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"Talk social sciences to me": Enhancing the dissemination of social sciences through mass media engagement

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ABSTRACT

This study examines mass media communication as a vital yet under-explored channel for disseminating social sciences. Drawing on the knowledge transfer and science communication literature, we identify specific Social Sciences Communication Barriers (SSCBs) that may hinder the effectiveness of mass media in this regard. These barriers include perceptions of lower expertise compared to STEM fields, heightened competition from non-academics, and difficulties aligning disciplinary expertise with public expectations. By means of a between-subjects experiment, we analyse responses to op-eds written by social scientists in economics, management science and sociology on business-related topics. Using a representative French sample (n = 1080), complemented by replication studies in two other European contexts, we find that social scientists benefit from an "academic premium" in terms of credibility that significantly enhances engagement with their audiences, thus supporting the effectiveness of mass media as a dissemination channel—but solely when addressing topics aligned with their disciplinary expertise. Conversely, this premium is diminished when academics also act as consultants. This study addresses calls for further research on knowledge dissemination in the social sciences and offers insights for scholars, institutions, and policymakers.

1. Introduction

The dissemination of scientific knowledge to society is a foundation for economic progress and social development (Gibbons et al., 1994; Stephan, 1996; Etzkowitz, 1998; Leydesdorff and Etzkowitz, 1998; Mokyr, 2002; Gaunand et al., 2015; Salter et al., 2017; Mazzucato, 2018; Haley, 2022). Universities achieve this by publishing and promoting their research through academic publications, patents, and media outlets (Nasirov and Joshi, 2023). These outputs are then searched and screened by various actors (Fontana et al., 2006). However, existing studies on this process have mostly focused on commercial organizations (e.g., Fontana et al., 2006; Nasirov and Joshi, 2023). Indeed, significant scholarly attention has concentrated on knowledge transfer, understood in this context as a "unidirectional transfer of knowledge from academics to businesses" (De Silva et al., 2023, p. 1). Hence, knowledge transfer typically refers to codified scientific knowledge that is intended to be used for instrumental and economic purposes, and is therefore particularly relevant for STEM disciplines (Grimaldi et al., 2011; Perkmann et al., 2021; Benneworth and Jongbloed, 2010; Olmos-Peñuela et al., 2014a).

In the social sciences, however, knowledge is typically context-specific, interpretive and intangible, aimed at raising societal awareness and informing public debate and policymaking (e.g., Beyer, 1997; Amara et al., 2004; Olmos-Peñuela et al., 2014a; Lewis et al., 2023). Its dissemination goes beyond commercial or instrumental purposes by also targeting the general public, policymakers, and non-commercial organizations (Olmos-Penuela et al., 2014a, 2014b). This is either for conceptual purposes (e.g., promoting critical thinking, general societal enlightenment) or symbolic ones (e.g., sustaining and legitimising ideas or positions) (Beyer, 1997; Amara et al., 2004). However, the ability of social scientists to bridge the university "communication gap" (Nasirov and Joshi, 2023, p. 1) remains understudied—despite growing public scepticism about their real contribution to society (Rekker, 2021; Lewis et al., 2023), and increasing pressure on universities to demonstrate genuine impact (e.g., Guerrero et al., 2015).

We propose that although media outlets have previously been found

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ineffective for fostering commercially oriented knowledge transfer (Nasirov and Joshi, 2023), they may play a more prominent role in the context of social sciences. First, science communication[1] is globally promoted across disciplines by policymakers and academic institutions (Haustein, 2016; Hoffman, 2016; Ravenscroft et al., 2020; D'Este and Robinson-García, 2023), and social scientists appear to be even more frequently engaged than their STEM counterparts with mass-media platforms (Bentley and Kyvik, 2010; TNS-BMRB, 2015), for example by communicating in leading newspapers – an outlet that continues to carry high legitimacy despite the rise of social media (Day and Golan, 2005; Sommer and Maycroft, 2008; Parks and Takahashi, 2016). Second, mass-media science communication is particularly well-suited to engaging with a broad audience beyond business-focused stakeholders (Lewis et al., 2023), and supports the conceptual and symbolic dissemination of scientific insights. However, there is a lack of theoretical understanding and empirical evidence on whether social scientists can effectively disseminate their research via mass media, especially in terms of audience engagement. This research echoes recent calls to better bridge the knowledge transfer and science communication literature (e.g., D'Este and Robinson-García, 2023; Nasirov and Joshi, 2023), and to address the disciplinary specificities of knowledge transfer (Bekkers and Bodas Freitas, 2008; Olmos-Peñuela et al., 2014a, 2014b).

We conceptualise and empirically examine four *Social Sciences Communication Barriers* (SSCBs)—a set of constraints that typically prevent social scientists from effectively engaging with non-specialist audiences and disseminating their knowledge via mass media. Beyond the well-documented, discipline-generic barriers (e.g., misalignment with public interest, limited communication training, and weak institutional incentives), social scientists also face barriers that appear to be more specific to their particular field, including: (1) heightened competition from non-academic voices (Collins and Evans, 2007; Johnston and Ballard, 2016); (2) perceived deficits in expertise and (3) trustworthiness (Gauchat and Andrews, 2018); and (4) difficulties aligning disciplinary expertise with topics they are being asked to discuss (Lewis et al., 2023). As each of our so-called SSCBs can undermine audience engagement and the broader dissemination of social sciences knowledge (Davies et al., 2024), we develop and test a conceptual model that captures their influence on perceived academic credibility, topic–expertise congruence, legitimacy, and ultimately, public engagement–a set of constructs that are critical for addressing the science communication gap in this context.

The model is tested using an original between-subjects experimental design (e.g., Lehmann et al., 2025; Brüggemann et al., 2016; Balietti and Riedl, 2021) that reflects real-world patterns of audience interaction with mass media content. A representative sample of the French population evaluated opinion pieces ("op-eds")—a medium widely used by social and other scientists (Sommer and Maycroft, 2008; Parks and Takahashi, 2016). The between-subjects design provides a direct empirical test of the SSCBs' effects, and clarifies whether social-science academics retain an 'academic premium' when disseminating knowledge in mass media after accounting for these barriers. We focused on business-related topics because this is a context in which competition with non-academics (e.g., CEOs, consultants) is especially intense, thereby paralleling existing research on commercially-oriented knowledge transfer. We used op-eds authored by economists, management scholars, and sociologists, concentrating on these disciplines because they are so commonly associated with business-related issues. To enhance the generalisability of our findings, we also partially replicated the study in two other European countries. Each of the four SSCBs is implemented in the model and tested. For example, we compared op-eds written by social scientists and practitioners to explore the effects of the greater competition with non-academic practitioners in the public arena.

Although our study proposes that social scientists enjoy a distinctive "academic premium" in terms of public credibility, we also show that audiences do not grant them *carte blanche* to comment on any topic. Instead, this premium only holds when they communicate within their own particular realm of expertise. We also explore the effects of hybrid identities, such as "social scientist and consultant", a common dual role among social scientists (e.g., Bekkers and Bodas Freitas, 2008), initially to show how such a status might be leveraged in mass media communication. Interestingly, however, we found that this can actually tip the balance between perceived practical relevance and scholarly legitimacy, ultimately eroding academic credibility.

Having shed new light on the role of mass-media communication channels in the dissemination of social sciences knowledge, we end by discussing the implications for both theory and practice.

2. The challenges of disseminating knowledge to the public via mass media: the case of social sciences

2.1. Importance of media communication for society and its main barriers

Scientists have traditionally been well-positioned to offer valuable insights that help the public make more informed decisions—especially in times of crisis (Algan et al., 2021; Cologna et al., 2025). Media outlets have been conceptualized as particularly useful vehicles for both disseminating scientific knowledge and generating greater exposure for science across society (D'Este and Robinson-García, 2023). They also serve as channels that help bridge the communication gap between universities and businesses (Nasirov and Joshi, 2023) and, more broadly, connect with diverse stakeholders such as NGOs, policymakers, and the general public.

Institutions and funding bodies increasingly view mass-media engagement as a core component of research impact (Hoffman, 2016; Ravenscroft et al., 2020), and there is widespread consensus in the literature that the practice meets the public's expectations (e.g., Bucchi and Trench, 2021; Wellcome Foundation, 2018). Indeed, although digital platforms (e.g., X/Twitter, LinkedIn) have broadened the range of available channels, mass-media outlets such as print and online newspapers are also able to reach large audiences (Jonker et al., 2022; Zhou and Na, 2019). Still, several concerns have been raised. These include the over-representation of elite researchers at the expense of broader diversity, and the tendency to prioritise sensationalism over methodological nuance, over-selling individual findings and downplaying the cumulative, consensus-driven nature of science[2] (e.g., Jonker et al., 2022; Selvaraj et al., 2014; Peters et al., 2008; Dempster et al., 2022).

As a result, there are several well-documented barriers that limit the effectiveness of media-science communication across disciplines (Peters et al., 2008; Lewis et al., 2023), contributing to a divide between universities and their audiences. For instance, Nasirov and Joshi (2023) found that mentions of science in the media had no measurable impact on businesses' engagement in knowledge transfer or collaboration with universities.

The first such barrier that we could mention is the tendency among academic institutions to reward publications in peer-reviewed journals far more than public outreach (Besley and Nisbet, 2013; Hoffman,

[1] We refer here to science communication in the way of communicating about science beyond traditional scientific publications or patents, echoing the view of Science Communication research field or Public Understanding of Science logic; we note that prior research often consider science communication as all outlets used to disseminate science including patent, academic publication and media-outlets (e.g., Nasirov and Joshi, 2023).

[2] For example, Selvaraj et al. (2014) reported how several cases of notably retracted and debunked papers (e.g., poor design methodology) were widely mentioned in mass media due to their surprising or novel results. One example is a study by A. Wakefield in *The Lancet* about vaccines and autism, which drove vaccine scepticism in the US (see Motta and Stecula, 2021).

2016), exacerbated by the fact that many scientists lack the communication skills needed to effectively reach non-academic audiences (Galetti and Costa-Pereira, 2017; Besley, 2020; Coletti et al., 2023). Second, barriers arise when scholarly priorities do not align with public interest, with audiences favouring accessible, newsworthy content over specialised or theoretical work (Shapiro et al., 2007). A third set of barriers concerns the pressures faced by academics from journalists demanding short deadlines and eye-catching headlines (Larsson et al., 2019), raising concerns about the media's ability to accurately convey scientific findings without overstating the benefits or underplaying the risks (Bubela and Caulfield, 2004). This is compounded by the economic constraints of mass media, which must compete with online platforms that tend to reward more provocative or emotive content to fulfil real-time engagement metrics such as clicks (Lischka and Garz, 2021), which can be detrimental to the quality of scientific reporting and can lead to misleading or oversimplified coverage.

A better understanding of these barriers is critical for fostering impact outside the walls of academia (Haley, 2022; Aguinis et al., 2012, 2014; Mokyr, 2002; Burchell, 2009), but these issues have mainly been addressed in science communication from a STEM perspective and in the university–industry knowledge transfer literature (Olmos-Peñuela et al., 2014a, 2014b), and have received far less attention regarding the specificities of social sciences (Schäfer, 2012; Lewis et al., 2023).

2.2. The key role of mass media communication as a dissemination mechanism in the social sciences

The numerous calls to enhance the societal impact of social sciences research are especially motivated by its unique nature (Olmos-Peñuela et al., 2014a, 2014b). As Benneworth and Herbst (2015) observes, social scientists contribute significantly to their local economies by increasing knowledge stocks, building networks, supplying human capital, problem-solving and supporting entrepreneurialism. As their output frequently concerns interpretive frameworks, institutional critiques or societal structures, it needs to be disseminated outside of academia in order to fully realise its potential (Mokyr, 2002; Burchell, 2009; Zimmermann, 2004; Neveu, 2007; Olmos-Peñuela et al., 2014a, 2014b).

In contrast to STEM fields, where patenting, licensing, and spin-offs are common outcomes of knowledge transfer (Grimaldi et al., 2011; Benneworth and Jongbloed, 2010), outreach policies are less ubiquitous in the social sciences (Cassity and Ang, 2006), often because the societal impact is so much harder to pinpoint (Benneworth and Jongbloed, 2010). Indeed, social sciences knowledge is produced and used in a very different way, primarily aimed at fostering general enlightenment, promoting critical thinking, and sustaining certain ideas (Beyer, 1997; Amara et al., 2004).

However, social sciences insights can serve many more purposes than that. For example, they can be used by businesses or NGOs to solve specific problems (i.e., instrumental use), by policymakers or activists to support a given position (i.e., symbolic use), or by the general public to foster critical thinking and societal progress (i.e., conceptual use) (Beyer, 1997; Amara et al., 2004; Olmos-Penuela et al., 2014a, 2014b). This diversity of users and applications makes mass media a natural channel for dissemination (Lewis et al., 2023; Besley and Nisbet, 2013; Dorta-González et al., 2024).

Survey data (TNS-BMRB, 2015) shows that 56 % of social scientists and humanities scholars in the UK had written at least one media or blog article in the previous three years, compared to only 32 % of their STEM counterparts. Similarly, 31 % of social scientists reported being interviewed by newspaper reporters, compared to 19 % of STEM scholars (TNS-BMRB, 2015), while Bentley and Kyvik (2010) found that researchers in disciplines such as sociology, economics, and psychology exhibit especially high rates of public engagement.

There are several possible explanations for this. For example, as social sciences insights are often less tangible than those in STEM disciplines (such as those regarding drugs, for example), and because social sciences are sometimes perceived as less authoritative (Gauchat and Andrews, 2018; Gligorić et al., 2022), the fact-checking and editorial vetting associated with mass media can help provide an external stamp of quality that supports their credibility (Deacon et al., 2024). Moreover, opinion pieces in mass media have been shown to exert long-lasting effects on public and expert ideas (Coppock et al., 2018), and social-media discussions routinely cascade from this coverage, reinforcing their central role in shaping how social sciences authority is performed in public (Schudson, 2003; Vos et al., 2023; Zhang and Lu, 2023).

