific methods."

While most work on readability has been conducted in the United States and on American texts, readability studies have been conducted in Australia (Anderson, 1966) and Great Britain (Weeks and Wallace, 2002). The latter found articles in British journals more readable than those in American journals, and articles written by British authors easier to read than those by American authors. Thus, at least within the English-speaking world, readability has international value as a measure.

Returning again to the question of authenticity, we may well ask: If authentic and deceptive news stories published over the same time span and by the same news organizations differ in readability then the difference cannot be due to changes in reporters' characteristics, changes in media routines or changes in extra-media factors. The stories differ only in that the authentic ones are constrained to describe a real, complex world while the deceptive ones are not. Deceptive "news," like fiction, can reduce the real world to a tidy, manageable place where everything fits together nicely. In an analysis of recent deceptive news stories, Woo (2003) observed that they were filled with conventional wisdom and stereotypes. Likewise, when *New Republic* Editor Charles Lane reviewed the work of discredited Stephen Glass, Lane said, "So many of his stories revolve around stereotypes.... They fit into the preexisting grooves that are already etched into everybody's heads, things we think or are predisposed to believe are true" (Gorenfeld, 2004). Jack Shafer's (2004) analysis of the Associated Press's Christopher Newton found that he followed a predictable formula: "Newton's disputed talking heads ... appear halfway or two-thirds of the way through his stories, very much according to the AP formula, to contribute the opposing view of a professor or an interest group spokesperson.... Content-free, these clichéd sound bites add nothing to the story except to say

that there's another side to the story." Similarly, John Gorenfeld (2004), commenting on the work of *USA Today's* Jack Kelley, observed that "what stands out in Kelley's phony oeuvre is the way he trafficked in particularly explosive stereotypes.... Kelley told a lot of people what they expected to hear.... Jack Kelley's forgeries fit snugly." News by definition is information. Stereotypes by definition are redundancies. Since stereotypes fit readers' expectations, they should make stories easier to read.

### **Simplifying a complex world**

This simplification process that marks fabricated news also extends to plagiarism and other illicit credit-taking because in the process of stealing the words of others it has been found that reporters often engage in stereotyping and other forms of simplifying. Indeed, it has been found that deceptive news stories of all types contain significantly more stereotypes than do authentic news stories (Lasorsa and Dai, 2007a; Lasorsa and Dai, 2007b). Also, the lines separating different types of journalistic deception are blurry. Even if a writer intends only to pilfer the words of another and not to change a single fact (plagiarism), that writer may end up offering an untrue account (fabrication). For example, the story that first got Jayson Blair into trouble initially raised suspicion when he made the reasonable but incorrect assumption that patio furniture would be on the patio. The author of the story from which he lifted that information noticed Blair's "simple" mistake and probed further, ultimately uncovering one of journalism's most notorious cases of deception (Hernandez, 2003). Whether a reporter deceives through fabrication or plagiarism, the reporter often smoothes out the wrinkles existing in the real world.

The only difference between literary journalism and literature is that the former deals only with reality. "As such," said award-winning non-fiction magazine writer David Quammen, "literary journalists are at a serious disadvantage: Novelists and other fiction writers can make things up; journalists traditionally have no such luxury. They are constrained by the boundaries of fact and credibility, and when they push those boundaries too far, there can be consequences. Finkel and the others demonstrate this all too clearly" (Gorss, 2003, p. 23). Quammen was referring to Michael Finkel, who fabricated a *New York Times* Sunday magazine cover story about child slaves in Africa. Asked why he embellished parts of the story, including creating composite characters and changing timelines, Finkel replied, "The story is complicated, and I didn't want to inundate the readers with complexities and numbers. I wanted the whole to be greater than the sum of its parts and felt, wrongly, that a greater truth could emerge using this technique" (Kurtz, 2002). After the *Boston Globe's* Patricia Smith got caught fabricating, she said much the same thing. "I wanted the pieces to jolt, to be talked about, to leave the reader indelibly impressed.... So I tweaked them to make sure they did" (Smith, 1998). This "tweaking" included making up sources, quotes and entire stories.

