Peeling Back the Onion: 
Formative Agenda Building in Business Journalism

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This study looks beyond evidence of effects in news media content to examine factors journalists perceive as influencing their selection of sources for story ideas—the formative stage of agenda building. Survey data from a large sample of business journalists ($N = 782$) collected in three years help identify distinctive dimensions of business journalists’ reliance on resources for story idea generation, the impact of journalists’ characteristics, and the mediating role of source credibility. The findings provide new empirical insights into the multiple dimensions—or layers of the metaphorical onion (McCombs, 1992, 2014)—that collectively shape the media agenda as well as the broader process in which business journalists decide what makes news. The conceptual, methodological, and practical implications of the study are discussed.

Keywords: agenda building, business journalism, story ideas, source credibility, hierarchy of influences, individual-level influences

Even in a changing media landscape, media coverage still impacts public opinion on a host of salient subjects, including perceptions of the world of business and the economy (Carroll, 2017; Ragas, 2014). In turn, scholars have examined the forces that shape the media agenda—a process known as agenda building (Berkowitz & Adams, 1990). Frequently, these investigations focus on one specific force, such as the influence of source-controlled public relations efforts (Kim, Kiousis, & Xiang, 2015; Kiousis et al., 2015) or the influence of intermedia agenda setting (Golan, 2006; Vargo & Guo, 2017; Zhang et al., 2017). Meanwhile, the sociology of news research often zooms in on the influence of journalism norms and routines on news production (Gans, 1979; Tuchman, 1978). These three approaches look at isolated slices of the concentric layers of the metaphorical onion that shapes the media agenda (McCombs, 1992, 2014). There is value in a more complete, extended view of these and other factors.

Research tends to look for evidence of agenda-building effects as manifested in media content (McCombs, 2014). Scholars often analyze the outputs of journalists (i.e., news coverage) and/or the outputs of strategic communication professionals (i.e., information subsidies) and then compare the agendas of these actors to each other. While this approach can yield valuable insights, it is tantamount to making
observations about the flavor of a dish that has already been brought to the table rather than going into the kitchen and asking the chef about the recipe and the inputs that went into making the dish. Few agenda-building studies survey journalists about the selection of resources at the story idea stage, which we call ‘formative agenda building,’ or the credibility of sources as part of the process (Len-Ríos et al., 2009; Zoch & Molleda, 2006).

Further, media sociology research from a hierarchy of influences perspective (Reese & Shoemaker, 2016; Shoemaker & Reese, 2014) suggests it can be important to gauge how micro- or individual-level factors, such as the characteristics of journalists, might help explain the way journalists use agenda-building resources for story ideas and their perceptions of source credibility. For example, research on business journalists has found that, even within this specific news ecosystem, journalists’ perceptions can vary based on their demographic and work-related characteristics (Ragas & Tran, 2015).

Inspired by the onion metaphor of three layers of influences and journalism studies of source credibility (McCombs, Holbert, Kiousis, & Wanta, 2011), the current undertaking helps fill these gaps through a large-scale, multiyear survey of U.S.-based business journalists. With a sample of 782 cases collected every other year over a five-year period, we empirically test the forces within the onion at the formative agenda-building stage for journalists, thereby providing greater insight into the process.

Literature Review

Agenda Building

Cobb and Elder (1971) were the first to explicitly raise the question of where public policy issues come from and who participates in the process of building an agenda. Although these scholars originally used the term agenda building as an alternative perspective in the broader context of modern democratic theory, subsequent studies typically address the choices made by the news media and journalists in selecting and featuring certain events, issues, or sources over others. This process is closely related to agenda setting, a well-studied mass communication theory (Perloff, 2015) that initially focused on how the media agenda determines the salience of political issues among the public (McCombs & Shaw, 1972) but has become increasingly expansive since its inception (McCombs, Shaw, & Weaver, 2014). Research into the origins of the media agenda emerged in the 1980s (e.g., Berkowitz, 1987; Lang & Lang, 1981) as some agenda-setting researchers began to ask: “Who sets the media agenda, how and for what purpose it is set?” (Gandy, 1982, p. 7). The media agenda, in that sense, moved from the independent variable to the dependent variable. Early empirical studies found that the sources journalists interact with could significantly influence news content (Berkowitz, 1987; Ghorpade, 1986; Lang & Lang, 1981; Turk, 1985; Turk & Franklin, 1987).

Tedesco (2011) notes that agenda-building studies can be considered a specific type of agenda-setting research that is concerned with exploring the forces and sources that make up news content. As such, agenda building is equivalent to what Dearing and Rogers (1996) described as media agenda setting. For the current study, we adopt the definition put forth by Berkowitz and Adams (1990): Agenda building is “the overall process of creating mass media agendas” (p. 723).
Drawing from sociology of news research into the hierarchy of influences (see Reese & Shoemaker, 2016; Shoemaker & Reese, 2014), McCombs (1992, 2014) introduced the metaphor of an onion and its layers to explain the interconnected forces that broadly influence the creation of news content. Conceptually, this onion consists of the media agenda at the core and three layers surrounding it: (1) external news sources, including public relations efforts via information subsidies; (2) the interactions and influences of news media on each other; and (3) the social norms and traditions of journalism.