2.3. Specific social sciences communication barriers (SSCB) to effective knowledge transfer via mass media channels

Focusing on knowledge transfer, Nasirov and Joshi (2023) defined a list of barriers that explain the communication gap between universities and businesses, including different organizational logics (e.g., academic career incentives), commercial logics (e.g., market awareness), and geographical or cognitive distance. However, the epistemic distinctiveness of the social sciences (Olmos-Peñuela et al., 2014a) means that their academics encounter additional, discipline-specific obstacles when attempting to reach non-academic audiences through mass-media channels.

Drawing on classic transmission models of communication (Lasswell, 1948; Berlo, 1960) and the credibility literature (Ohanian, 1990), we distinguish between sender-, audience- and channel-related barriers.

2.3.1. Sender-(academic) related barriers

One key issue in social sciences communication concerns how social scientists are perceived as (scientific) experts, a key component of source credibility theory (Ohanian, 1990; Wiener and Mowen, 1986; Finch et al., 2015; Jahn et al., 2020). Evidence suggests that social scientists are viewed as less scientific than their STEM peers (Gligorić et al., 2022). For example, Gauchat and Andrews (2018) report that the general public identify physics, biology, and medicine more readily as "science" than sociology or economics. Indeed, the credibility of social scientists depends on how effective they are at overcoming the *Expertise Perception Barrier* (Social Sciences Barrier SSCB1), which relates to their perceived competence in a particular domain (Wiener and Mowen, 1986; Ohanian, 1990; Delmas, 2012). Gligorić et al. (2022) found that economics, sociology, and psychology rank among the disciplines perceived by the general public as requiring the lowest level of competence, in stark contrast to fields like nuclear physics and neuroscience. This may be explained by what Cassidy (2008, p.231) describes as the "*overlap between the expert knowledge of social science researchers and people's everyday experience*." While this overlap may raise relevance, it may also lead people to assume they already understand these issues—based on their own social experiences—and hence make them less likely to acknowledge the added value of social-scientific research (Huber et al., 2019). The public's tacit knowledge often undermines confidence in the authority of social scientists, especially when their ideas challenge what people find intuitively plausible (Lewis et al., 2023). Indeed, the social sciences have even been portrayed as deficient compared to STEM disciplines in media and policymaking circles (Evans, 1995; Knudsen, 2017), which is also likely to have influenced perceptions (Cassidy, 2008; Lewis et al., 2023).

2.3.2. Audience-related barriers

The credibility of social scientists is also affected by the *Trustworthiness Perception Barrier* (SSCB2), the second pillar of source credibility theory and which captures the perceived honesty, reliability, and integrity of the communicator (Caldwell and Clapham, 2003; Colquitt and Rodell, 2011; Wiener and Mowen, 1986). To a far greater extent than in STEM disciplines (Mede and Schäfer, 2020), perceptions of social sciences academics can be negatively affected by reproducibility and replicability crises (e.g., Fišar et al., 2023; Ioannidis, 2005; Ioannidis and Doucouliagos, 2013) and accusations of political bias. As Lewis et al.

(2023, p. 661) explain, "*a 'fact' produced by the natural sciences has historically carried more weight (with the public), than a fact produced by the social sciences*." This is also a consequence of increasing polarisation of attitudes toward science and the rise of a post-truth era, which has particularly affected the social sciences (Rekker, 2021).

2.3.3. Channel-related barriers

Social sciences academics also face channel-related barriers in relation to how the media screen and select scientific news, and the extent to which they push scientists to frame their message in a specific manner. While STEM disciplines appear more confined to experts (Collins and Evans, 2007), the social sciences are comparatively more porous (Lewis et al., 2023). The mass media has generated a *Practitioner Competition Barrier* (SSCB3), often creating a setting in which a vast array of actors, including business leaders, politicians and others, who often have equal or greater access to the mass media (Johnston and Ballard, 2016; Medvecky and Macknight, 2017), can challenge the findings and comments of social sciences academics (Lewis et al., 2023). In a crowded media arena, social scientists must continually defend and justify their expertise in territories that many non-academics regard as common sense (McCall and Stocking, 1982).

Furthermore, social scientists may be affected by the *Topic-Expertise Mismatch Barrier* (SSCB4), which relates to knowledge congruence—the alignment between a communicator's domain of expertise and the subject matter they are addressing (Amos et al., 2008; Dhun and Dangi, 2022). As Evans (1995) notes, social sciences are often portrayed in the mass media as lacking distinctiveness, blurring public conceptions of its disciplinary boundaries (Tauginienė et al., 2020). Therefore, scholars are frequently pushed by journalists into addressing a broad range of issues under the assumption that they are equally qualified to discuss those too (Cassidy, 2008; Lewis et al., 2023), when that is not necessarily the case.

2.3.4. Overview and interdependence between the SSCBs

All the SSCBs, as well as the traditional barriers to effective knowledge dissemination, are summarised in Table 1. While the SSCBs are distinct from each other, they may be mutually reinforcing. For instance, when audiences question a social scientist's methodological competence (SSCB1), they may also become more alert to possible partisan motives, thereby amplifying concerns about trustworthiness (SSCB2) (Gauchat and Andrews, 2018; Mede and Schäfer, 2020). If such a credibility gap holds, journalists could feel compelled to "balance" coverage by foregrounding non-academic commentators, which would in turn heighten practitioner competition (SSCB3) and further marginalise scholarly voices (Collins and Evans, 2007; Johnston and Ballard, 2016). Hence, alleviating any one SSCB might indirectly mitigate the others, whereas allowing one to persist could trigger a cascade effect that erodes the capacity of social scientists to effectively disseminate their knowledge.

3. Hypotheses development

Having shown why mass media engagement with the content of science communication is critical for realising the full potential of knowledge dissemination in the social sciences (i.e., if the public does not engage with the content, this dissemination channel is nullified, Davies et al., 2024), we now present a model that examines how social sciences scholars navigate the SSCBs. Indeed, our model explicitly links each barrier (SSCB1–SSCB4) to the constructs of source credibility and legitimacy, hypothesising their influence on mass media engagement with social sciences commentary (see Table 1).

We focus on business-related public discourse because it occupies a unique place at the intersection between the transfer mechanisms that are already well-established in STEM and the more diffuse, practitioner-rich environment typical of the social sciences. With spin-off ventures, licensing of intellectual property and so on deemed essential components of the transfer of STEM disciplines, extensive research in its field has already generated a robust conceptual foundation (e.g., Bekkers and Bodas Freitas, 2008). This corpus now needs to be extended to the dissemination of social sciences, whose academics, when engaging with business topics, must navigate not only academic norms but also a diverse constellation of non-academic standards (Lewis et al., 2023). Consequently, business discourse provides an ideal setting to develop hypotheses regarding the heightened complexity of knowledge dissemination in the social sciences, where academic insights compete with, or

Table 1
Overview of common and social-science-specific barriers to media-based knowledge transfer.

Level	Barrier	Details	Disciplines affected	Main references
Sender-related	Misaligned Incentives & Recognition Barrier	- Researchers tend to be rewarded more (e.g. promotion, tenure) for peer-reviewed publications than for public outreach. - Communication with broader audiences is often viewed as secondary to academic responsibilities, limiting the motivation to engage with the media.	All	Besley and Nisbet (2013); Hoffman (2016)
	Insufficient Communication Competencies Barrier	- Most researchers have limited exposure to journalism or training in public speaking. - Lack of institutional resources (e.g., dedicated media officers, press support) hinders effective science communication.	All	Galetti and Costa-Pereira (2017); Besley (2020); Coletti et al. (2023)
	Expertise Perception Barrier (SSCB-1)	- Social sciences are often considered "less scientific" than STEM disciplines. - Many people believe they already understand social issues based on personal experience, reducing the perceived value of academic insights.	Social sciences	Gligorić et al. (2022); Cassidy (2008); Huber et al. (2019)
Audience-related	Mismatch With Public Priorities and Interest Barrier	- Public attention is predominantly focused on immediate or sensational topics. - Tension between the detailed, rigorous, theoretical contributions that are preferred by academia vs. the succinct, practical takeaways pursued by media or public.	All	Shapiro et al. (2007)
	Trustworthiness Perception Barrier (SSCB-2)	- Replication crises and accusations of political bias can undermine public trust in social-science findings. - Social scientists may struggle to differentiate rigorous empirical work from partisan commentary, especially in polarised media environments.	Social sciences	Lewis et al. (2023); Mede and Schäfer (2020); Ioannidis and Doucouliagos (2013); Rekker (2021)
Channel-related	Editorial Selection & Framing Logic	- News values (conflict, novelty, personalisation) and tight deadlines steer coverage toward catchy angles rather than methodological nuance.	All	Brighton and Foy, 2007; Schäfer, 2012
	Mass-media Economy Constraints	- Algorithmic curation and click-through metrics reward provocative or emotive content over careful exposition.	All	Lischka and Garz, 2021
	Practitioner Competition Barrier (SSCB-3)	- Social sciences are comparatively more porous than STEM disciplines, allowing non-academic voices (e.g., business leaders, politicians) to frequently challenge academic insights. - In crowded media arenas, social scientists must constantly defend expertise against perspectives framed as practical or common sense.	Social sciences	Collins and Evans, 2007; Johnston and Ballard, 2016; Lewis et al., 2023; Medvecky and Macknight, 2017
	Topic–Expertise Mismatch (SSCB-4)	- Journalists or editors solicit insights from social scientists beyond scholars' narrow domain, pushing them to speak outside their expertise.	Social sciences	Amos et al. (2008); Lewis et al. (2023); Tauginienė et al. (2020)

complement, real-world experience in shaping public understanding.

3.1. Influence of author type on source credibility

3.1.1. Effect on trustworthiness

As in all disciplines, when social scientists communicate with the general public, broader academic norms may confer an aura of objectivity or disinterestedness (Merton and Storer, 1979; Djørup and Kappel, 2013), whereby academics appear to prioritise the pursuit of knowledge over personal or commercial gains, which can foster trust among lay audiences (Mishra, 1996). Therefore, one might expect social scientists to be perceived as trustworthy because they are viewed to be working for the public good, focused on critical analysis and societal reflection, rather than serving private interests (Burchell, 2009). In contrast, practitioners such as consultants and industry experts may be bound by similar professional norms and ethical standards, but often prioritise the specific interests of their clients (Iatridis et al., 2022; Burchell, 2009). Such conflicts of interest or commercial agendas can easily lead audiences to question the trustworthiness of practitioners' recommendations (O'Dwyer et al., 2011).

We therefore posit that being a social sciences academic has a stronger positive effect on perceived trustworthiness than being a practitioner. It is particularly important to test this hypothesis in the light of the crisis of confidence that seems to be eroding public trust in social scientists (SSCB2). On business-related topics, beyond the replication crisis that is also affecting researchers in fields such as management science (Fišar et al., 2023), public trust in social scientists may be undermined by how their knowledge is perceived in relation to political ideologies such as capitalism (e.g., Seeck et al., 2020; Ali Kazmi et al., 2015). Additionally, the perceived disinterestedness of academics may be questioned when they act as founders or advisors to businesses (e.g., Ding and Choi, 2011) while producing scientific knowledge in business-related domains. At the same time, practitioners who operate in real-life business contexts (SSCB3) often have strong incentives to engage with the mass media, such as boosting both their own reputation and that of their brand (e.g., Tsai and Men, 2016; Matthews et al., 2022). According to the rigour-relevance framework (e.g., Kieser et al., 2015), practitioners' business insights may also be viewed as a means to secure greater trustworthiness in the public eye (SSCB2). Therefore:

H1.a. Being an academic more positively affects perceived trustworthiness than being a practitioner in the context of social scientists discussing business-related topics.

3.1.2. Effect on expertise

In both STEM and social sciences, academic expertise generally stems from systematic training, rigorous peer review, and domain-specific scholarship, especially on business-related topics (Mangematin, 2000; Lee et al., 2010; Plantec et al., 2023). Practitioners, on the other hand, develop expertise through direct, hands-on engagement with real-world clients and problems across multiple industries and projects (Abbott, 1988; Pantic-Dragisic and Söderlund, 2020).

As emphasised in SSCB3, academics frequently compete with practitioners, which raises the critical question of their relative perceived expertise. Indeed, audiences may find practitioners' experience of tangible outcomes more compelling and immediately relevant (Collins and Evans, 2007; Lewis et al., 2023), particularly when it comes to business-related topics, where practical experience often carries significant weight. In management science, there has long been concern about a disconnect between academic research and the needs of practitioners. For example, it has been noted that "*Some of the research produced is excellent, but because so little of it is grounded in actual business practices […] and less relevant to practitioners*" (Bennis and O'Toole, 2005, p. 97). In response, there have been growing calls for more engaged scholarship that balances rigour and relevance (e.g., Van De Ven and Johnson, 2006; Beaulieu et al., 2018). However, and despite rising scepticism toward "soft" sciences (Mede and Schäfer, 2020), academia's high methodological standards and ongoing scholarly scrutiny are still held in high regard (Merton, 1973; Djørup and Kappel, 2013). So, although we can hypothesise that academics are still more strongly associated with expertise than practitioners (SSCB3), this claim is worth testing with specific regard to social scientists, who are often considered "less scientific" than their STEM counterparts (SSCB1):

H1.b. Being an academic more positively affects perceived expertise than being a practitioner in the context of social scientists discussing business-related topics.