Some reporters, Quammen said, “under pressure from editors’ expectations or their own artistic and professional ambitions, create elegant falsifications that appear to be factual but are more shapely, more dramatic, than the actual data that careful reporting has turned up. Wanting the grace and the focus of art, wanting also the urgency and the authority of reality, a journalist sometimes combines the two, but conceals that act of combination from the readers” (Gorss, 2003, p. 23).

In a study of differences between journalists and novelists, Fishkin (1985) noted that in earlier times they often were the same people and used the same techniques. “In eighteenth-century England, as the novel began to come into its own, the boundary between this new imaginative genre and journalism was still indistinct; novels by former journalist Daniel Defoe, for example, were often presented as factual accounts by their author.... (Walt) Whitman, (Mark) Twain, and (Theodore) Dreiser all admit having invented stories on slow days.” Over time, though, that changed. “From the middle of the nineteenth century on, the journalist and the imaginative writer were generally held to different standards and were subject to different expectations on the part of the reader. The journalist’s facts must be verifiable” (p. 207). A *New York Times* (1984) editorial put it bluntly: “Why should not writers, like carnival barkers, pretend that fictions are facts? First, last, and always, because the reader lured into the House of Facts, poor sap, has paid to experience facts.” Deceptive news stories can make the perfect point with the perfect source’s perfect anecdote or perfect quote. In the end, the author of a deceptive news story never has to let the facts get in the way of telling a good story. Deceptive news stories can be too good to be true.

Not surprisingly, deceptive news stories do contain significantly more sources than do authentic news stories (Lasorsa and Dai, 2007a). If one is going to engage in deceptive reporting, why not increase the value of one’s story by adding sources? For the same reason, it is possible that deceptive stories also contain more direct quotations. Like the sound bites that permeate broadcast news, good quotes tend to be short and simple, thereby enhancing the readability of the story. Sherman (1893) observed that written language becomes more efficient over time by becoming more like spoken language, where sentence lengths tend to be shorter than in written language. Direct quotations literally represent spoken language. It is possible that reporters who make up quotes are also likely to make up good ones, thereby increasing the readability of their copy.

## **Hypotheses**

These ideas led to the hypotheses that deceptive news stories written for major news organizations would (1) be more readable and (2) contain more direct quotations than authentic stories written for the same organizations.

## **Method**

An online search was conducted to find recent instances of reporter deceptions in major American newsrooms. Using four online full-text databases (Academic Search Premier, Expanded Academic ASAP, Factiva and Lexis-Nexis), as well as a general online search engine (Google), the authors looked for accounts of deception contained in newspapers, magazines, academic journals, trade organizations and Web sites. The search identified nearly 50 reporters who between the years 1998 and 2004 wrote deceptive news stories and news columns. Many of the accounts, however, yielded little more than that deception had occurred. Selected for further analysis were the nine deceptive reporters who had the most information written about them.<sup>2</sup>

These news reporters and news columnists worked for five news publishers: the Associated Press wire service, *The Boston Globe*, *The New York Times*, *USA Today* and the weekly newsmagazine *The New Republic*. While it may appear that these news organizations somehow cultivated deception, they clearly cultivated revelation of deception, which is at least partly why these nine cases are so well documented. In addition, scandal at better-known organizations tends to generate more information from others, including competing organizations, than scandal at lesser-known organizations.

An effort was made to identify every story written by these nine reporters that later was recognized as being deceptive in some way.<sup>3</sup> In most cases, once a deceptive story was uncovered by one of these prestigious news organizations, the organization conducted an investigation of the reporter's previous work and corrections were attached to each story identified as deceptive. In a few cases, deceptive stories were first pointed out by other, often competing, publications. A total of 181 deceptive stories written by these nine reporters were identified. This census of deceptive stories was compared to a random sample of ostensibly authentic news stories written for the same five news organizations over the same time period. Following standard content analysis sampling guidelines (Riffe et al., 2005), a constructed two-week sampling scheme was adopted for the two seven-day newspapers, the one five-day newspaper (*USA Today*) and the wire service for each of the years 1998 and 2004. For the newsweekly, one issue was randomly selected for each month of each year. One article was then randomly selected from each issue. This sampling scheme resulted in a total of 128 randomly sampled articles from the five news organizations (AP, 28; *Times*, 28; *Globe*, 28; *USA Today*, 20; *New Republic*, 24).