Sources

Information subsidies (Gandy, 1982), such as news releases, interviews, and content on digital communication channels (particularly those controlled by official and authoritative sources), lower the cost and time that journalists spend on news gathering (see Kiousis & Ragas, 2016). In turn, the fingerprints of sources are often found on published news content. For example, research indicates that 25% to 80% of news content is initiated by public relations sources, such as corporations and government agencies (Neill et al., 2018; Sweetser & Brown, 2008). Of course, journalists do not simply repeat the information provided by sources. News content is a by-product of their interactions (Kiousis & Ragas, 2016).

Intermedia

Studies have usually detected the impact of elite or prestige media outlets, such as The New York Times and the national wire services, on the patterns of news coverage across the media ecosystem (Golan, 2006). Around the same time that agenda-setting researchers began exploring the influence of public relations on news content, another group of scholars—practicing what is often called intermedia agenda setting—began assessing journalists’ and news organizations’ influence on the media agenda (e.g., Reese & Danielian, 1989). This research discovered that the news agendas of traditional media, such as newspapers and television, are largely homogenous, with media elites often serving as the trendsetters across beats (McCombs, 2014). Intermedia agenda-setting studies have evolved with the changing media landscape and now examine digital and social media (see Tran, 2014, for a review). Although the media agenda as a whole remains somewhat redundant, the classic top-down influence of the elite press seems to be dissipating (Meraz, 2011; Vargo & Guo, 2017).

Norms and Routines

Other factors influence news content beyond journalists’ interactions with sources or with the work of peers (Supa, 2014). Research of news production and the sociology of news demonstrates that journalistic norms, routines, and traditions also influence the news (Becker & Vlad, 2009; Boczkowski, 2010; Gans, 1979; Shoemaker & Reese, 2014; Tuchman, 1978; Usher, 2013, 2014). The professional norms, routines, and practices into which journalists are socialized begin with their education and training and develop further through their daily experiences on the job (McCombs, 1992). Such norms and routines guide news gathering and story selection decisions (Supa & Zoch, 2009). In general, norms around news values and newsworthiness persist (Supa, 2014; Zoch & Supa, 2014). But there are instances where journalists, due in part to economic reasons (Usher, 2014), have focused the media agenda on trending topics that drive audience traffic, giving rise to the “reverse” agenda-setting phenomenon (Ragas & Tran, 2013).
Lay ers of the Onion

Describing the broad process of how the media agenda is set, McCombs (2014) wrote:

The concentric layers of the onion represent the numerous influences at play in the shaping of the media agenda, which is the core of the onion. This metaphor also illustrates the sequential nature of this process in which the influence of an outer layer is, in turn, affected by layers more proximate to the core of the onion. A detailed elaboration of this onion contains many, many layers. (p. 111)

While there is conceptual agreement among scholars that the news content is shaped by a range of resources, agenda-building scholarship, in practice, tends to focus on just one layer of the onion—typically either (1) the influence of sources through public relations and strategic communication efforts on news content or (2) the intermedia influences of the news agenda. For example, a review by Ragas (2014) of business news processes and effects research finds accumulated evidence of agenda-building effects with much less attention being paid to peeling back and understanding nuances in the different layers of agenda building.

In its most basic form, evidence of how an agenda is built is gauged through media visibility, which refers to the volume of coverage or frequency of reference to those who actively participate in this process (news makers, sources, elite media). Arguably, elements of agenda building formulate even earlier, when journalists are still exploring and considering which news topic(s) to cover in the first place. At that early stage of reporting, judgments about what constitutes news are made with the aid of various contributing factors, including breaking news or developments highlighted by the mainstream media, tips from the audience, trending topics in social media, public relations pitches, or news releases from different entities. Len-Ríos and colleagues (2009), for example, studied how a range of such resources was used in health journalism for story idea generation. Because the way journalists handle news-gathering resources directly influences their editorial decisions, this initial phase involves the precursors of agenda building. As such, the reliance on resources for story ideas, the first step of news production, can be defined as formative agenda building, which carries implications for subsequent stages of the agenda-building process. To extend this proposition to the context of business journalism, the first research question is introduced:

**RQ1:** How frequently do business journalists perceive themselves using different resources for generating story ideas?

Building on this research question and the metaphorical multilayered onion (McCombs, 2014), we further argue that the selection of certain resources for story ideas reflects journalists’ orientation toward different dimensions or layers of formative agenda building. In other words, pertinent layers of the onion represent inner elements and outer forces that influence—both collectively and independently—journalists in their news decisions. In peeling back the layers of the onion, one can gain insight into the subtle intricacies of agenda building with its various dimensions being interactive but distinctive. As such, the second research question is introduced:

**RQ2:** What are the specific dimensions in the use of resources for story idea generation?
Variations Based on Journalists’ Characteristics

Journalists, even those within a specific beat such as business journalism, are not a monolithic entity (McCombs et al., 2011; Tran & Ragas, 2018). Journalism studies show that individual differences (i.e., demographics and professional backgrounds) can contribute to perceptual variations among journalists (Brownlee & Beam, 2012; Willnat, Weaver, & Wilhoit, 2017). Within the media sociology tradition, the hierarchy of influences model (Reese & Shoemaker, 2016; Shoemaker & Reese, 2014) identifies the complex factors that shape news, from the individual level to the social system level. According to Reese and Shoemaker (2016), at the micro level, “in spite of the traditional notion of professional ‘objective’ detachment, we assume these characteristics affect [journalists’] work” (p. 398). Such characteristics include traits, roles, and demographics.