3.2. Knowledge congruence as a boundary condition

From a communication theory perspective, Framing Theory maintains that experts who address topics firmly within their recognised area of specialisation benefit from greater perceived coherence, thus boosting trust (Entman, 1993). Communication Accommodation Theory similarly posits that aligning one's message with audience expectations tends to enhance disciplinary authority and therefore credibility and engagement (Giles et al., 1991). From a cognitive psychology standpoint, dual-process theories show that audiences often use mental shortcuts to evaluate expertise—instinctively asking, for example, "Is this person an economist talking about economics?" (Chaiken and Trope, 1999; Kahneman, 2011). When a social scientist moves outside of their established boundaries (such as a sociologist speaking on corporate finance), such incongruence can trigger closer scrutiny and erode credibility (Amos et al., 2008; Nickerson, 1998).

This 'knowledge congruence' is especially critical for social scientists, who are frequently invited by the mass media to comment outside of their core domains (SSCB4) (Evans, 1995; Lewis et al., 2023). Under such circumstances, a practitioner from a directly relevant background may appear just as qualified, if not more so, thus diminishing the academic's supposed advantage in terms of expertise or trustworthiness (SSCB1, SSCB2) (Johnston and Ballard, 2016; Medvecky and Macknight, 2017). Conversely, when academics or practitioners speak directly within their own disciplines, the resulting sense of depth and consistency reinforces credibility (Wiener and Mowen, 1986; Meyer, 1988). Consequently, knowledge congruence can exert a positive effect on audience perceptions by providing cognitive cues that align with audience heuristics, allowing them to quickly affirm the communicator's credibility through perceived expertise and trustworthiness (Chaiken and Trope, 1999; Kahneman, 2011). For social scientists, whose legitimacy may be undermined by assumptions of abstraction or ideological bias (SSCB1, SSCB2), congruence reinforces the perception that their expertise is directly applicable to the issue at hand, thus enhancing credibility. For practitioners, whose authority is grounded in applied experience, congruence situates their contribution in a domain where their practical insights are expected to be valuable. In both cases, alignment between the communicator's disciplinary identity and the topic strengthens the perceived coherence of the message (Entman, 1993) and confirms that the speaker is appropriately positioned to contribute (Giles et al., 1991), ultimately bolstering credibility.

H2. Knowledge congruence positively moderates the effect of author type on perceived (a) trustworthiness and (b) expertise.

3.3. Building perceived legitimacy through credibility factors

Legitimacy theory provides a useful framework for understanding whose commentary is ultimately deemed most valid in a crowded mass media landscape (Suchman, 1995; Deephouse et al., 2016). While traditionally focused on how organizations align with cultural norms, this theory has been fruitfully applied to scientists as well (e.g., Llopis et al., 2022). Specifically in the social sciences, where expertise (SSCB1) and trustworthiness (SSCB2) are more contested than in STEM fields (Gauchat and Andrews, 2018; Gligorić et al., 2022), legitimacy can be

particularly hard to achieve.

Nevertheless, credibility signals—demonstrated via perceived expertise and trustworthiness— can contribute to legitimacy, but only if they convincingly align with societal values (Benford and Snow, 2000; Bucchi and Trench, 2021). This alignment is especially pertinent in the case of social scientists, who tend to operate within multiple, and often conflicting, institutional logics—ranging from a "pure" research mission to more commercial or policy-oriented imperatives (Llopis et al., 2022). However, such complexity can also be an asset, because social scientists' commentaries resonate not only with academic standards but also with the wider social norms governing what is deemed "appropriate" or "beneficial" (Llopis et al., 2022; Suddaby et al., 2016). When social scientists are perceived as both credible and socially relevant, they can overcome the scepticism toward so-called "soft" sciences (Mede and Schäfer, 2020), thereby gaining greater legitimacy—grounded in the interplay between expertise, value alignment, and the ability to navigate competing claims to authority (Lewis et al., 2023).

For example, consider the ongoing public debate surrounding the EU Corporate Sustainability Reporting Directive (CSRD). When a management control scholar with a strong publication record in sustainability reporting authors a media item explaining how the CSRD will reshape firms' environmental and social accountability, audiences infer high expertise because the scholar's track record signals rigorous, evidence-based knowledge (Ohanian, 1990; Wiener and Mowen, 1986). At the same time, because the scholar is not financially dependent on the companies affected, readers attribute disinterested motives, bolstering trustworthiness in line with scholarly norms of impartiality (Merton and Storer, 1979; Caldwell and Clapham, 2003). These two credibility cues tie the message to a widely shared societal value—that corporations should act transparently and minimise negative externalities. In doing so, the scholar's interpretation encourages audiences to perceive the CSRD as both technically sound and morally appropriate, i.e. legitimate (Suchman, 1995; Benford and Snow, 2000).

Consequently, we posit that:

H3. Perceived (a) trustworthiness and (b) expertise both enhance perceived legitimacy.

3.4. Mass media engagement

Legitimacy deeply influences the way in which audiences engage with media-based content (Benneworth and Jongbloed, 2010; Schäfer, 2012), and is ultimately the pivotal factor for ensuring that content is regarded as valuable and worthy of its audience's time and attention.

This is especially important for social scientists, with regard to whom previous research has suggested that legitimacy fosters, among other aspects, more widespread acceptance and support for scientific endeavours, better informed decision-making (Besley and Nisbet, 2013) and greater adherence to policy recommendations (Gauchat, 2011; Fiske and Dupree, 2014). Conversely, a lack of legitimacy can generate scepticism, rejection, and diminished impact (Hardy et al., 2005). Unlike many STEM-related outputs, such as tangible artefacts or codified, commercially-oriented results that offer readily verifiable value, social-science contributions are primarily interpretive. As such, they are more vulnerable to perceived deficits in credibility and trustworthiness, a form of "soft science" stigma (Gauchat and Andrews, 2018; Mede and Schäfer, 2020). In this context, legitimacy functions as a prerequisite for engagement: only when audiences perceive a commentary as both credible and value-aligned are they willing to invest their attention and engage with the content. We hence hypothesise that the general public will be more inclined to read and engage with content authored by individuals who are perceived as legitimate.

H4. The perceived source legitimacy of an author positively influences engagement with their mass media contributions.

While the difficulties that the dissemination of knowledge via mass media poses for social sciences academics share much in common with the challenges faced by communicators from the STEM fields, certain issues are clearly far more relevant to the former (i.e., SSCBs). Our model, as summarised in Fig. 1, explores the specific process whereby social scientists disseminate their knowledge to society.

4. Methodology

4.1. Experimental design

4.1.1. Overview of the experiment

To test our hypotheses, we draw on established experimental methods in the field of consumer behaviour in marketing science, which are widely used to test causality in theoretical models with different mediating and moderating effects (e.g. Clegg et al., 2023; Wilcox et al., 2023). Such methods have also gained prominence in the innovation management literature (e.g. Lehmann et al., 2025; Brüggemann et al., 2016; Balietti and Riedl, 2021).

To mirror real-world practices, we designed a $3 \times 3 \times 2$ between-subjects experiment, resulting in 18 unique experimental conditions. Each participant was randomly assigned to one of these and exposed to a single set of materials reflecting it (with no other variations). This random assignment ensured that any systematic differences between groups could be attributed to our manipulations (see Appendix A.6) rather than to self-selection or other confounding factors. Indeed, random assignment is essential for establishing internal validity and drawing causal conclusions in experimental research (Shadish et al., 2002).

To operationalise social sciences in our context, we selected Management, Economy and Sociology, the research areas that most commonly produce research on business-oriented topics – as confirmed by our meta-analysis (see Section 4.1.4 and Appendix A.2). The participants then completed an associated questionnaire. The varying conditions, which align with our hypotheses, are as follows:

- *Author Type* (2 levels): Academic vs. Practitioner
- *Author Speciality* (3 levels): Economist, Sociologist, or Management Scholar
- *Communication Topic* (3 levels): Economy, Society, or Business.

Here, *Author Type* directly addresses the Practitioner Competition Barrier (SSCB3) by comparing audience reactions to mass media articles authored by academics versus industry professionals. This helps to pinpoint any advantages academics may have over non-academic practitioners in terms of perceived expertise (SSCB1) or trustworthiness (SSCB2). Meanwhile, *Author Speciality* and *Communication Topic* jointly address the Topic-Expertise Mismatch Barrier (SSCB4), whereby an economist discussing the economy, for example, constitutes a congruent pairing, whereas an economist discussing societal or business issues represents an incongruent one.

The experiment was designed to isolate the effects of the SSCBs from those of more general barriers that affect all science communication, including STEM. Therefore, the three experimental variables were the only ones that varied across conditions, thus eliminating variance attributable to more generic barriers.

4.1.2. Op-eds as a proxy for science communication

We specifically selected op-eds (short for "opposite the editorial page") published in major newspapers as our experimental setting.

First, regarding SSCB1, op-eds provide a common ground for both social scientists (e.g., the economists Paul Krugman in *The New York Times*,[3] and Mariana Mazzucato in *The Guardian*[4]) and practitioners (e.

[3] https://www.nytimes.com/by/paul-krugman.
[4] https://www.theguardian.com/profile/mazzucato-mariana.

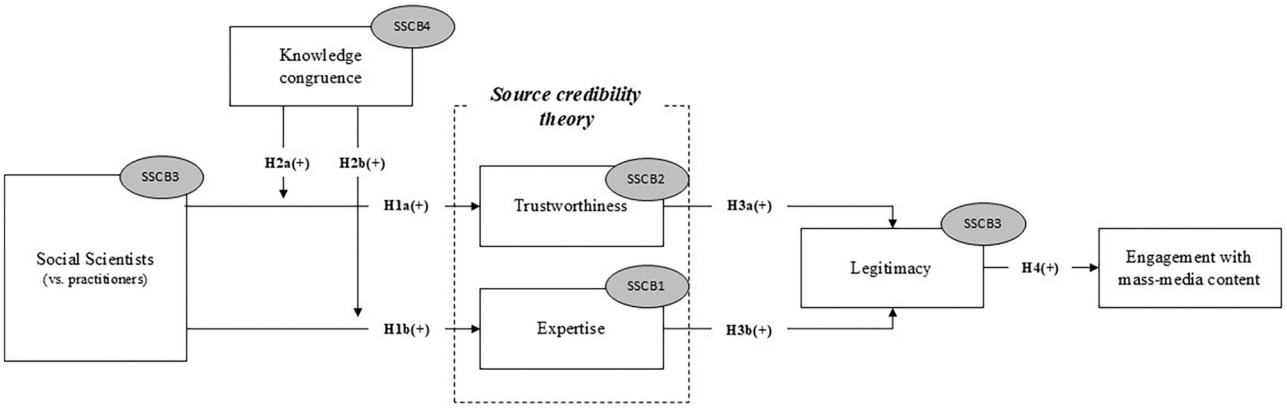

Fig. 1. Model of engagement with mass media content based on author type.

g., Gianmarco Monsellato, President of Deloitte France in *Le Monde*[5]) to comment on business-related topics in a comparable style—in terms of length, tone, and editorial guidelines—for broad, general audiences. In contrast, other platforms like *The Conversation* tend to target more niche readerships and exhibit different editorial standards, while social media prioritise short, informal posts that often blend personal and professional content (Zhou and Na, 2019).

Second, following careful and competitive selection by mass media journalists, which helps ensure a baseline of quality and relevance (Sommer and Maycroft, 2008), op-ed authors tend to be granted a considerable level of control over their content, framing arguments in their own words and elaborating upon them at length (Parks and Takahashi, 2016). This is in stark contrast to radio or television, where time constraints, interview dynamics, and editing often distort the final message.

Third, op-eds have emerged as a critical channel for science communication (Day and Golan, 2005), and particularly social sciences (Parks and Takahashi, 2016). As print and digital newspapers are so widely accessible, op-eds have been described as "*one of the most valuable tools of influence*" available to academics (Sommer and Maycroft, 2008, p. 586), particularly because policymakers and other decision-makers often rely on them to gauge expert opinions and track emerging trends (Parks and Takahashi, 2016; Sommer and Maycroft, 2008).

The op-ed format is used by social scientists to share their perspectives on a wide variety of topics, including economic (e.g., opinions on labour policies or inflation[6]), management (e.g., opinions on corporate strategies and practices[7]), and sociological issues (e.g., commentary on the social consequences of consumption[8]). Finally, most newspapers impose a paywall—either on a per-article or subscription basis, enabling us to measure willingness to pay as a key indicator of public engagement.

4.1.3. Geographical coverage

Our primary focus is on France, situated within the broader European context. This choice is grounded in both theoretical and practical considerations. First, European countries, and notably the European Union, have increasingly foregrounded science communication as a cornerstone of research policy (e.g., Haustein, 2016; D'Este and Robinson-García, 2023). As a major EU Member State with a robust network of research institutions (e.g., CNRS), France offers fertile ground for studying how social scientists navigate mass media engagement.

Second, France has a strong tradition of intellectual commentary in its newspapers (e.g., *Le Monde*, *Les Echos*). Coupled with its longstanding influence on the social sciences, it hence provides a rich landscape for our research interest. Moreover, on a 5-point Likert scale, France scored 3.42 for trust in science, which is remarkably close to the EU mean of 3.52,[9] making it an excellent example of the average state of affairs in Europe (Cologna et al., 2025, p. 3). To further substantiate France's suitability, we conducted a bibliometric analysis of a database of academic papers whose DOI was cited in news articles (see Appendix A.1), where France is ranked a very average tenth out of 19 European countries. Also, Peters et al. (2008) noted that France occupies a mid-range position in an analysis of scientists communicating in the mass media in France, Germany, Japan, the UK and the USA.

Although France is clearly a fine proxy for Europe as a whole, we partially replicated our experiment in Spain and the UK, two countries specifically chosen for theoretical reasons, in order to strengthen the ecological validity of our findings (see Section 6.3).