The algorithm used to compute the Flesch Reading Ease Score is based on just two factors. The average number of syllables per word (ASW) is used as an indicator of the vocabulary burden of the text. ASW equals the number of syllables divided by the number of words. The average sentence length (ASL) is used as an indicator of the grammatical burden of the text. ASL equals the number of words divided by the number of sentences. The formula for the Flesch Reading Ease score is:  $206.835 - (1.015 \times \text{ASL}) - (84.6 \times \text{ASW})$ . The formula yields a number between 0 and 100. A higher score indicates an easier-to-read text (Flesch, 1949). (See Figure 1.) To determine the readability of the stories,

the Flesch Reading Ease Score was calculated using computer software (Microsoft Word XP's readability tool).

Since a story topic can affect readability, this study controlled for story topic. Stories were coded into 11 topic categories: accidents/disasters; business/finance; crime/courts; defense/military/terrorism/war; domestic (U.S.) affairs/policies/laws/issues; domestic elections; entertainment /media /arts/culture/lifestyle; international affairs/policies/laws/issues; science/technology/health/medicine; sports, and other. Intercoder reliability of the story topic variable, measured by Cohen's kappa, was .80.

[Figure 1 about here]

To test the second hypothesis, on use of direct quotations, at least two trained persons coded each story, which was stripped of all identifying information, including bylines. Coders were told that the stories appeared in recent years in major U.S. publications. They were not told that some stories were deceptive. Coders were instructed to read each news story solely to find direct quotations. They counted the number of direct quotations in each story. Intercoder reliability, measured by Cohen's kappa, was calculated to be .96. (Because a computer program was used to calculate readability scores, intercoder reliability was not a consideration for that measure.)

## Results

As one might expect, the five news organizations differed in their readability levels (*AP*, 44.2; *Globe*, 49.4; *New Republic*, 47.2; *Times*, 47.9; *USA Today*, 48.1) but the differences were not statistically significant ( $F = 2.047$ ,  $df = 4$ , ns, two-tailed ANOVA). However, the authenticity of the news stories these organizations produced made a significant difference in how readable the stories were. (See Table 1.) The 128 ostensibly authentic stories had an average readability of 44.47 while the 181 deceptive stories had an average readability of 48.84. The deceptive stories, as hypothesized, were more readable than the authentic ones.

Because the subject matter of news stories could affect their readability, the story topics of the authentic and deceptive news were examined to determine if that might contribute to the observed readability differences. For example, if the deceptive news contained inordinately larger numbers of stories on topics that somehow lend themselves to relatively easy-to-read stories then that might explain why deceptive news is more readable than authentic news. The authentic and deceptive stories did not differ by more than 5% for stories on most topics: accidents and disasters; business and finance; crime and courts; domestic affairs; entertainment; science, technology, health and medicine, or other unspecified types of stories. However, the authentic and deceptive stories did

differ in their numbers of stories on defense (14.8% versus 27.3%), domestic elections (12.5% versus 1.6%), international affairs (8.6% versus 19.7%), and sports (8.6 % versus 1.1%). On all but one of these topics, though, the readability of the deceptive stories was eight to ten points higher than the readability of the authentic stories. Thus, story topic fails to explain the observed readability differences. The exception was sports stories. There were significantly more authentic sports stories (N=11) than deceptive ones (N=2), and the readability of the authentic sports stories averaged 10 points higher than the readability of the deceptive sports stories. Given the small number of sports stories, however, this cannot account for the readability differences between the authentic and deceptive news. Even when story topics are taken into account, the deceptive news stories are substantially more readable than the authentic ones.

[Table 1 about here.]

The authentic and deceptive news stories also differed in their use of direct quotations. On average, almost twice as many quotations were found in the deceptive stories as in the authentic stories. (See Table 1.) However, because quotation use could be a function of story length, that alternative explanation for this finding was tested. (It was not necessary to control for story length when comparing stories' readability because it is already factored into that equation.) Indeed, the deceptive news stories were on average a third longer than the authentic ones. (See Table 1.) Therefore, the number of direct quotations per 1,000 words was calculated. As Table 1 shows, even when story length was controlled, the deceptive news stories contained significantly more direct quotes than did the authentic stories. Therefore, the second hypothesis also was supported.