Health news agenda-building research demonstrates that certain journalists’ characteristics help explain the reliance on public relations resources for story idea generation (Len-Ríos et al., 2009). In a business news context, the demographics of business journalists and their professional backgrounds (i.e., experience, editorial rank, newsroom size, primary news platform, work location) have been found to contribute to perceptual variations within this group of news workers (Ragas & Tran, 2015). As such, business journalists’ perceived reliance on the various formative agenda-building layers or dimensions might vary as a function of personal and work-related variables. Therefore, the first hypothesis is submitted:

H1: Business journalists’ characteristics (demographics and professional backgrounds) are significant predictors of their perceived use of the agenda-building dimensions.

Source Credibility Perceptions

Credibility has long been a well-researched concept in mass communication. It cuts across theoretical perspectives and can help connect them (McCombs et al., 2011). Source credibility has been identified as a contingent condition of agenda setting (e.g., Wanta & Hu, 1994). In turn, the media sociology literature shows that news professionals often seek out quality news sources that they perceive as credible (Boczkowski, 2010; Usher, 2014). Therefore, news sources, such as spokespeople, want to be seen as credible among journalists, thereby improving their standing with them (Supa, 2014; Zoch & Supa, 2014). Typically, perceptions of public relations professionals are cloudy at best (Hanusch, 2012; Supa & Zoch, 2009), while greater credibility is ascribed to other sources, particularly other reporters and subject matter experts (Callison, 2004; Callison, Merle, & Seltzer, 2014).

As with any beat, business journalists rely on a range of sources for story idea generation and news gathering, including other news professionals, academic experts, government officials, nongovernmental officials, and corporate spokespeople (Roush, 2017). As has been found with other news beats and areas of journalism (Hanusch, 2012; Reich, 2011, 2014), business journalists’ perceptions of the credibility of these different types of sources are likely to vary. As such, the next research question is posed:

RQ3: How do business journalists perceive the credibility of various news sources?
Further, journalism studies indicate that source credibility perceptions might differ within groups of journalists due to individual differences (Cassidy, 2007; Hanusch, 2012; Vergeer, 2018). Just as personal and work-related variables may influence business journalists in their perceived reliance on the various agenda-building dimensions, such characteristics may also influence perceptions of source credibility. Therefore, it is hypothesized that:

H2: Business journalists’ characteristics (demographics and professional backgrounds) are significant predictors of the perceived credibility of different types of sources.

Source Credibility as Part of Agenda Building

Because the use of different resources for story ideas and perceptions of source credibility are expected to vary as a function of individual characteristics, it is important to examine how perceived source credibility might contribute to reliance on the different layers or dimensions of formative agenda building, the initial story idea stage for journalists. Consequently, a possible triangular relationship among these variables should be probed.

Assuming these variables covary, further questions are raised. For example, after taking into account individual characteristics, can ascribing higher credibility to a particular source type predict greater use of the related resource for story ideas? Along a similar line, one might ask whether source credibility perceptions somehow mediate the relationship between individual differences and reliance on the various dimensions of agenda-building resources. Previous research yields somewhat inconsistent results regarding the association between perceived credibility and use of sources. Such a linkage is clearly evident for some sources but completely absent for others (Reich, 2011, 2014; van der Meer, Verhoeven, Beentjes, & Vliegenthart, 2017). Few studies have looked at a three-way relationship among source credibility, source use, and journalists’ characteristics. Thus, the final research question is proposed:

RQ4: What is the specific role of source credibility perceptions in formative agenda building?

Method

Data Collection

The data for this study come from a multiyear survey of U.S.-based journalists responsible for reporting business news. We used the Gorkana media database (Dudley, 2014) to recruit potential respondents, asking them to participate and complete an online questionnaire. The data were collected in three years (2011, 2013, 2015), and each data collection period involved a four-week survey window with an initial invitation and at least three waves of reminder e-mails. This process resulted in a sample of 1,265 cases with response rates of 11.2% (n = 349) in 2011, 9.7% (n = 494) in 2013, and 10.7% (n = 422) in 2015.

From this data set, we selected 782 cases for analysis because they contained responses pertaining to our variables of interest: use of resources for story ideas, source credibility perceptions,
and journalists’ characteristics. Overall, the effective sample used in this study is relatively similar to the profile of the complete sample in each year of the survey.

**Measures and Analysis**

**Use of Resources**

Use of resources for story ideas was measured by nine items adapted from Len-Ríos et al. (2009). Respondents were asked, in a randomized order, how often they used the following resources for story ideas: personal interest or that of someone on staff; readers/viewers/listeners’ e-mails or phone calls; newspapers or other publications; a public relations person who pitches a story; corporate news releases; corporate social media; news releases from nonprofit organizations; university news releases; and government news releases. Responses were recorded on a 7-point Likert-type scale ranging from 1 (not at all) to 7 (very often).