4.1.4. Stimuli

Our stimuli were derived from a mock op-ed modelled on an article published in *Le Monde*, the most widely read newspaper in France, with 570,000 subscribers (2023).[10] It also has 25 million subscribers on its different social media platforms (Facebook, Twitter, Instagram, etc.), on which its printed content is widely republished.[11]

First, although it is generally categorised as centrist-progressive, this newspaper claims to have no political affiliation, and is certainly less right or left-leaning than most other French dailies, helping to reduce potential bias.

Second, we further substantiated our choice of *Le Monde* by manually coding all 1492 op-eds published in the paper in 2024 (see Appendix A.2), finding that economists, management scholars, and sociologists collectively produce 85.4 % of its academic op-eds on business-related topics. In contrast, practitioners wrote 21.8 % of business-related op-eds, highlighting the intense competition between

[5] https://www.lemonde.fr/idees/article/2024/01/08/faire-appel-a-davantage-de-main-d-uvre-etrangere-est-devenu-une-necessite-vitale_6209637_3232.html.

[6] https://www.theguardian.com/news/2017/nov/14/the-fatal-flaw-of-neoliberalism-its-bad-economics; or https://www.washingtonpost.com/opinions/2022/06/01/one-cheer-for-inflation/.

[7] https://www.wsj.com/articles/BL-GHMB-198 or https://www.ft.com/content/7c90803e-34d4-11e3-8148-00144feab7de.

[8] https://www.ft.com/content/19d90308-6858-11ea-a3c9-1fe6fedcca75; https://www.theguardian.com/us-news/commentisfree/2021/oct/23/judith-butler-gender-ideology-backlash.

[9] With the exception of studies focusing specifically on trust in vaccine science (e.g., Wellcome Foundation, 2018).

[10] Article from La Lettre accessible here: https://www.lalettre.fr/fr/medias_presse-ecrite/2023/05/15/le-monde-ralentit-dans-sa-course-au-million-d-abonnes,109964427-art.

[11] https://www.lemonde.fr/le-monde-et-vous/article/2021/01/21/les-audiences-du-monde_6067105_6065879.html.

Table 2
Sample characteristics.

Characteristics	Statistics
Gender	
Men	45.6 % (vs. 48.3 %)[a]
Women	54.3 % (vs. 51.7 %)
Other/prefer not to say	0.1 %
Age	48.6 (SD = 15.8) (vs. 42.6)[b]
Education	
No diploma	3.1 %
Middle school diploma	11.9 %
High school diploma	29.8 %
2-year post-secondary degree	22.6 %
Bachelor's degree (3-year post-secondary degree)	15.1 %
Master's degree (5-year post-secondary degree)	16.1 %
Doctorate (8-year post-secondary degree)	1.4 %
Occupation	
Farmer	0.1 %
Craftsperson, shopkeeper, business owner	5.0 %
Executive	11.8 %
Intermediate profession	16.0 %
Skilled employee	20.7 %
Low-skilled employee	3.4 %
Skilled worker	4.7 %
Low-skilled worker	0.9 %
Student	2.7 %
Retired	26.6 %
Unemployed	8.1 %

[a] https://www.insee.fr/fr/statistiques/6051042?sommaire=6047805.
[b] https://www.insee.fr/fr/statistiques/2381476.

Table 3
Quality of the measurement instruments.

Construct	α	AVE	β
Trustworthiness (Ohanian, 1990)	0.95	0.81	
The author of the op-ed is…			
…dependable			0.88
…honest			0.91
…reliable			0.90
…sincere			0.90
…trustworthy			0.91
Expertise (Ohanian, 1990)	0.96	0.83	
The author of the op-ed is…			
…expert			0.90
…experienced			0.91
…knowledgeable			0.93
…qualified			0.93
…skilled			0.87
Legitimacy (Pavey et al., 2022)	0.96	0.89	
I would think it was […] for this author to write this op-ed			
…fair			0.95
…legitimate			0.94
…reasonable			0.95
Self-Assessed Expertise in Context (Ohanian, 1990)	0.98	0.90	
I am […] in the economy/society/businesses			
…expert			0.95
…experienced			0.96
…knowledgeable			0.95
…qualified			0.96
…skilled			0.94
Self-Assessed Expertise in Discipline (Ohanian, 1990)	0.98	0.89	
I am […] in economics/sociology/management science			
…expert			0.93
…experienced			0.96
…knowledgeable			0.94
…qualified			0.96
…skilled			0.94

Notes. α: Cronbach's alpha, AVE: average variance extracted, b: loading.

academics and practitioners in the precise domain that our study targets.

Third, the op-ed used in our experiment was held constant across all conditions. To select a suitable original op-ed from *Le Monde* for our experimental manipulation, we applied five criteria: (1) the piece had to be authored by an academic in economics, management, or sociology; (2) it had to address a topic prominently covered in *Le Monde* during 2024 to ensure topicality and ecological validity; (3) it needed to be sufficiently technical to reduce prior familiarity among respondents, thus minimising bias; (4) the topic had to be suitable for commentary by both academics and practitioners, thus ensuring plausibility across conditions; and (5) we needed to be able to convincingly manipulate references to the author's disciplinary background. The chosen op-ed dealt with a new environmental regulation in the European Union, a topic that most respondents would be unfamiliar with but which could credibly be discussed from economic, managerial, or sociological viewpoints by both academics and practitioners.[12] To confirm representativeness, we conducted a neural topic-model analysis of all 1492 op-eds published in *Le Monde* that year (Appendix A3.3). We used machine learning techniques to identify 12 distinct topics, and our mock op-ed clustered unambiguously at the centre of the "Climate governance in Europe" topic. Moreover, Welch's *t*-tests revealed no significant difference in the distribution of this topic across author types[13] suggesting that the content is equally plausible for attribution to either. Finally, we compared our mock op-ed with the original article on which it was based. The probability distributions were almost identical across all 12 topics, confirming a high degree of semantic similarity, further supporting the internal and ecological validity of our experimental materials.

In line with the 3 × 3 × 2 between-subjects design and with the format that *Le Monde* uses to present its op-eds, we noted on the left side of the page, below the author's name, whether they were a "Professor" (academic)[14] or a "Consultant" (practitioner) and also stated whether they were experts in Economics, Sociology, or Management. These details were repeated in the introduction (e.g., "*In this op-ed, Camille Benoit, Professor in Economics at a leading European institution, examines the implications of […]*" or "*In this op-ed, Camille Benoit, Consultant in Management at a leading consulting company, examines the implications of […]*") again in the typical fashion of *Le Monde* op-eds.

We also clearly specified the topic in the title of the piece—"*Entry into force of the CSRD: The consequences of this new environmental directive on the [economy]/[society]/[companies] are to be anticipated from now on*"—and repeated this detail at the end of the introduction—"*This op-ed questions the major consequences of this new directive on the [economy]/[society]/[companies].*" This procedure resulted in 18 different experimental conditions. Each participant was only shown one of these, consistent with best practices in experimental design to isolate causal effects.

As for operationalisation of our research model, a condition is defined as congruent when the authors' speciality aligns with the topic (e.g. an economist discussing economics), while all other combinations are classed as incongruent.

The author was given a gender-neutral name ("Camille Benoit"), in line with evidence of gender-related bias in science communication (e.g., Crettaz von Roten, 2011; Knobloch-Westerwick et al., 2013). The op-ed was also truncated by a paywall appearing after a few sentences of the main text, identical to the one that appears in the real *Le Monde*. Appendix A.4 provides an example of the original French version, while Appendix A.5 presents the English translation.

[12] The op-ed was derived from an existing op-ed, accessible at: https://www.lemonde.fr/emploi/article/2023/10/03/le-reporting-sur-la-durabilite-ne-doit-pas-masquer-la-necessaire-reforme-des-entreprises-europeennes_6192165_1698637.html.
[13] Academics (M = 0.06, SD = 0.13) and Practitioners (M = 0.06, SD = 0.15); t(211.37) = −0.71, p = .48.
[14] In French, the term "Teacher-Researchers" is commonly used for University or Business School Professors.

Table 4
Descriptive statistics and discriminant validity.

	M	*SD*	TRUST	EXP	LEGI	SELFCONT	SELFDISC
TRUST	5.19	1.13	0.81				
EXP	5.16	1.17	0.70	0.83			
LEGI	5.12	1.30	0.62	0.66	0.89		
SELFCONT	2.62	1.52	0.04	0.04	0.04	0.90	
SELFDISC	2.51	1.54	0.04	0.04	0.05	0.63	0.89

Notes. TRUST: trustworthiness, EXP: expertise, LEGI: legitimacy, SELFCONT: Self-Assessed Expertise in Context, SELFDISC: Self-Assessed Expertise in Discipline. Diagonal values represent the average variance extracted (AVE), while the lower triangular matrix presents squared correlations.

Table 5
Comparison of reader evaluations of trustworthiness, expertise, legitimacy, and willingness to pay of academic and practitioner authors of op-eds.

Construct	Researcher		Practitioner		Diff
	Mean	SD	Mean	SD	
Trustworthiness	5.27	1.18	5.12	1.07	$t_{(1078)} = 2.19^{*}$
Expertise	5.22	1.20	5.11	1.15	$t_{(1078)} = 1.64^{ns}$
Legitimacy	5.19	1.33	5.04	1.26	$t_{(1078)} = 1.96^{ns}$
Willingness to pay	2.69	1.74	2.91	1.84	$t_{(1078)} = 1.94^{ns}$

Notes. The table compares the descriptive statistics of academics and practitioners across various measures. It reports the means and standard deviations (SDs) for each group. Statistical significance of the difference between academics and practitioners for each measure was calculated using *t*-tests. ns: non-significant.
* $p < .05$.

4.2. Sample and measurements

4.2.1. Sample

A major French panel provider (Panelabs by MIS Group) recruited and administered the experiment online to a representative sample of the French population aged 20 or older[15] (n = 1080). Participants were drawn from a pool of registered panel members who had agreed to participate in research studies in exchange for compensation. To ensure representativeness,[16] the panel provider applied quotas based on official INSEE (French National Institute of Statistics and Economic Studies) data for gender (male/female), age, socio-professional status, and regional distribution (UDA5). Potential respondents meeting these quota requirements were invited to participate, and data collection continued until the target size and quota balance were reached. The average time to complete the survey was 13 min, with a median of 9 min.

Throughout the data collection process, automated and manual checks were performed to exclude inattentive participants, such as eliminating inconsistent responses, and enforcing minimum reading times. All respondents provided informed consent prior to participation and were free to withdraw at any time. Streamliners (e.g., standard deviation equal to 0 for Likert Scales) and anyone who took less than five minutes to complete the task were discarded and replaced.

The sample characteristics are shown in Table 2. 45.6 % identified as men, slightly lower than the French national average of 48.3 %, and 54.3 % identified as women. A minimal portion of the sample (0.1 %) selected "Other/Prefer not to say." The average age of the participants was 48.6 years (SD = 15.8), somewhat higher than the national average of 42.6, although in general our sample is fairly representative of the French population.

4.2.2. Measures

Each respondent answered a series of questions designed to test the various components of our model.

We used 7-point Likert scales,[17] which were adapted from established literature (Table 3). We assessed congruence on a scale from "*very inappropriate match*" to "*very appropriate match*," following Mishra et al. (2015). The scales for trustworthiness (e.g., "*The author of this op-ed is trustworthy*") and expertise (e.g., "*The author of this op-ed is an expert*") were adapted from Ohanian (1990). The scale for legitimacy (e.g., "*I find it legitimate for this author to present this op-ed*") was adapted from Pavey et al. (2022). The scale for willingness to pay (e.g., "*I am willing to pay to read the rest of this op-ed*") was adapted from Jiao et al. (2020).

For the controls, we adapted the scales proposed by Ohanian (1990) for self-assessed expertise in both the context (e.g., "*I am an expert in the economy/society/businesses*") and discipline (e.g., "*I am an expert in economics/sociology/management science*"), tailoring the options to each of the randomised experimental conditions.

4.2.3. Assessment of the measurement model

We assessed the measurement model using the lavaan package (Rosseel, 2012). The chi-square statistic (χ^2) of 1336.07 with 220 degrees of freedom (df), and the root mean square error of approximation (RMSEA) of 0.069 both indicated a reasonable fit. Meanwhile, the comparative fit index (CFI) of 0.969, and the Tucker–Lewis index (TLI) of 0.965 were both above the commonly accepted threshold of 0.95, hence suggesting a good fit.

The scales used in this study demonstrated reliable internal consistency, with Cronbach's alpha values exceeding 0.70 for all measured constructs (Table 3). Additionally, convergent validity was supported by average variance extracted (AVE) values >0.50. Discriminant validity was also well supported, with squared correlations lower than their respective AVE values (Table 4), indicating that the constructs are distinct from each other.

We conducted several additional analyses, including common method variance and post hoc power analysis (Appendix A.6), which further confirmed the robustness of the experimental design.

4.2.4. Control variables

By including control variables in our analysis, we were able to refine our understanding of how demographic and personal factors might

[15] In the study, a total of 1436 participants were selected by Panelabs, of whom 78.0 % ultimately completed the survey. Of the 1120 remaining responses, 40 were discarded due to freeriding or not taking sufficient time to properly complete the study.

[16] We employed a 2 (expert vs. practitioner) × 3 × 3 design, resulting in 18 experimental conditions. Following recommendations in Pechmann (2019), experimental studies include at least 50 respondents per condition, implying a minimum of 900 respondents for full cell coverage. We exceeded this threshold with 1080 respondents. Although the statistical analysis focused on a 2 × 2 factorial structure (congruent vs. incongruent × expert vs. practitioner), requiring only 200 respondents for adequate power, we opted for the more complex 2 × 3 × 3 design to enhance ecological validity and the generalisability of results across multiple realistic scenarios.