## **Conclusion**

This study attempted to address a problem that has perplexed journalism for many years—the low readability of news. Despite efforts of professional trainers, coaches and educators, news stories generally have been less readable than most other types of prose, and the problem appears to be getting worse. By comparing deceptive and authentic news, the study tried to eliminate major reasons offered as explanations for the low readability problem.

The findings indicate that deadline pressures, format features and other plausible excuses may not explain the relatively low readability of news stories in major American news publications. If these features were responsible for low readability of news then we should see little differences in the readability of news stories, whether authentic or deceptive. However, one major limitation of this study is its assumption that the deceptive stories were written under the same ideological, extra-media, organizational, professional and personal constraints as were the authentic stories. It is possible that the reporters who wrote the

deceptive stories were systematically alike in that they used the time they saved avoiding shoe-leather reporting to focus on their story's readability. One way to eliminate such speculation would be to compare the deceptive reporters' deceptive stories to the same deceptive reporters' authentic stories. Future studies might consider such a strategy. In the meantime, however, the existing evidence suggests that the deceptive reporters did not use the time they saved doing real reporting to improve the readability of their stories. Those deceptive reporters who commented on what they did with the time they saved all admitted using the time for other purposes. They hung out at home (Blair, 2004), shopped at stylish boutiques (Carr, 1999), and otherwise spent their time enjoying the life of a well-paid, well-respected reporter for one of the nation's major news organizations.

The results indicate that deceptive news stories may be easier to read primarily because the tales deceptive reporters tell are not constrained by reality. Does this mean that nothing can be done about the news readability problem, that the problem is inherent in the news product itself? Not necessarily so. News editors and journalism educators may not be able to make the world less complex, but they may be able to make the reporter's job less complex, by giving the reporter the training and tools needed to do a better job of describing complex reality. A relatively modest step would be for journalism educators to stop using made-up story notes to teach reporting, a routine practice in many introductory reporting classes (and a technique the first author used for many years). Instead, students might start from scratch covering real stories in the real world, with all of their complexities. More grandly, journalism educators could provide students with specific tools designed to help them understand, describe, analyze and interpret an increasingly complex world. One need not be a mathematician to use the simpler tools of mathematics. The same goes for the simpler tools of science, business, politics, psychology and statistics. Whether the world has actually gotten more complex or whether its complexity merely is more apparent, or both, reporters need to use the best tools available to observe and describe that world to their audience.

A major limitation of this study is its analysis only of stories generated by major U.S. news organizations. Deceptive news reporting is not limited to the United States. Soon after the Jayson Blair scandal erupted at *The New York Times*, an incidence of reporter deception in Great Britain two decades earlier was discussed. A political journalist who was supposed to be covering the Conservative Party Conference in Brighton in 1984 gave away the fact that he was not present when he checked in with his newsroom unaware that a bomb had exploded at the conference. He had been watching the proceedings on television (Bradbury, 2003).

While nations and cultures may share the problem of news deception they do not necessarily share the same readability standards. Differential educational norms and other cultural differences play a role in what is considered a "mass" medium, that is, a form of communication the vast majority of the population can

understand. Studies of differences between authentic and deceptive news in other countries and cultures would shed further light on the issues explored here.

Future studies also might explore other aspects of readability beyond the simple indicators used in the Flesch formula, and the use of direct quotations. Other text factors that might contribute to readability include emotion, human interest, humor and textual organization, none of which is captured by the Flesch equation (Bailin and Grafstein, 2001; Meyer et al., 1985). What other characteristics of text might help make news stories more readable? How can reporters capitalize on the use of these text characteristics?

We now know that the nature of the content of news stories dictates to a large extent how readable a news story can be. The authors hope that journalists will not take this as an excuse for writing unreadable prose. Rather, we hope they will recognize the problem and strive to do a better job of describing as simply and as clearly as they can the complex world they surveil for their readers. A more readable news product might also help retain readers.