**Journalists’ Characteristics**

Journalists’ characteristics were defined by professional backgrounds and demographic factors (Brownlee & Beam, 2012; Hanusch, 2012; Reich & Hanitzsch, 2013; Willnat et al., 2017). Professional backgrounds were measured by experience (years of work in business journalism); editorial rank (reporter/writer, editor/editorial staff, columnist, producer/news director/on-air, freelancer); newsroom size (response scale ranged from 1 [fewer than 10 reporters/editors] to 6 [more than 50 reporters/editors]); primary news platform (Web, television/radio, newspaper, magazine, newswire); and work location (Northeast, Southeast, Midwest, Southwest, West). Demographics comprised race (White, Hispanic/Latino, African American, Asian, Native American, multiracial/mixed); gender (female = 0, male = 1); and age (in years). To facilitate data analysis, multicategory variables were transformed as binary items. Specifically, editorial rank was recoded as junior (0 = reporter/writer/freelancer) versus senior (1 = editor/producer/news director/on-air/columnist). News platform was categorized as traditional (0 = television/radio/newspaper/magazine/newswire) versus online (1 = Web). Work location was collapsed into Northeast (1) versus others (0). With the large majority of respondents identifying themselves as White (86%), race was coded as White (1) and non-White (0).

**Source Credibility Perceptions**

Source credibility perceptions were gauged through five items adopted from the Edelman Trust Barometer annual survey (see Edelman, 2019). Surveyed journalists were asked how credible information about a company would be if they heard it from the following types of sources: a news professional, a public relations professional, a representative of a nongovernmental organization, an academic expert, and a government official. The response scale ranged from 1 (not at all credible) to 5 (extremely credible).
Data Analysis

Data analysis was conducted in multiple steps. One-way repeated measures analysis of variance and comparison of means were employed to compare how journalists used different types of resources for story ideas as well as source credibility perceptions. Factor analysis was performed to identify the various dimensions of resources in formative agenda building. We also tested multiple regression models to gauge how journalists’ individual characteristics and their source credibility perceptions might explain possible variations in the selection of resources. Prior to the statistical procedures, a screening for normality, linearity, and multicollinearity showed that the data satisfactorily met the assumptions underlying each analysis (Tabachnick & Fidell, 2012). Item nonresponse led to data missing at random, ranging from 1.5% to 7% across variables of interest. According to conventional standards, a missing rate of 5% or lower is inconsequential and statistical analysis is less likely to be biased by a missing rate under 10% (see Dong & Peng, 2013). Therefore, pairwise deletion was deemed appropriate.

Results

Use of Resources

RQ1 asked about business journalists’ perceptions of how frequently they use various resources for story idea generation, which we call formative agenda building. A one-way repeated measures analysis of variance with a Huynh-Feldt correction shows significant differences in the selection of such resources at the formative stage, $F(7, 4,977.14) = 277.05, \ p < .001, \ \eta^2_p = .28$. Respondents reported relying most heavily on other news media ($M = 5.05, SD = 1.41$) and personal interest or that of someone on staff ($M = 4.48, SD = 1.62$) for story idea generation. To a lesser extent, they also used corporate news releases ($M = 4.06, SD = 1.63$), government news releases ($M = 3.98, SD = 1.62$), and tips from the news audience ($M = 3.76, SD = 1.59$). Among the various resources, they rated corporate social media lowest ($M = 2.65, SD = 1.40$), followed by university news releases ($M = 2.67, SD = 1.34$), news releases from nonprofit organizations ($M = 3.16, SD = 1.43$), and public relations professionals who pitch stories ($M = 3.20, SD = 1.38$).

Dimensions of Formative Agenda Building

RQ2 asked about the concentric layers of the metaphorical agenda-building onion at the formative stage. To identify the specific dimensions or layers in the use of resources by business journalists, an exploratory factor analysis was performed.

With a good measure of sampling adequacy (Kaiser-Meyer-Olkin measure = .78); a significant Bartlett’s test of sphericity, $\chi^2(36) = 1,106.42, \ p < .001$; and three eigenvalues greater than 1, the analysis indicates that the data matrix was factorable with three components contributing about 36% of the explained variance. The Horn’s test comparing eigenvalues from random data to those of the current data shows that three factors would be extracted. Using a principal axis factoring technique to analyze three-factor solutions with oblique and orthogonal rotations, we found a three-factor orthogonal solution with nine items to be the most easily interpretable. As shown in Table 1, factor loadings identified three distinct dimensions or layers for story idea generation: (1) resources internal to the newsroom (i.e., other news media, personal
interest/someone on staff, news audience feedback); (2) corporate public relations efforts (i.e., corporate news releases, public relations professionals who pitch stories, corporate social media), and (3) noncorporate public relations efforts (i.e., news releases from government, nonprofit organizations, and universities). The extracted factor scores were retained and used for subsequent analysis.

Table 1. Factor Loadings for Three-Factor Solution.

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal interest or that of someone on staff</td>
<td>.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readers, viewers, listeners’ e-mails or phone calls</td>
<td></td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Reading newspapers or other publications</td>
<td></td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Public relations person who pitches a story</td>
<td></td>
<td>.46</td>
<td></td>
</tr>
<tr>
<td>Corporate news releases</td>
<td></td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>Corporate social media accounts</td>
<td></td>
<td></td>
<td>.44</td>
</tr>
<tr>
<td>News releases from nonprofit organizations</td>
<td>.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University news releases</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government news releases</td>
<td>.47</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Respondents were asked, “Please tell us how often you use each of the following resources for story ideas.” Responses were measured on a 7-point Likert-type scale ranging from 1 (not at all) to 7 (very often). Factor loadings were generated from varimax with Kaiser normalization as the rotation method and principal axis factoring as the extraction method.

Formative Agenda-Building Dimensions and Journalists’ Characteristics

H1 explores the formative agenda-building dimensions as a function of personal and work-related variables. Separate models were built to gauge the predictive power of demographics and professional backgrounds, respectively. In all, six different regression models were tested, with three gauging the role of demographic characteristics and the other three examining professional backgrounds as the predictors of reliance on (a) internal newsroom resources, (b) corporate public relations efforts, and (c) noncorporate public relations efforts.