[17] The decision to use 7-point Likert scales rather than 5- or 10-point formats was guided by both methodological evidence and field conventions. As demonstrated by Dawes (2008), 5-, 7-, and 10-point scales yield comparable results across most analytical techniques. However, the 7-point format offers a useful balance between sensitivity and ease of use by respondents, and aligns with recent studies employing the same constructs (e.g., Pavey et al., 2022).

Table 6
Model estimation.

	Model 1 (without congruence)		Model 2 (with congruence)		Legitimacy	WTP
	Trust.	Expertise	Trust.	Expertise		
Focal variables						
Author type	0.17*	0.14^{ns}	0.05^{ns}	−0.01^{ns}		
Congruence			−0.02^{ns}	−0.02^{ns}		
Author type × Congruence			0.36**	0.45**		
Trustworthiness					0.41***	
Expertise					0.56***	
Legitimacy						0.38***
Control variables						
Gender	−0.11^{ns}	−0.12^{ns}	−0.11^{ns}	0.12^{ns}	−0.03^{ns}	0.04^{ns}
Age	−0.00^{ns}	−0.00^{ns}	−0.00^{ns}	−0.00^{ns}	−0.00^{ns}	0.00^{ns}
Self-Exp. in Context	0.07*	0.09*	0.08*	0.10**	0.02^{ns}	0.20***
Self-Exp. in Discipline	0.09**	0.10**	0.09*	0.09**	0.02^{ns}	0.22***

Notes. ns: non-significant.
*** $p < .001$.
** $p < .01$.
* $p < .05$.

influence the relationships between author type, knowledge congruence, and media engagement, thereby enhancing the robustness and validity of our findings.

First, we controlled for age, which can significantly affect how individuals perceive and engage with information (e.g., Boulianne and Shehata, 2022). Older individuals might have different levels of trust in social scientists or practitioners than younger individuals, potentially due to varying levels of exposure to mass media. Second, research has shown that gender differences can also play a role in media consumption habits (Van Rees and Van Eijck, 2003) as well as interest in scientific topics (Wang and Degol, 2016), mainly due to stereotypes and underrepresentation of women (Mitchell and McKinnon, 2019). Third, self-efficacy has also been shown to affect perception of an author's credibility (e.g., Gist and Mitchell, 1992; Sitzman et al., 2017). To capture this, we controlled for two types of expertise: self-assessed expertise in the context (economy, society or business), and self-assessed expertise in the discipline (economics, sociology or management science).

4.3. Empirical method to test the model

As standard for a between-subjects experiment (e.g., Clegg et al., 2023), we first used ANOVA to identify significant differences between groups (e.g., to test H1.a and H1.b). Then, our primary analysis relies on the PROCESS macro (Hayes, 2021) to examine the nuanced pathways linking the experimental conditions to outcomes. First, PROCESS allows us to test mediation—whether trustworthiness and expertise convey the effect of being an academic (vs. a practitioner) on perceived legitimacy and, ultimately, audience engagement, in line with the various SSCBs. Second, PROCESS enables us to test moderation by congruence between discipline and topic. Finally, we employed a moderated mediation framework to determine whether the indirect effects of congruence on engagement (via credibility) differ by author type. This approach provides a more comprehensive view of the underlying mechanisms, thus addressing our congruence-related hypotheses (H2a, H2b). We emphasise that our claim of causality is not derived from PROCESS analysis alone, but from the underlying randomised experimental procedure (Hayes, 2021; Montoya, 2023).

5. Results

5.1. Descriptive statistics

The results (Table 5) indicate that academics are perceived as more trustworthy ($M = 5.27$, $SD = 1.18$) than practitioners ($M = 5.12$, $SD = 1.07$), and this difference is significant ($t_{(1078)} = 2.19$, $p = .03$). Academics also scored higher in expertise ($M = 5.22$, $SD = 1.20$) than practitioners ($M = 5.11$, $SD = 1.15$), although this difference was not significant ($t_{(1078)} = 1.64$, $p = .10$). Similarly, academics had a higher mean score for legitimacy ($M = 5.19$, $SD = 1.33$) than practitioners ($M = 5.04$, $SD = 1.26$), but this difference was not significant either ($t_{(1078)} = 1.96$, $p = .05$). For willingness to pay, practitioners ($M = 2.91$, $SD = 1.84$) slightly outscored academics ($M = 2.69$, $SD = 1.74$), although this difference was also non-significant ($t_{(1078)} = 1.94$, $p = .05$).

The significant trustworthiness premium observed for academics provides an encouraging initial indication that audiences do recognise the normative commitments traditionally associated with scholarly work, in line with H1.a. By contrast, the absence of statistically significant mean differences for expertise, legitimacy, and willingness to pay is consistent with the notion that author type operates primarily through conditional pathways rather than as a standalone cue (Ohanian, 1990). Source-credibility research shows that audiences integrate multiple signals simultaneously; simple mean comparisons therefore capture only a portion of the evaluative process. These descriptive results thus underscore the importance of examining moderating (e.g., topic–speciality congruence) and mediating mechanisms, which we address in the subsequent path and moderated-mediation analyses.

5.2. Effect of academic status on credibility and legitimacy

5.2.1. Direct effects of being a social scientist on credibility components (H1.a and H1.b)

First, we employed an ANOVA test to explore the relationships between topic and speciality congruence and between the two components of source credibility theory, i.e., trustworthiness (H1.a) and expertise (H1.b). A significant Fisher's ANOVA ($F_{(1,\ 1078)} = 4.79$, $p < .029$) indicates that the author of the op-ed is perceived as more trustworthy if they are an academic ($M = 5.27$, $SD = 1.18$) as opposed to a practitioner ($M = 5.12$, $SD = 1.07$), supporting H1.a. In other words, social scientists are able to overcome the difficulties inherent in SSCB2. Contrarily, a non-significant Fisher's ANOVA ($F_{(1,\ 1078)} = 2.69$, $p < .102$) reveals that an academic author is not perceived as more expert ($M = 5.22$, $SD = 1.20$) than a practitioner ($M = 5.11$, $SD = 1.15$), so H1.b is rejected, thus confirming the importance of SSCB1.

This result underscores the persistent credibility challenge for social scientists, who must contend with public perceptions that their expertise is either diffuse or insufficiently distinct from that of practitioners (Cassidy, 2008; Lewis et al., 2023). It also resonates with the long-standing rigour–relevance debate in management and related disciplines, where academic outputs are often seen as methodologically sound but lacking immediate applicability, thus undermining perceptions of expertise (Kieser et al., 2015; Van De Ven and Johnson, 2006). Our findings suggest that, in the context of media-based knowledge

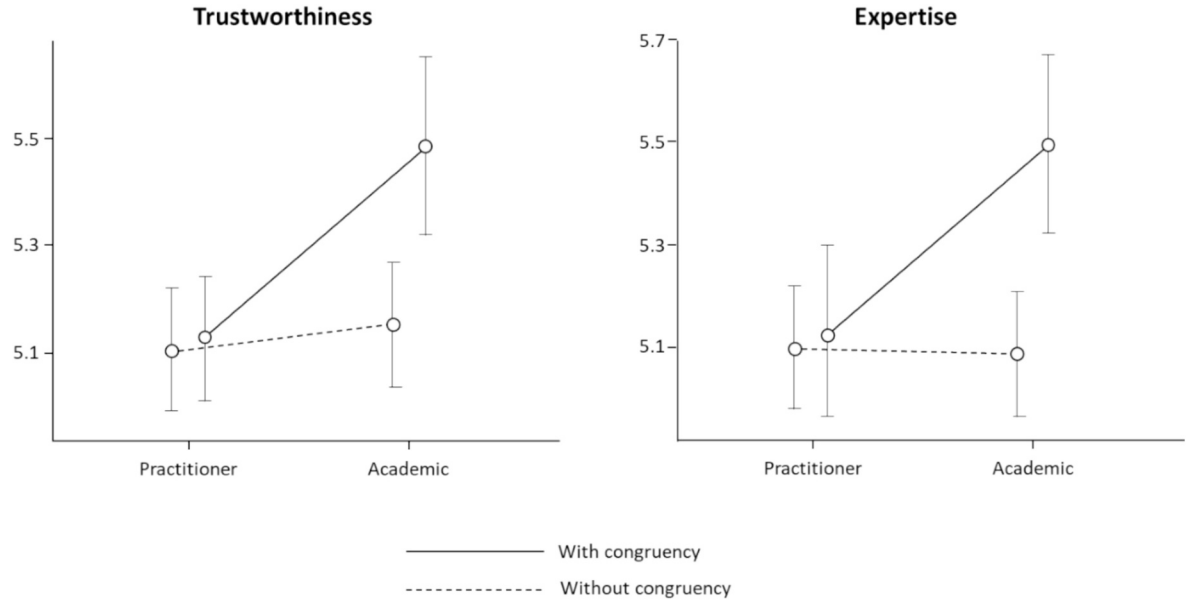

Fig. 2. ANOVA of the effects of author type and congruence on trustworthiness and expertise (95 % confidence interval).

dissemination, this perceived gap may limit academics' recognition as domain experts—even when their scholarly credentials are clear—reinforcing the salience of SSCB1 as a barrier to effective public engagement.

Second, we ran the entire research model using the PROCESS macro (Hayes, 2021). Model 1 does not take into account author-topic congruence (i.e., no moderation). The results are presented in Table 6. Model 1 confirms that being an academic significantly enhances trustworthiness ($b = 0.17$, $p < .05$), but has a non-significant effect on expertise ($b = 0.14$, *n.s.*), which aligns with the results of the ANOVA analysis.

5.2.2. Moderation of the relationship with congruence (H2)

We now test how congruence constitutes a boundary condition of the aforementioned relationship between being a social sciences academic and source credibility (H2a and H2b). To do so, we conducted two-way ANOVAs to evaluate the effects of author type and congruence on perceptions of trustworthiness and expertise. The findings reveal that congruence significantly enhances the positive impact of author type on trustworthiness ($F_{(1,\ 1076)} = 4.42$, $p < .036$), confirming H2a. Additionally, congruence significantly amplifies the positive effect of author type on expertise ($F_{(1,\ 1076)} = 6.64$, $p < .01$), so H2b is also supported. The results are shown in Fig. 2. This means that the public does not automatically grant free rein for academics to speak on any topic they choose; instead, academics only have a clear advantage in terms of credibility when they stay within their own specialist area.

We further assessed H2 based on the PROCESS analysis. In Model 2 (Table 6), which includes congruence, the direct positive effect of academic status on trustworthiness is no longer significant ($b = 0.05$, *n.s.*) because it is significantly moderated by author type ($F_{(1,\ 1072)} = 6.54$, $p < .05$), confirming the importance of the moderation. Specifically, when there is no congruence, academic status has no significant effect on trustworthiness ($b = 0.05$, *n.s.*); however, when there is congruence, the effect is both positive and significant ($b = 0.41$, $p < .001$). Similarly, the impact of academic status on expertise is also no longer significant ($b = -0.02$, *n.s.*), as this relationship is significantly moderated by congruence ($F_{(1,\ 1072)} = 9.34$, $p < .01$). When there is no congruence, academic status does not significantly influence expertise ($b = -0.01$, *n.s.*), whereas it has a positive and significant effect when there is ($b = 0.44$, $p < .001$). The other effects in Model 2 are consistent with those in Model 1. Therefore, the PROCESS analysis in Model 2 confirms the results from the ANOVA, and hence H2a and H2b are accepted.

Table 7
Results of the mediation analysis.

Willingness to pay	*b*	Bootstrap *SE*	95 % CI	
			Lower	Upper
Total	0.06*	0.02	0.0070	0.1035
Via Trustworthiness and Legitimacy	0.03*	0.01	0.0056	0.0492
Via Expertise and Legitimacy	0.03^{ns}	0.02	−0.0007	0.0599

Notes. ***$p < .001$, **$p < .01$, *$p < .05$, ns: non-significant.

5.3. Effects on public engagement with mass media content (H3 and H4)

We now explore the mechanisms through which being a social scientist influences public engagement with one's mass media content, which we theorised to be mediated by legitimacy building (H3). We measure this through willingness to pay (H4).

The PROCESS analysis[18] (Model 2 – Table 6) shows that both trustworthiness ($b = 0.41$, $p < .001$) and expertise ($b = 0.56$, $p < .001$) significantly increase legitimacy, supporting H3a and H3b. It also demonstrates that legitimacy significantly increases willingness to pay ($b = 0.38$, $p < .001$), confirming H4. In other words, what drives the general public to engage with a given op-ed in the mass media is related to how they attribute legitimacy, which is positively associated with trustworthiness and expertise.

5.4. Indirect effect of author-type on willingness to pay (overall model)

To further assess the psychological mechanism of author type on willingness to pay, we need to assess parallel paths (Author-type → Trustworthiness → Legitimacy → Willingness to Pay; Author-type → Expertise → Legitimacy → Willingness to pay). Hence, we conduct a mediation analysis using 5000 bootstrap samples (Hayes, 2021).

[18] Here, ANOVA analysis is not appropriate to test H3 and H4 because we study the relationship between continuous variables.

Table 8
Results of the moderated mediation analysis.

	Author type	*b*	Bootstrap *SE*	95 % CI	
				Lower	Upper
Via Trustworthiness and Legitimacy	Incongruence	0.01^{ns}	0.01	−0.0189	0.0330
	Congruence	0.06*	0.02	0.0287	0.1027
Index		0.06*	0.02	0.0139	0.1037
Via Expertise and Legitimacy	Incongruence	-0.00^{ns}	0.02	−0.0394	0.0323
	Congruence	0.09*	0.03	0.0434	0.1477
Index		0.09*	0.03	0.0350	0.1610

Notes. ***$p < .001$, **$p < .01$, *$p < .05$, ns: non-significant.