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**Notes**

1. For a review of the psychological factors affecting perception, attention and retention, see Severin and Tankard (2001, pp. 73-90).
2. For additional information about the reporters, news organizations and stories analyzed here, please contact the first author.
3. Although the stories analyzed here were considered “deceptive,” no claim is made that the authors of these stories intended to deceive. Also, the label “authentic” news is not meant to imply that these stories are necessarily accurate and fair but only that to the time of study they had not been recognized as deceptive.

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Figure 1. Characteristics of Texts at Different Flesch Reading Ease Levels.

<b>Flesch Reading Ease Score</b>	<b>Description of style</b>	<b>Average sentence length in words</b>	<b>Syllables per 100 words</b>	<b>Representative type of magazine</b>	<b>Grade level needed to understand text</b>	<b>% of adult pop. (1949)</b>
90-100	Very Easy	8 or less	123 or less	Comics	5th	93%
80-90	Easy	11	131	Pulps	6th	91%
70-80	Fairly Easy	14	139	Slicks	7th	88%
60-70	Standard	17	147	Digests	8th – 9th	83%
50-60	Fairly Difficult	21	155	Quality	10th – 12th	54%
30-50	Difficult	25	167	Academic	13th – 16th	33%
0-30	Very Difficult	29 or more	192 or more	Scientific	College Grad	4.5%

Note: Figure constructed from data in *The Art of Readable Writing* (Flesch, 1949).

The last column represents percent of adult U.S. population (circa 1949) estimated to be able to understand text at that reading level. The latest (2004) U.S. Census Bureau data indicate that 85% of Americans today can read at the 50-60 reading ease level, 72% at the 30-50 level, and 28% at the lowest (0-30) level.

Additionally, note that the publications listed here as examples of types of magazines expected to be most difficult to read are exclusively non-fiction publications.

Table 1. Independent T-Tests for Readability and Direct Quotations by News Story Authenticity.

	News Story Authenticity		t value	df
	Authentic (128)	Deceptive (181)		
<b>Readability</b>	44.47	48.84	-3.705***	307
<b>Direct Quotes</b>	8.16	15.90	-3.088**	307
<b>Story Length</b>	823.20	1210.66	-3.609**	307
<b>Quotes/Word</b>	10.73	12.67	-2.483*	307

Note: Cell entries are means. Readability is the Flesch Reading Ease Score. Direct Quotes is the number of direct quotes per story. Story Length is total number of words. Quotes/Word is the number of direct quotes per 1,000 words.

\*\*\*  $p < .001$     \*\*  $p < .01$     \*  $p < .05$

## Biographical information

**Linden Dalecki**, Ph.D., is an assistant professor in the Department of Management and Marketing at the Kelce College of Business in Pittsburg, Kansas. Broadly stated, his major research interest is the intersection of narrative and promotion. He pursues a sideline interest in creative writing, and *Kid B*—his first novel—was recently published by Houghton Mifflin. Linden is represented as a novelist and screenwriter by the Los Angeles office of International Creative Management. He holds a B.A. in Radio, TV, & Film from U.W. Madison, an M.A. in Radio, TV, & Film from U.T. Austin, and a Ph.D. in Advertising from U.T. Austin. He currently teaches courses in Strategic Advertising Management and Entertainment Marketing.

**Dominic L. Lasorsa** is an associate professor in the School of Journalism at the University of Texas at Austin. He co-authored *How to Build Social Science Theories* and *The National Television Violence Study*. His research appears in *Journalism & Mass Communication Quarterly*, *International Journal of Public Opinion Research*, *Journal of Media Economics*, *Journal of Reading*, *Newspaper Research Journal* and elsewhere.

**Seth C. Lewis** is a doctoral student in the School of Journalism at the University of Texas at Austin. His research focuses on the changing contexts for news production in a digital age, both for professional journalists and their citizen collaborators online. He currently teaches a course on blogging and citizen media, and also conducts research on these and other emerging forms of journalism. Before pursuing a Ph.D., he earned an M.B.A. from Barry University, was a Fulbright Scholar to Spain, and worked as assistant sports editor for *The Miami Herald*.