When the use of internal newsroom resources was regressed on the combination of variables representing demographics (age, gender, race), the equation was insignificant and unable to explain the variance in the criterion variable, $F(3, 669) = 0.67, p > .50$. Meanwhile, the other two models involving demographics were able to predict 4.7% of the variance in reliance on corporate public relations efforts, $F(3, 669) = 11.00, p < .001$; and 1.5% for the use of noncorporate information, $F(3, 669) = 3.36, p < .05$. 
According to standardized beta weights (see Table 2), age stands out as the only significant determinant. Specifically, older journalists are more likely to seek out noncorporate resources, while their younger counterparts are more willing to rely on corporate public relations efforts for story ideas.

### Table 2. Regression of Formative Agenda-Building Dimensions on Demographics and Professional Backgrounds (N = 782).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Newsroom resources</th>
<th>Corporate public relations</th>
<th>Noncorporate public relations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$ ($\beta$)</td>
<td>$b$ ($\beta$)</td>
<td>$b$ ($\beta$)</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>$-.16$</td>
<td>$.76$***</td>
<td>$-.44$*</td>
</tr>
<tr>
<td>Age</td>
<td>$.00$ (.04)</td>
<td>$-.01$ ($-.21$)**</td>
<td>$.01$ (.10)*</td>
</tr>
<tr>
<td>Gender</td>
<td>$.02$ (.01)</td>
<td>$-.09$ ($-.06$)</td>
<td>$.03$ (.02)</td>
</tr>
<tr>
<td>Race</td>
<td>$.06$ (.03)</td>
<td>$-.13$ ($-.06$)</td>
<td>$.14$ (.06)</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>$.003$</td>
<td>$.047$***</td>
<td>$.015$*</td>
</tr>
<tr>
<td>Professional background</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>$.07$</td>
<td>$.15$</td>
<td>$.18$*</td>
</tr>
<tr>
<td>Experience</td>
<td>$.00$ (.05)</td>
<td>$-.01$ ($-.15$)**</td>
<td>$.01$ (.09)*</td>
</tr>
<tr>
<td>Rank</td>
<td>$.12$ (.08)*</td>
<td>$-.06$ ($-.04$)</td>
<td>$.00$ (.00)</td>
</tr>
<tr>
<td>Newsroom size</td>
<td>$-.05$ ($-.15$)**</td>
<td>$.02$ (.05)</td>
<td>$-.03$ ($-.09$)*</td>
</tr>
<tr>
<td>Platform</td>
<td>$.03$ (.02)</td>
<td>$.03$ (.02)</td>
<td>$-.01$ (.00)</td>
</tr>
<tr>
<td>Location</td>
<td>$-.02$ ($-.02$)</td>
<td>$-.05$ ($-.03$)</td>
<td>$-.24$ (.14)**</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>$.036$***</td>
<td>$.030$***</td>
<td>$.043$***</td>
</tr>
</tbody>
</table>

*Note. $b$ = regression coefficient; $\beta$ = standardized beta coefficient.

* $p < .05$  ** $p < .001$  *** $p < .0001$.

Turning to professional backgrounds (i.e., experience, editorial rank, newsroom size, news platform, work location) and the three dimensions of formative agenda building, respective regression models accounted for 3.6% of the explained variance in the use of internal newsroom resources, $F(5, 679) = 5.07, p < .001$; 3% for reliance on corporate public relations resources, $F(5, 679) = 4.24, p < .005$; and 4.3% for reliance on noncorporate public relations materials, $F(5, 679) = 6.05, p < .001$. As shown in Table 2, editorial rank and newsroom size are significant predictors of the use of internal newsroom resources among senior journalists and those in smaller newsrooms, focusing on the core
layer among the three agenda-building factors. Experience was the only significant contributor to reliance on corporate public relations resources with more seasoned journalists spending less time considering public relations efforts for story ideas. Experience, newsroom size, and work location were determinants in the use of noncorporate public relations resources. More experienced journalists, as well as those who operate in smaller newsrooms and away from the Northeastern hub for business news, were more likely to use noncorporate resources to search for news topics.

These results partially support the hypothesized role of individual differences in formative agenda building (H1). The findings point to age, experience, editorial rank, newsroom size, and work location as the explanatory drivers of how business news professionals use the different dimensions of resources for story idea generation.

Source Credibility and Perceptual Variations

RQ3 asked how journalists perceive the credibility of different types of sources. According to a one-way repeated measures analysis of variance with a Huynh-Feldt correction, significant variations are found in journalists’ perception of sources’ credibility, $F(3.69, 2,644.97) = 157.02, p < .001, \eta^2_p = .18$. Respondents rated the credibility of academic experts most highly ($M = 3.51, SD = .81$), followed by news professionals ($M = 3.19, SD = .81$) and government officials ($M = 3.09, SD = .92$). Business journalists ranked representatives of nongovernmental organizations lower on credibility ($M = 2.83, SD = .80$), and they considered public relations professionals the least credible sources ($M = 2.60, SD = .90$).

H2 predicted the impact of demographic and work-related variables on source credibility perceptions. A series of multiple regression equations was developed to examine such relationships, focusing on the predictive power of both demographics and professional backgrounds.