Table 9
Results of the moderated mediation analysis.

	Model 1 (without congruence)		Model 2 (with congruence)		Legitimacy	WTP
	Trust.	Expertise	Trust.	Expertise		
Focal variables						
Hybrid authors	-0.11^{ns}	-0.07^{ns}	-0.07^{ns}	-0.06^{ns}		
Congruence			0.16*	0.20**		
Author type × Congruence			-0.11^{ns}	-0.04^{ns}		
Trustworthiness					0.44***	
Expertise					0.51***	
Legitimacy						0.40***
Control variables						
Gender	−0.14*	−0.15**	−0.14*	−0.16**	-0.02^{ns}	0.05^{ns}
Age	0.00^{ns}	-0.00^{ns}	0.00^{ns}	-0.00^{ns}	−0.00**	0.00^{ns}
Self-Exp. in Context	0.03^{ns}	0.05^{ns}	0.04^{ns}	0.06^{ns}	0.01^{ns}	0.20***
Self-Exp. in Discipline	0.14***	0.13***	0.13***	0.13***	0.02^{ns}	0.21***

Notes. ns: non-significant.
*** $p < .001$.
** $p < .01$.
* $p < .05$.

5.4.1. Indirect effect without congruence moderation

The results (Table 7) indicate that the total indirect effect is positive and significant ($b = 0.06$, $p < .05$, 95 % CI = [0.0070, 0.1035]), as the 95 % confidence interval excludes zero. This means that the effect of being an academic on willingness to pay occurs through the mediating variables (i.e., trustworthiness and/or expertise) rather than directly, confirming the logic of our theoretical model. Specifically, the indirect effect through trustworthiness and legitimacy is positive and significant ($b = 0.03$, $p < .05$, 95 % CI = [0.0056, 0.0492]), but the indirect effect via expertise and legitimacy is not ($b = 0.03$, *n.s.*, 95 % CI = [−0.0007, 0.0599]), further supporting confirmation of H1.a and rejection of H1.b. These findings underscore the importance of author type and specifically trustworthiness in driving media engagement and economic behaviour.

5.4.2. Indirect effect with congruence moderation

We extended our analysis by examining whether the aforementioned mediating pathways—trustworthiness and expertise—are moderated by knowledge congruence.

The results (Table 8) indicate that the indirect effect of trustworthiness is significantly moderated by knowledge congruence—the index of moderated mediation is $b = 0.06$ ($p < .05$, 95 % CI = [0.0139, 0.1037]). Under incongruence, the indirect effect of being an academic on willingness to pay, via trustworthiness and legitimacy, is not significant ($b = 0.01$, *n.s.*, 95 % CI = [−0.0189, 0.0330]). Conversely, under congruence, it is positive and significant ($b = 0.06$, $p < .05$, 95 % CI = [0.0287, 0.1027]). A similar pattern emerges for expertise. The index of moderated mediation is $b = 0.09$ ($p < .05$, 95 % CI = [0.0350, 0.1610]).

Table 10
Model estimation in the UK sample.

	Model 1 (without congruence)		Model 2 (with congruence)		Legitimacy	WTP
	Trust.	Expertise	Trust.	Expertise		
Focal variables						
Author type	0.14^{ns}	0.10^{ns}	-0.05^{ns}	-0.09^{ns}		
Congruence			-0.21^{ns}	0.01^{ns}		
Author type × Congruence			0.65**	0.63*		
Trustworthiness					0.37***	
Expertise					0.50***	
Legitimacy						0.18*
Control variables						
Gender	−0.32**	−0.25*	−0.31**	−0.24*	0.04^{ns}	-0.24^{ns}
Age	0.00^{ns}	-0.00^{ns}	0.00^{ns}	-0.00^{ns}	0.01*	0.01^{ns}
Self-Exp. in Context	0.02^{ns}	0.00^{ns}	0.02^{ns}	0.01^{ns}	-0.00^{ns}	0.16*
Self-Exp. in Discipline	0.03^{ns}	0.04^{ns}	0.03^{ns}	0.03^{ns}	0.00^{ns}	0.13^{ns}

Notes. ns: non-significant.
*** $p < .001$.
** $p < .01$.
* $p < .05$.

Table 11
Model estimation in the Spain sample.

	Model 1 (without congruence)		Model 2 (with congruence)		Legitimacy	WTP
	Trust.	Expertise	Trust.	Expertise		
Focal variables						
Author type	0.41***	0.41***	0.15^{ns}	0.18^{ns}		
Congruence			−0.31^{ns}	−0.11^{ns}		
Author type × Congruence			0.80***	0.71**		
Trustworthiness					0.52***	
Expertise					0.38***	
Legitimacy						0.21***
Control variables						
Gender	−0.24*	−0.21^{ns}	−0.08*	−0.06^{ns}	0.25*	−0.22^{ns}
Age	0.01^{ns}	−0.00^{ns}	0.01^{ns}	−0.00^{ns}	−0.00^{ns}	0.02**
Self-Exp. in Context	0.03^{ns}	0.00^{ns}	0.01^{ns}	0.01^{ns}	−0.09*	0.12*
Self-Exp. in Discipline	0.16**	0.16**	0.03**	0.03**	0.06^{ns}	0.16*

Notes. ns: non-significant.
*** $p < .001$.
** $p < .01$.
* $p < .05$.

Under incongruence, the indirect effect via expertise and legitimacy on willingness to pay is not significant ($b = -0.00$, *n.s.*, 95 % CI = [−0.0394, 0.0323]) but it is significantly positive under the congruent condition ($b = 0.09$, $p < .05$, 95 % CI = [0.0434, 0.1477]).

These moderating mediation analyses highlight two main points. First, our initial main effect—that academics generally enjoy a credibility premium over practitioners that is mainly derived from trustworthiness—is a critical factor. Second, the extent to which that advantage translates into higher willingness to pay depends critically on whether the author's domain is congruent with the topic. In other words, while an academic label may initially boost perceived trustworthiness, audiences only fully respond to that credibility when the author writes on a topic in their own domain of expertise.

Overall, our findings suggest that author status and topic alignment must be considered jointly to understand how audiences perceive and react to media-based scientific knowledge dissemination. Academics hold a partial edge in credibility (trustworthiness rather than expertise), but this only becomes truly consequential for driving behavioral engagement (e.g., willingness to pay) when their specialised background aligns with the content they discuss.

6. Robustness checks and complementary studies

6.1. Alternative models

We ran a series of alternative models using various covariates as moderators to assess the robustness of our focal effects. In other words, we test whether the model, and especially the moderation through congruence, still holds when another moderator is chosen instead (e.g., gender, age).

When gender is introduced as a moderator, its interaction with author type is not significant for either trustworthiness ($b = 0.16$, $p = .22$) or expertise ($b = 0.20$, $p = .15$). However, the significant moderation effect of congruence persists for trustworthiness ($b = 0.36$, $p = .01$) and expertise ($b = 0.45$, $p = .002$). Similarly, when age is included as a moderator, its interaction with author type is not significant for trustworthiness ($b = -0.00$, $p = .10$) or for expertise ($b = -0.01$, $p = .02$), but the moderation effect of congruence remains significant for trustworthiness ($b = 0.36$, $p = .01$) and expertise ($b = 0.45$, $p = .002$) confirming the robustness of the model.

We also tested models including self-assessed expertise in the context as a moderator, which had no significant interaction with author type for trustworthiness ($b = -0.04$, $p = .43$) or expertise ($b = -0.01$, $p = .79$). However, the interaction between author type and congruence remains significant for trustworthiness ($b = 0.36$, $p = .01$) and expertise ($b = 0.45$, $p = .002$). In a similar model using self-assessed expertise in the discipline as a moderator, the interaction with author type is non-significant for trustworthiness ($b = -0.06$, $p = .16$) and for expertise ($b = -0.06$, $p = .17$). However, the interaction between knowledge congruence and author type remains significant for trustworthiness ($b = 0.37$, $p = .009$) and expertise ($b = 0.46$, $p = .002$).

Finally, we ran alternative models using disciplines as moderators. When economics is introduced as a moderator, its interaction with author type is not significant for trustworthiness ($b = -0.03$, $p = .86$) or expertise ($b = -0.07$, $p = .61$). However, the significant moderating effect of congruence persists for trustworthiness ($b = 0.36$, $p = .01$) and expertise ($b = 0.44$, $p = .003$). Similarly, when management is included as a moderator, its interaction with author type is not significant for trustworthiness ($b = -0.24$, $p = .09$) or expertise ($b = -0.23$, $p = .11$), but the interaction with congruence remains significant for trustworthiness ($b = 0.36$, $p = .01$) and expertise ($b = 0.45$, $p = .002$). Finally, in the sociology model, the interaction with author type is not significant for trustworthiness ($b = 0.26$, $p = .06$) but is for expertise ($b = 0.30$, $p = .04$), while the interaction with congruence does remain significant for both trustworthiness ($b = 0.37$, $p = .01$) and expertise ($b = 0.45$, $p = .002$).

As in those different models, the moderation by congruence of the relationship between author type and trustworthiness and expertise is still significant, even when introducing other moderators, hence confirming the robustness of the proposed model.

6.2. Complementary study #1 on hybrid consultant-academics

We conducted an additional study (n = 596) with a representative population from France,[19] in which the author was explicitly described as both an academic and a consultant. This hybrid role was introduced because social scientists often engage in external consulting (e.g., Olmos-Peñuela et al., 2014a, 2014b). Indeed, such practices are often a key channel for knowledge transfer among social scientists (Bekkers and Bodas Freitas, 2008), and we were interested in knowing whether this had any positive or negative effect on their credibility.

To do so, we replicated the aforesaid PROCESS analysis, but this time to compare hybrid authors against all other types. As before, we ran two successive models, one excluding knowledge congruence (Model 1) and one including it (Model 2). The results are shown in Table 9.

Unlike authors labelled solely as academic, hybrid authors did not benefit from significantly enhanced trustworthiness ($b = -0.11$, *n.s.*) or expertise ($b = -0.07$, *n.s.*), nor was this effect significantly moderated by

[19] We recruited additional respondents' representative of the French population from the same panel provider that in the main study.

congruence ($b = -0.11$, *n.s.* for trustworthiness and $b = -0.04$, *n.s.* for expertise). In contrast, trustworthiness ($b = 0.44$, $p < .01$) and expertise ($b = 0.51$, $p < .01$) did continue to enhance legitimacy, which in turn increased willingness to pay ($b = 0.40$, $p < .01$), reaffirming our earlier conclusion that perceived credibility is a critical driver of media engagement. However, hybrid status failed to elevate that credibility beyond the levels associated with practitioners alone. In other words, when a hybrid identity is presented in public communication, the "consultant" label appears to override the "academic" one, rather than generating a cumulative credibility effect. While acting as a consultant could, in theory, signal that academics are bridging the rigour–relevance gap, it instead seems to erode the academic premium. Hybrid status may conflict with public expectations about how trust and expertise are attributed, potentially undermining both the perceived disinterestedness associated with scientific knowledge production and the level of theorisation expected from scholars who maintain critical distance from practice. Audiences may also infer that such op-eds are tailored to the interests of specific clients, rather than offering the generalisable insights typically expected from academia.

6.3. Complementary study #2: replication in the UK and Spain

Although France was our primary research context, we also conducted partial replications[20] in the UK (n = 300 respondents from Prolific) and Spain (n = 300 respondents from Prolific) to verify that our core results reflect a broadly generalisable phenomenon rather than an idiosyncratic feature of the French media environment. We chose these two new countries because they share Europe's strong newspaper tradition, with opinion pages that commonly feature social scientists and industry experts alike (Schäfer, 2012), but also present noteworthy differences from France.

Social sciences papers are cited in Spanish newspapers with a similar frequency to France (see Appendix A.1), but Spain also exhibits the highest trust in scientists out of all European countries (Cologna et al., 2025). Meanwhile, the UK is a comparable country to France in terms of trust in scientists, but is unique because it has Europe's highest citation rate of sociology, management and economics papers in the news (Appendix A.1; Cologna et al., 2025).

Our replicated studies used demographically similar samples to the one in France, and the texts of the experimental op-ed and associated questionnaire were identical, albeit translated into Spanish and English. However, the visual design was adapted to resemble *El País* in Spain and *The Guardian* in the UK for the purposes of ecological validity.

As for the results of our replicated studies, Table 10 (Model 1) shows that, in the UK, and unlike in France, being an academic rather than a practitioner does not significantly increase perceived trustworthiness ($b = 0.14$, *n.s.*) or expertise ($b = 0.10$, *n.s.*). When knowledge congruence is introduced (Model 2), being an academic again has no significant effect on trustworthiness ($b = -0.05$, *n.s.*) or expertise ($b = -0.09$, *n.s.*), but the interaction between author type and congruence is both positive and significant ($b = 0.65$, $p < .01$ for trustworthiness; $b = 0.63$, $p < .05$ for expertise). This pattern mirrors the French findings, whereby for academics, disciplinary alignment with the op-ed topic strongly enhances perceived credibility, while for practitioners, such congruence has little effect. Finally, trustworthiness ($b = 0.37$, $p < .001$) and expertise ($b = 0.50$, $p < .001$) are also significantly positive drivers of legitimacy in the UK, which in turn significantly increases willingness to pay ($b = 0.18$, $p < .05$).

To summarise, the UK findings confirm the moderating role of congruence that was observed in France, but not the idea that academics are especially prone to be viewed as credible when discussing topics outside of their recognised area of expertise. This suggests that UK audiences require a clearer fit between an academic's discipline and the topic before assigning higher credibility.

In Spain (Table 11, Model 1), being an academic significantly and positively influences both trustworthiness ($b = 0.41$, $p < .001$) and expertise ($b = 0.41$, $p < .001$), indicating a more pronounced academic premium than in France or the UK when congruence is not factored in.