Two models were not statistically significant and therefore unable to explain the variance in perceived credibility of nongovernmental organization representatives, $F(8, 674) = 0.90, p > .10$; and news professionals, $F(3, 702) = 1.76, p > .05$. Meanwhile, the combination of demographics and professional backgrounds accounted for over 2% of the difference in credibility perceptions toward corporate public relations professionals, $F(8, 707) = 1.98, p < .05$; more than 3.5% for the perceived credibility of academic experts, $F(8, 710) = 3.32, p < .01$; and almost 4% of the variance in credibility ratings for government officials, $F(8, 706) = 3.63, p < .001$. As shown in Table 3, age, gender, race, experience, editorial rank, and newsroom size were the explanatory factors. Essentially, younger and junior journalists rated government sources higher on credibility. For male journalists and those who work in smaller newsrooms, academic experts were more likely to be perceived as credible sources. White and senior journalists were more skeptical toward public relations professionals. Respondents with less experience were more positive about the credibility of other journalists.
Table 3. Regression of Source Credibility Perceptions on Demographics and Professional Backgrounds (N = 782).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Journalist</th>
<th>Public relations person</th>
<th>Nongovernmental organization representative</th>
<th>Academic expert</th>
<th>Government official</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.30***</td>
<td>2.81***</td>
<td>2.89***</td>
<td>3.41***</td>
<td>3.65***</td>
</tr>
<tr>
<td>Demographics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.01 (.09)</td>
<td>-.01 (-.03)</td>
<td>-.01 (-.02)</td>
<td>.00 (.01)</td>
<td>-.01 (-.11)*</td>
</tr>
<tr>
<td>Gender</td>
<td>-.11 (-.06)</td>
<td>.03 (.01)</td>
<td>-.03(-.02)</td>
<td>.18 (.11)**</td>
<td>-.02 (-.01)</td>
</tr>
<tr>
<td>Race</td>
<td>-.04 (-.02)</td>
<td>-.20 (-.08)*</td>
<td>.12 (.05)</td>
<td>.12 (.05)</td>
<td>-.10 (-.04)</td>
</tr>
<tr>
<td>Professional background</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>-.01 (-.14)**</td>
<td>.00 (.04)</td>
<td>-.01 (-.01)</td>
<td>-.01 (-.06)</td>
<td>-.01 (-.02)</td>
</tr>
<tr>
<td>Rank</td>
<td>.02 (.01)</td>
<td>-.16 (-.09)*</td>
<td>-.06 (-.04)</td>
<td>-.10 (-.06)</td>
<td>-.20 (-.10)**</td>
</tr>
<tr>
<td>Newsroom size</td>
<td>-.01 (-.01)</td>
<td>.03 (.06)</td>
<td>-.01 (-.02)</td>
<td>-.03 (-.08)*</td>
<td>.01 (.02)</td>
</tr>
<tr>
<td>Platform</td>
<td>.02 (.01)</td>
<td>-.01 (-.01)</td>
<td>.10 (.06)</td>
<td>.05 (.03)</td>
<td>-.08 (-.04)</td>
</tr>
<tr>
<td>Location</td>
<td>-.05 (-.03)</td>
<td>-.09 (-.05)</td>
<td>-.05 (-.03)</td>
<td>-.08 (-.05)</td>
<td>.04 (.02)</td>
</tr>
<tr>
<td>Total R²</td>
<td>.020</td>
<td>.022*</td>
<td>.011</td>
<td>.036**</td>
<td>.039***</td>
</tr>
</tbody>
</table>

Note. Respondents were asked, "If you heard information about a company from one of these people, how credible would that information be?" Responses were measured on a 5-point Likert-type scale ranging from 1 (not at all credible) to 5 (extremely credible). \( b \) = regression coefficient; \( \beta \) = standardized beta coefficient. * \( p < .05 \). ** \( p < .01 \). *** \( p \leq .001 \).

These findings provide partial support for H2, demonstrating how individual characteristics, such as age, gender, race, experience, editorial rank, and newsroom size, might explain variations among business journalists when it comes to their perceptions of source credibility.

Source Credibility and Formative Agenda Building

RQ4 focuses on peeling back the conceptual onion further by exploring three correlates: perceptions of source credibility, journalists' characteristics, and selection of different resource dimensions or layers in formative agenda building—the story idea generation phase.

With news platform and work location yielding null results in the preceding statistical procedures, they were ruled out in this analysis. Consequently, separate hierarchical regression models were run, one
at a time, for explaining reliance on each formative agenda-building dimension as a function of journalists’ characteristics and their perceptions of source credibility. Specifically, the criterion variables pertain to the use of (1) resources internal to the newsroom; (2) corporate public relations efforts; and (3) noncorporate public relations efforts. Six significant variables representing individual-level differences (i.e., race, gender, age, experience, editorial rank, and newsroom size) were included in the first block. On top of those controls, we entered the independent variables (i.e., credibility perceptions toward each pertinent source type).

As shown in Table 4, perceived credibility of news professionals made a unique contribution to the use of internal newsroom resources. The perception of higher levels of credibility among other journalists led to greater reliance on this core layer of formative agenda building. In the control block, editorial rank and newsroom size were the consistent contributors. The $F$ test for change in $R^2$ was significant in both blocks ($p < .001$). The full model, a linear combination of the independent and control variables, explains 6.5% of the variance in the dependent variable.