Introducing knowledge congruence (Model 2) suppresses the direct effect of author type on trustworthiness ($b = 0.15$, *n.s.*) and expertise ($b = 0.18$, *n.s.*) in Spain. However, the interaction between author type and congruence is significant ($b = 0.80$, $p < .001$ for trustworthiness; $b = 0.71$, $p < .01$ for expertise) and stronger than in France or the UK. Consistent with the previous samples, trustworthiness ($b = 0.52$, $p < .001$) and expertise ($b = 0.38$, $p < .001$) significantly boost legitimacy, which in turn significantly increases willingness to pay ($b = 0.21$, $p < .001$). Hence, the Spanish findings support the importance of knowledge congruence, but also suggest a particularly high baseline trust in academics (i.e., prior to controlling for congruence). This could reflect greater societal trust in academic credentials in Spain, as supported by other cross-country surveys on public attitudes toward science (Cologna et al., 2025).

Overall, the mechanisms tested in France are broadly consistent in our other two study contexts, and differences in baseline perceptions of academic credentials would appear to be the primary cause of any discrepancies. We posit that these discrepancies may relate to political orientations in each country, which are often associated with varying levels of trust in science in general (e.g., Gauchat, 2011), different media landscapes (e.g., tabloid press in the UK) and contrasting approaches to gate-keeping, promoting and framing scientists' contributions in the mass media.

7. Discussion

7.1. Contributions

7.1.1. Contributions to the knowledge dissemination literature

The dissemination of scientific knowledge to society is recognised as a key driver of progress (e.g., Mokyr, 2002; Salter et al., 2017; Mazzucato, 2018). As such, bridging the "communication gap" between academia and its audiences has become a critical objective for universities aiming to achieve societal impact (Nasirov and Joshi, 2023). However, very little research has focused on the specific challenges faced by the social sciences in this context (e.g., Olmos-Peñuela et al., 2014a, 2014b), despite the relevance of their insights, which are used for instrumental, symbolic and conceptual purposes by a wide range of actors beyond business organizations (Beyer, 1997; Amara et al., 2004; Olmos-Peñuela et al., 2014b).

First, we conceptualise mass media as an overlooked yet highly effective mechanism for knowledge dissemination in the social sciences, as supported by evidence (including our own meta-analysis, presented in Appendix A.3) that social scientists command a notably stronger media presence than their STEM counterparts (Bentley and Kyvik, 2010; TNS-BMRB, 2015). Our particular focus on the mass media also echoes recent research on the role of scientific exposure (Mokyr, 2002; Burchell, 2009) and especially how research captures attention and stimulates discussion in non-academic circles (D'Este and Robinson-García, 2023). Indeed, our empirical approach shows that the general public is keen to engage with mass-media content produced by social scientists. Interestingly, this finding contrasts with previous studies that found that mass-media science communication had no significant strengthening effect on business-oriented knowledge transfer when all disciplines were considered (Nasirov and Joshi, 2023).

[20] For the replication studies in Spain and the UK, we used a 2 (expert vs. practitioner) × 2 (congruent vs. incongruent) design, yielding four experimental conditions. Based on Pechmann (2019), a minimum of 50 respondents per condition ensures methodological rigour, implying a target sample of 200 respondents. We collected 300 respondents in each country, exceeding this benchmark and providing both sufficient statistical power and robustness for cross-country comparison.

Second, as the literature on scientific knowledge dissemination demonstrates, universities often struggle to effectively signal the value and availability of their scientific knowledge (e.g., Fontana et al., 2006; Nasirov and Joshi, 2023). Building on knowledge from the science communication literature, we argue that social scientists face distinctive barriers, our so-called SSCBs. Drawing on source credibility theory (Wiener and Mowen, 1986; Ohanian, 1990) and legitimacy theory (Suchman, 1995; Deephouse et al., 2016), we add to the literature by identifying how general audiences engage with social sciences content. In alignment with Llopis et al. (2022), legitimacy emerges as a key concept in this regard and could also fuel further research on knowledge dissemination, including its importance for business-oriented knowledge transfer. Our research also highlights how such a foundational element of scientific production as disciplinary specialisation (Merton, 1973) affects knowledge transfer in mass media contexts. Although institutions and policymakers have incentivised scholars to increase their outreach (Ravenscroft et al., 2020; Sengupta and Ray, 2017), our findings add to the "engaged scholarship" literature (Van de Ven, 2007; Hoffman, 2021) by noting that the public will only fully engage with academics when they discuss topics that are directly connected to their specialist fields. Academics do not have free rein to speak on any topic they choose solely by virtue of their status, a consideration that may have been overlooked in other knowledge dissemination contexts too.

Third, our findings contribute to the literature on academic consulting as a knowledge transfer mechanism (Perkmann and Walsh, 2008; Olmos-Peñuela et al., 2014a), an especially important area for social scientists (Bekkers and Bodas Freitas, 2008). While it has been argued that dual identities as both consultants and academics could bolster legitimacy by signalling practical knowledge (Harvey and Spee, 2024), our experiment shows that they may actually diminish the impact. Such hybrid labels may inadvertently undermine the distinctive legitimacy that academics enjoy, tipping the balance between practical relevance and scholarly authority. This finding is somewhat counter-intuitive, given that boundary-spanning activities are typically encouraged by academic institutions, not only as a means for disseminating knowledge to industry (e.g., Olmos-Peñuela et al., 2014a), but also as inputs for teaching and student placement. However, our findings hint at a possible disconnect between how such engagement activities are valued within academic or student communities and how they are perceived by the broader public—an audience nonetheless central to effective knowledge dissemination. Drawing on legitimacy theory, Bitektine et al. (2025) show that evaluators may mobilise different legitimacy judgments. In particular, cognitive legitimacy (i.e., taken-for-granted perceptions, Bitektine, 2011) relies on clear categorical distinctions. A dual identity as both consultant and academic may blur these categories, making it harder for audiences to evaluate cognitive legitimacy. We thus contribute to the literature on academic knowledge transfer by highlighting potential cross-channel mismatches: practices that enhance legitimacy in industrial or educational settings may not translate into equivalent credibility in mass media or public-facing settings. This potential downside of academic consulting may also apply to other forms of knowledge transfer, such as joint research, engagement with alumni and outreach, and hence warrants further research.

Finally, our research calls for a broader view of knowledge transfer beyond business-related engagement to include diverse audiences, uses and channels, and for greater attention to be paid to disciplinary specificities.

7.1.2. Contribution to science communication literature

Our research also contributes to the science communication literature. First, we respond to calls for further research on the specificities of social sciences (e.g., Cassidy, 2008; Lewis et al., 2023). While previous research has highlighted that certain barriers affect the social sciences more than STEM disciplines (e.g., Gligorić et al., 2022; Gauchat and Andrews, 2018; Lewis et al., 2023), we add to this literature by empirically examining how social scientists in economics, management and sociology navigate these barriers to foster audience engagement. We also extend the work by Sommer and Maycroft (2008) on the importance of op-eds as an outlet for science communication.

Our findings also offer insights on science communication in the so-called "post-truth" era, in which emotional appeal and personal beliefs seem to have a greater impact on public opinion than objective, scientifically grounded facts, fuelled in part by the rise of populism (Knight and Tsoukas, 2018; Mede and Schäfer, 2020; Rekker, 2021). Notwithstanding concerns about ideological bias in the social sciences (Mede and Schäfer, 2020), our findings are cautiously optimistic: social scientists still benefit from a considerable degree of legitimacy when communicating on their specialist topics. However, research consistently shows that individuals tend to engage in selective interpretation of scientific findings, using them to reinforce pre-existing ideological beliefs (Drummond and Fischhoff, 2017). Even when social scientists are viewed as legitimate experts, audiences might still pick and choose the facts that align with their own worldviews. This can lead to the paradox whereby "expert" findings reinforce polarisation rather than bridging it, because each side merely seizes the parts it finds useful to support its stance (Rekker, 2021). Hence the need for a nuanced interpretation of our findings: having a credible academic voice is necessary but probably not always sufficient to ensure broad acceptance or reduce polarisation.

Finally, we contribute methodologically to the science communication literature by bridging experimental approaches with a proxy for audience engagement, rather than relying solely on overall attitudinal measures (e.g., Gauchat and Andrews, 2018). This design aligns with the need for more consequential engagement metrics that capture real-world decision-making. Importantly, the experiment also controls for typical confounders—such as differences in writing style—by using a standardised op-ed content and only changing the author's domain of expertise and professional status, introducing a replicable measure to test how specific features shape audience responses.

7.2. Implications for research policies, institutions, and academics

In the pursuit of societal impact, policymakers and universities have increasingly encouraged science communication across all disciplines (D'Este and Robinson-García, 2023).[21] Our findings suggest that these efforts may be especially fruitful when they prioritise mass-media engagement by social scientists, a dissemination channel that, despite its specific disciplinary barriers, is highly effective for connecting academic knowledge with general audiences. Given the interpretive nature of social-science research, which is often applied across varied audiences and for diverse purposes (Beyer, 1997; Olmos-Peñuela et al., 2014a), mass media offer an especially fitting outlet. Unlike STEM fields, where impact is often achieved through codified outputs such as patents or licenses, and for which the mass media is generally less effective for fostering business-related engagement (Nasirov and Joshi, 2023), the social sciences benefit from trusted, narrative-driven platforms. National newspapers (and their digital versions) remain among the most credible and widely consumed sources of information (Deacon et al., 2024), and op-eds serve a particularly powerful agenda-setting function,

[21] 2022 EU call for a *European Competence Centre* for science communication, with the goal of helping academics develop their communication skills, and developing mandatory guidelines for EU-funded research through Horizon Europe projects to engage in science communication. See for example: https://rea.ec.europa.eu/news/science-communication-how-social-media-can-effectively boost-your-research-project-2023-08-11_en

influencing both public opinion and policymaking (Coppock et al., 2018).

Beyond the need for further research (see Section 7.3), we suggest that policymakers and university transfer offices should develop dedicated support programmes to assist social scientists in mass-media dissemination. The success of such efforts highly depends on clear alignment between disciplinary expertise and the topic. Targeted support mechanisms—such as training programmes and media placement guidance—should actively encourage such alignment to maximise credibility and impact. Research funders (e.g., Horizon Europe) could also encourage grant applicants to include mass-media outreach strategies and allocate resources for professional editorial support.

Universities also need to carefully navigate the potential tensions between public media engagement and other forms of knowledge transfer. Our study highlights the key concern that social scientists with dual roles are often perceived as less impactful than those without. Institutions could respond by establishing clear internal guidelines on how such roles are presented in order to safeguard academic credibility. Our findings also carry significant implications for policymakers designing incentive structures for public engagement, who should be wary about encouraging academics to speak outside of their disciplinary boundaries, as this can erode legitimacy and trust. Neither should academics be pressured into disclosing findings prematurely in pursuit of visibility (e.g., "science by press conference", Winsten, 1985), which could lead to misunderstandings due to audience unfamiliarity with the iterative nature of scientific research (Hunter, 2016; Simis et al., 2016).

Finally, we recommend improved tracking of mass-media outreach in social sciences to better assess university impact. As media appearances tend to lack formal identifiers (e.g., DOIs), universities could adopt broader assessment frameworks like the UK's Research Excellence Framework (REF), to better recognise and reward public science communication efforts.

7.3. Limitations and future research

Our study has several limitations that also open a number of avenues for future research. First, although the French sample was carefully chosen and despite our partial replication of the experiment in two other European countries, the generalisability of our findings to other cultural settings remains unclear. Some countries may offer fewer platforms for social scientists or exhibit different levels of trust in science (Cologna et al., 2025). Our two partial replications should also be treated with caution. While the UK and Spanish samples were designed to replicate the French findings, they may miss subtler cross-national nuances. Although we used a standard back-translation protocol and checks with native speakers, subtle semantic or idiomatic shifts could still influence respondents' interpretations of key cues. Further replications in more diverse settings and on larger scales would help clarify how cultural norms shape perceptions of social scientists' legitimacy.

Second, our focus on three business-oriented disciplines (economics, sociology, and management) and the use of the op-ed format, also narrows the scope for generalisation. While these disciplines are especially salient in mainstream mass media on business-related topics (Appendix A.3), future studies might examine whether similar effects emerge in other social sciences (e.g., political science or history), in non-business topics or in alternative media channels such as podcasts or talk shows, where academics might not have the same degree of freedom to express their views, and where new competitors may emerge, such as politicians and activists. Also, we deliberately avoided politically polarised media, but subsequent research could choose not to. Indeed, potential differences in political alignment and media framing may alter how audiences perceive academic input, and we need to know whether such exposure bridges or exacerbates societal divides.

Third, although our op-ed topic was carefully crafted, we did not examine others where certain media commentators (e.g., politicians, celebrities, activists) might command greater legitimacy or attention. Our design could be replicated across a wider range of subjects to observe potential differences. It would also be useful to explore in greater depth how different audiences (e.g., NGOs, citizens, policymakers) engage with the communicated content. Our experimental design focused exclusively on a general audience, but social sciences can serve a wide range of purposes, and accounting for these distinctions could open up fruitful avenues for further study.

Fourth, we restricted our analysis to op-eds for both theoretical and empirical reasons. However, social media increasingly shapes public discourse, particularly among younger audiences, where misinformation circulates readily, and academics often double as influencers (e.g., Zhang and Lu, 2023). Studies comparing the perceived credibility of op-eds and social media posts could determine whether academics retain their perceived legitimacy in more fragmented, user-curated information environments. This highlights the ongoing challenges of scholarly communication in the digital age and underscores the need for continued research into effective strategies for maintaining public trust.