**Table 4. Regression of Formative Agenda-Building Dimensions on Respondent Characteristics and Source Credibility Perceptions (N = 782).**

<table>
<thead>
<tr>
<th></th>
<th>Newsroom resources</th>
<th>Corporate public relations</th>
<th>Noncorporate public relations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Constant</strong></td>
<td>-.37</td>
<td>.09</td>
<td>-.149***</td>
</tr>
<tr>
<td><strong>Respondent characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>.01 (.09)</td>
<td>-.01 (-.06)</td>
<td>.01 (.09)</td>
</tr>
<tr>
<td>Rank</td>
<td>.12 (.08)*</td>
<td>-.01 (-.01)</td>
<td>.03 (.02)</td>
</tr>
<tr>
<td>Newsroom size</td>
<td>-.05 (-.15)***</td>
<td>-.01 (-.01)</td>
<td>-.04 (-.10)*</td>
</tr>
<tr>
<td>Race</td>
<td>.03 (-.02)</td>
<td>-.08 (-.03)</td>
<td>.10 (.04)</td>
</tr>
<tr>
<td>Gender</td>
<td>.02 (.02)</td>
<td>-.10 (-.06)</td>
<td>.00 (.00)</td>
</tr>
<tr>
<td>Age</td>
<td>-.01 (-.05)</td>
<td>-.01 (-.16)***</td>
<td>.01 (.06)</td>
</tr>
<tr>
<td><strong>Credibility perceptions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Journalist</td>
<td>.15 (.17)***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public relations professional</td>
<td></td>
<td>.24 (.28)***</td>
<td></td>
</tr>
<tr>
<td>Nongovernmental organization representative</td>
<td></td>
<td>.12 (.12)**</td>
<td></td>
</tr>
<tr>
<td>Academic expert</td>
<td></td>
<td></td>
<td>.12 (.12)**</td>
</tr>
<tr>
<td>Government official</td>
<td></td>
<td></td>
<td>.15 (.17)***</td>
</tr>
<tr>
<td><strong>Incremental/total $R^2$</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td>.036***</td>
<td>.050***</td>
<td>.028***</td>
</tr>
<tr>
<td>Independent variables</td>
<td>.029***</td>
<td>.075***</td>
<td>.088***</td>
</tr>
<tr>
<td>Total</td>
<td>.065***</td>
<td>.125***</td>
<td>.116***</td>
</tr>
</tbody>
</table>

*Note. $b =$ regression coefficient; $\beta =$ standardized beta coefficient. $^* p \leq .05. ^{**} p < .005. ^{***} p \leq .001.$
In the second model, credibility perceptions of public relations professionals helped predict journalists' reliance on corporate public relations efforts for story ideas. Those who were more likely to rate public relations officers as credible sources were also more receptive to using corporate public relations efforts for story ideas. Age was a significant control variable. Based on the $F$ value for change in $R^2$, both blocks were statistically significant ($p \leq 0.001$). The full regression equation accounted for 12.5% of the explained variance in the criterion variable.

The third model found the explanatory power of all three predictors, comprising perceptions of source credibility for academic experts, government officials, and nongovernmental organization representatives. The contributions of these variables were independent from those in the control block, demonstrating that higher credibility perceptions of these pertinent sources induced greater use of noncorporate public relations materials. In terms of individual characteristics, newsroom size was a significant determinant. The whole model was able to predict 11.6% of the variance in the dependent variable with a significant $F$ test for change in $R^2$ in both blocks ($p < 0.001$).

These findings point to mediation involving three variables. Certain characteristics of business journalists did directly impact reliance on the various formative agenda-building dimensions, but they also exerted an indirect influence through perceptions of source credibility. In other words, perceived source credibility served as a mediator in the relationship between individual differences and the use of resources.

**Discussion**

Story idea generation is the formative stage of agenda building. Steering away from the effect-centric approach that is common in agenda-building research, the present study surveyed business journalists regarding their individual characteristics as well as their perceptions of resources and source credibility, all of which could potentially impact the way they decide what makes news. The findings not only lend empirical support to the onion conceptualization (McCombs, 1992, 2014) but also provide new insights into the various concentric layers that come into play (Len-Ríos et al., 2009; Zoch & Molleda, 2006).

**Theoretical Implications**

The present study is unique in its examination of the multiple dimensions or layers of influences that shape the media agenda and the individual-level influence of journalists’ backgrounds (Brownlee & Beam, 2012; Willnat et al., 2017) as well as their perceptions of source credibility (Boczkowski, 2010; Usher, 2014). This research brings together variables from agenda building, the hierarchy of influences, and source credibility in journalism studies.

Much like the Len-Ríos et al. (2009) survey-based study of health journalists, business journalists also perceive themselves as using resources internal to the newsroom (i.e., following other news media, news routines, news audience feedback) the most. Business journalists also consider using information from corporate and noncorporate entities for story idea generation but perceive themselves as doing so less frequently. Importantly, this finding suggests that agenda-building studies that analyze only the public relations efforts of sources and then claim significant source influence on media agendas may be
inadvertently overstating the impact of these efforts (Kim et al., 2015; Kiousis et al., 2015). Agenda-building studies based on analyzing just one layer of the onion should carefully acknowledge this limitation; there are clearly many different influences on journalists’ construction of the media agenda.

Turning to the individual-level influence of journalists’ backgrounds, this study finds that several individual factors (race, gender, age, experience, editorial rank, newsroom size) have a modest influence on the way journalists perceive the credibility of sources and how they use different resources for story idea generation. Journalists’ perception of source credibility, in turn, helped predict their use of corresponding resources. This mechanism involves some form of mediation (Hayes, 2013; Holbert & Stephenson, 2008) with source credibility perceptions acting as mediating variables. Although a formal mediation model should be further tested, the findings reported here tentatively suggest that reliance on the various resources in formative agenda building is determined in part by individual differences among journalists and their perceptions of source credibility. This finding is consistent with research that identifies source credibility as a contingent condition of agenda setting (for a review, see McCombs et al., 2011).

The results of this study find that McCombs’ (1992) original conceptualization of the onion’s distinctive but interrelated layers generally holds true as an organizing framework; there are clearly many additional layers to peel back and examine. Journalists’ characteristics and source credibility are just two variables. In addition to source credibility, other variables, such as news values and various newsroom routines, are worth exploring (Usher, 2013, 2014). A general criticism of mass communication research is that its major theories and perspectives have evolved in scholarly silos (Perloff, 2015). We provide a more complete view of formative agenda building by drawing from the hierarchy of influences model from media sociology (Reese & Shoemaker, 2016; Shoemaker & Reese, 2014) and source credibility from journalism studies (Hanusch, 2012; McCombs et al., 2011; Reich, 2011, 2014; van der Meer et al., 2017; Vergeer, 2018). More integrative work is needed to advance the field as a whole.

**Methodological Implications**

Rather than focusing on content analysis to draw inferences about effects, the current undertaking employed a large-scale survey design to inquire into the contingencies of agenda building. This methodological choice has several advantages. First, it looks beyond the imprints of salience transfer in the media agenda to gauge the explanatory factors in journalists’ use of resources for story ideas—the first step that initiates agenda-building effects. Second, survey data allowed for analysis at the individual level of the journalist early in the news production process—an aspect that remains largely overlooked in the scholarship pertaining to agenda building and agenda setting. Also, this survey involved data collection every other year over a five-year period, yielding a large, representative sample that is unique among existing research. Overall, our study design represents a step toward a more stringent approach to enhance the validity of empirical generalizations.

**Practical Implications**

Business journalists have been roundly criticized for not playing enough of a watchdog role in media coverage leading up to and during the global financial crisis (Tran & Ragas, 2018; Usher, 2013). The results
of this study (based on data collected after the financial crisis) indicate that business journalists at least perceive themselves as relying more on internal newsroom resources than external corporate sources. Perhaps financial journalists are more cautious and skeptical toward corporate actors post the crisis. As has typically been found in other studies (Callison, 2004; Callison et al., 2014; Supa & Zoch, 2009), business journalists rate public relations professionals fairly low in credibility and claim they are not particularly receptive to story idea pitches by them. On the flip side, the seasoned business journalists in this study reported more skepticism toward public relations sources; younger journalists of diverse backgrounds were somewhat more amenable. As old-school journalists retire, this could make financial news more captive to corporate interests and the information they disseminate.

This study also has practical implications for public relations professionals. Source credibility was found to be at least a partial driver of journalists using source-related resources. As such, ethical behavior and a commitment to the truth are paramount if public relations and communications managers wish to improve their perceived credibility among journalists and build better relationships (Zoch & Supa, 2014). Further, business journalists find academic experts to be the most credible sources. This highlights the need by public relations professionals to establish and maintain strong relationships across academia and with other subject matter experts.

**Limitations and Future Research**

As with any study, there are limitations of this one that should be taken into account when interpreting the results and the conclusions drawn. Because the data are based on self-administered online surveys, financial journalists’ perceptions of formative agenda-building resources and sources may not fully match their actual behaviors. Further, the response rates for list-based Web samples of busy professionals are typically low, and this study is no exception. Therefore, inferences drawn from this study should be further verified and replicated with surveys of other news beats and with journalists in international settings. Such replications and extensions will provide further opportunities to compare and contrast results and build a more detailed and nuanced understanding of agenda building (Len-Ríos et al., 2009; Zoch & Molleda, 2006). In addition, the properties of news source content factor into source selection and use by journalists and were not explicitly measured here since this study was survey based. Finally, despite a large sample size, measurements and data characteristics were inadequate in this study for a more stringent analysis of mediation through structural equation modeling.

Because the self-reports of business journalists are the focus of analysis, the current study analyzes formative agenda building at a micro or individual level. Future formative agenda-building research should look at other levels of the hierarchy of influences on news content (Reese & Shoemaker, 2016; Shoemaker & Reese, 2014), both individually and in tandem when possible. For example, some of the unexplained variance in the current models could be due to organizational-level, social institutional–level and social system–level factors. While journalists certainly have a degree of independence when it comes to story idea generation and the use of resources, they operate within a broader networked public sphere. A dynamic model of agenda building with interconnected layers and interactive predictor variables warrants future empirical testing. This could involve a more sophisticated, full-scale study with appropriate measures and data structures that allow for structural equation modeling or multilevel modeling. Another approach could
use newsroom-level ethnographies and/or in-depth interviews across different media ownership types and in different countries to incorporate these other factors.

In conclusion, the peeling of the metaphorical agenda-building onion elucidates for scholars and professionals alike that news story idea generation is driven by a confluence of factors. It is our hope that this test and elaboration of the onion metaphor encourages further integrative research in this area (Perloff, 2015).

References