Fifth, to isolate our SSCBs, we held other common barriers (e.g., public interest, writing style) constant. Future research could assess how topic salience and audience familiarity influence perceptions of academic expertise. We also minimised the influence of perceived reputation by using a fictional and gender-neutral author, leaving open questions about the effects of institutional prestige, personal renown, gender, integrity and even political orientation. Examining real-world op-eds by recognised scholars—especially those with contrarian views—might shed light on how legitimacy is constructed or contested in public arenas. Future research could also explore how journalistic gatekeeping might systematically favour certain academics, incentivise questionable practices or 'oversell' preliminary findings. Future qualitative or longitudinal research could illuminate these subtler editorial dynamics and the potential 'dark sides' of media-based knowledge transfer, such as sensationalism and scientific misinformation.

Sixth, although our between-subjects experiment minimised endogeneity by randomly assigning participants to the experimental conditions, residual concerns may persist. Unobserved traits—such as pre-existing trust in academia—could still influence perceptions of credibility, even though we addressed this by controlling for participants' self-assessed expertise, which confirmed the robustness of our findings. Moreover, reverse causality—whereby perceived credibility drives perceived congruence—was mitigated by our manipulation checks, which confirmed that participants registered our intended congruence cue rather than credibility. While these design features collectively reduce potential bias, future studies could incorporate additional participant-specific measures (e.g., political orientation) to further address any remaining endogeneity concerns.

Seventh, we note that participants were exposed to the op-ed within a survey context, which is not their natural media consumption environment. This may affect attention, motivation, or judgment in ways

that differ from spontaneous browsing. Future studies using alternative methodological approaches might help to explore these processes in situ.

Finally, a limitation of our study is our unidimensional, static treatment of legitimacy, in line with methodological choices made in recent studies (Pavey et al., 2022). While we focused on how academic status shapes perceptions, this approach did not fully account for the multifaceted and evolving nature of legitimacy. Scholars have argued that legitimacy can also be viewed as dynamic – being built, maintained, repaired and potentially lost over time (Tost, 2011; Bitektine and Haack, 2015). Future research might adopt a more processual perspective, exploring how perceptions of legitimacy change in response to ongoing interactions, public debates, or crisis events. Building on our findings, subsequent studies could incorporate moral, pragmatic, and cognitive dimensions of legitimacy (Suchman, 1995) to capture the ethical and societal considerations that are critical in domains such as climate change communication or public health initiatives.

CRediT authorship contribution statement

Quentin Plantec: Writing – review & editing, Writing – original draft, Validation, Supervision, Resources, Project administration, Methodology, Investigation, Data curation, Conceptualization. **Julien Cloarec:** Writing – original draft, Methodology, Formal analysis, Data curation. **Cylien Gibert:** Writing – review & editing, Writing – original draft, Validation, Methodology, Conceptualization. **Marie-Alix Deval:** Writing – review & editing, Writing – original draft, Validation.

Declaration of Generative AI and AI-assisted technologies in the writing process

During the preparation of this work the author(s) used ChatGPT to copy-edit and refine the language (e.g., grammar, spelling). The author (s) subsequently reviewed and edited the content as needed and take(s) full responsibility for the final version of the manuscript.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A

A.1. France's position in social sciences in the news: a bibliometric analysis

To evaluate France's relative position among European countries in terms of the visibility of social sciences research in mass media channels, we conducted a bibliometric analysis using the SciSciNet database (Lin et al., 2023), a comprehensive repository encompassing a vast collection of scientific papers, complete with pre-calculated bibliometric indicators. These include metadata such as journal sources, citation counts, patent citations, and discipline classifications. Moreover, SciSciNet uniquely integrates NewsFeed data, capturing direct citations of academic papers across a vast array of news media outlets, including mainstream newspaper websites and specialised platforms like *The Conversation*.

NewsFeed data was collected from Crossref Event Data, which tracks links between scientific papers with DOIs and news articles or blog posts from RSS and Atom feeds. This provides insights into how scientific research is mentioned in the media, drawing from a broad range of sources such as *Scientific American*, *The Guardian*, *Vox*, and *The New York Times*.

While this metric offers valuable insights, it also has limitations. First, it only captures a small subset of academics who actively engage with media outlets. When scholars contribute to media channels, particularly through op-eds, they rarely cite specific academic papers, which may lead to underestimation of their influence. Additionally, the broad spectrum of sources in the NewsFeed data makes it hard to distinguish between reputable mainstream outlets and niche or secondary media sources. Lastly, even within the social sciences, numerous factors influence the likelihood of a paper being cited in the media, including its academic citation rate, the number of co-authors, and the country's research specialisation in specific disciplines.

Despite these limitations, ranking European countries by the propensity of their social sciences papers to be cited in the news is a meaningful proxy for assessing the varying degrees of social sciences diffusion across European media. To align with our study's experimental framework—focused on economics, management science, and sociology—and considering our geographic focus on Europe, we selected academic papers from these three disciplines. The dataset only included papers published in academic journals (excluding conference proceedings) published from 2013 to 2022 in the European Union and the United Kingdom. Transdisciplinary papers were excluded to maintain a clear disciplinary focus.

The final dataset comprised 321,310 unique academic papers. Two key metrics were computed:

- *Mean Propensity to Be Cited in News*: The ratio of papers cited at least once in the media to the total number of papers.
- *Mean Number of Media Citations if Cited*: The average count of distinct media sources referencing a paper, conditional on it being cited.

The detailed results for each discipline are presented in Table A1.1, offering an overview of how social sciences research visibility varies across different academic fields and European countries.

Table A1.1
Citations in news in European countries for economics, management and sociology.

	Mean propensity to be cited in news	Mean number of occurrences in news if cited	Number of observations
Economics	0.015	1.653	87,382
Management	0.016	1.919	102,411
Sociology	0.013	1.444	131,517

Following the initial analysis, we ranked European countries by their propensity for social sciences papers to be cited in the news across the three disciplines: economics, management science, and sociology. The results, presented in Table A1.2, provide a comparative view of how each country performs in terms of media diffusion of academic research.

Table A1.2
Citations in news in European countries for economics, management and sociology by country.

Country	Ranking	Mean propensity to be cited in news	Mean number of occurrences in news if cited	Number of observations
United Kingdom	1	0.021	1.700	112338
Netherlands	2	0.018	1.493	18630
Austria	3	0.015	1.552	4341
Germany	4	0.015	1.745	31572
Finland	5	0.013	1.788	8460
Sweden	6	0.013	2.139	14847
Ireland	7	0.012	1.378	6032
Denmark	8	0.012	1.676	8628
Belgium	9	0.012	1.281	7473
France	**10**	**0.011**	**1.594**	**15498**
Spain	11	0.008	1.468	26243
Italy	12	0.008	1.566	22017
Hungary	13	0.008	1.947	2474
Portugal	14	0.007	1.783	7033
Czech Republic	15	0.004	1.375	3821
Greece	16	0.003	1.267	4750
Latvia	17	0.003	1.500	3194
Poland	18	0.002	1.474	10263
Romania	19	0.001	2.000	3943

Note: Countries with <2000 papers overall were excluded from this ranking.
Note: the country of the study is highlighted in grey.

A.2. Analysis of op-eds in Le Monde

To assess how academics and practitioners share the public space for written commentary, we systematically examined all op-eds published in *Le Monde* from January 1, 2024, to December 31, 2024. This review yielded a total of 1493 op-eds, each of which was manually classified to capture two main dimensions. First, we coded the *profession of the author*, distinguishing between academics, business practitioners (such as CEOs and consultants), political figures, and an 'other' category (including NGO representatives, public intellectuals, and artists). Second, we assessed whether the focus of each op-ed was related to "*business*" (i.e., addressing companies, interest rates, organizational structures, or other corporate issues) or "*non-business*" topics (cultural, political or historical themes).

Table A2.1 presents the distribution of these op-eds by author profession and by business vs. non-business topics. Academics authored the largest share overall, accounting for 695 of the 1492 op-eds (46.8 %). Within this already substantial presence, academics were particularly dominant on business-related topics, writing 260 op-eds in this domain, 61.0 % of all such op-eds. Interestingly, business practitioners—arguably the other major group one might expect to appear in public debates on corporate issues—authored 91 business-related op-eds (21.8 %) but wrote substantially fewer pieces on non-business themes (17, or 1.6 %). Meanwhile, political figures authored 179 (12.0 % of the total), and various "others" contributed 510 (34.2 % of the total). The final column in Table A2.1 aggregates the categories to illustrate the breadth of content featured in *Le Monde* over the one-year period.

Table A2.1
Distribution of op-eds by profession of the author and topic type (business vs. non-business) in Le Monde (2024).

	Business-related op-eds		Non-Business-related op-eds		Total
	No.	%	No.	%	
Academics	260	61.0 %	435	40.7 %	695
Business-practitioners	91	21.8 %	17	1.6 %	110
Politicians	27	6.3 %	152	14.2 %	179
Others	46	10.8 %	464	43.4 %	510
Total	424	100.0 %	1068	100.0 %	1492

Our next focus was specifically on academics, whose contributions were classified by discipline (see Table A2.2). This breakdown revealed that

economics, management, and sociology were the most widely represented fields on business-related topics, collectively accounting for 222 of the 260 academic op-eds (85.4 %) in that domain. Management scholars, albeit fewer in absolute number (60), wrote a remarkable 95.0 % of their pieces on business-oriented issues, compared with 69.5 % for economists and 41.3 % for sociologists. In contrast, disciplines such as political science and history, despite producing substantial numbers of non-business op-eds, contributed little in the way of business-themed content. Political scientists, for instance, collectively authored 145 op-eds in the year, but only eight of those addressed business matters, while historians penned 87, ten of which covered business topics. Fields more traditionally associated with STEM (e.g., physics, biology, and engineering) or with the humanities (e.g., archaeology, anthropology) featured very little in business discussions, with many authors either writing exclusively on non-business topics or barely contributing op-eds at all.

Table A2.2
Academic disciplines represented in op-eds on business and non-business topics in Le Monde (2024).

	No. Op-Eds	No. Op-Eds Business	Share of business-related op-eds
Economics	200	139	69.5%
Management	60	57	95.0%
Sociology	63	26	41.3%
History	87	10	11.5%
Political Science	145	8	5.5%
Law	58	6	10.3%
Agronomy	4	3	75.0%
Philosophy	21	2	9.5%
Medicine	7	2	28.6%
Psychology	6	2	33.3%
Computer Science	5	2	40.0%
Geography	10	1	10.0%
Biology	8	1	12.5%
Physics	1	1	100.0%
Anthropology	6	0	0.0%
Education Sciences	5	0	0.0%
Mathematics	2	0	0.0%
Urban Planning	2	0	0.0%
Archaeology	1	0	0.0%
Semiotics	1	0	0.0%
Cognitive Sciences	1	0	0.0%
Engineering Sciences	1	0	0.0%
Sports Sciences	1	0	0.0%
Total	**695**	**260**	**N/A**

Note: disciplines included in the study are highlighted in grey.

Taken together, these findings support the underlying rationale of our experimental design. Academics in general, and social scientists in particular, not only feature prominently in Le Monde op-eds but also discuss business-related topics more frequently than other professional and disciplinary groups. Economists, management scholars, and sociologists—the primary focus of our study—are especially visible on corporate or market issues, suggesting that they actively compete with practitioners for the public's attention and trust in this precise domain. This supports our objective of exploring how academic commentators navigate traditional and discipline-specific barriers when communicating social sciences to a broad readership, and how that audience evaluates their legitimacy and expertise relative to those from business or other backgrounds.

A.3. Semantic study of the op-eds

We used natural language processing to analyse op-eds published in *Le Monde*. Our goal was to identify the primary topics that these op-eds address and to determine whether significant differences exist between the topics covered by academics versus practitioners.

Specifically, we used neural topic modeling with BERTopic (in Python; see Grootendorst, 2022), which offers a more robust method for uncovering topics in text compared to traditional LDA (Blei et al., 2003), which, although popular, relies on a bag-of-words approach that fails to account for context. We followed the standard procedure recommended by Grootendorst (2022): first, we vectorised the op-ed corpus using a Sentence-BERT embedding model; next, we reduced the dimensionality of these embeddings with UMAP to mitigate the effect of dimensionality; then, we clustered the reduced embeddings using HDBSCAN in preparation for topic modeling; and finally, we applied c-TF-IDF to model the topics. This analysis resulted in the identification of 12 distinct topics.

To mitigate bias in interpreting these topics, we used KeyBERT to select the most representative words for each topic and implemented a fine-tuned large language model (LLM) to represent them. We quantised (4-bit) and fine-tuned a Llama 2 model (meta-llama/Llama-2-7b-chat-hf, available on HuggingFace) on our data. This is a free, open-source LLM that was among the most popular in 2023, underscoring its stability and relevance. The final results are presented in Table A3.1.

Table A3.1
Results of the neural topic modeling with LLM fine-tuned representation.

Topic	Representation	
	KeyBERT	Llama 2
1	economist, economists, economy, economic	Economists' views on policymaking
2	political, politics, electoral, politist	French far right politics after the legislative elections
3	ecological, ecological, ecology, climatic	Climate governance in Europe
4	Russia, Russian, Russians, Ukrainian, Ukrainians	European security and Russia-Ukraine conflict
5	Israeli, Israelis, Israeli, Palestinian	Middle Eastern geopolitics
6	teachers, professors, professor, teaching	Education reform in France
7	Olympic, Olympics, athletes, sport	Paris 2024 Summer Olympics
8	care, tragic, ageing, help, die	End-of-life care in France
9	sexual, sexual, sexual, masculinity	Masculinity, sexual violence, and feminism
10	immigration, migratory, migratory, migrant	Eurozone immigration policies
11	Chinese, Chinese, China, European	China-Europe relations
12	consumers, algorithms, marketing, distributions	Circumventing online sales tax laws

We visualised the op-ed embeddings in a 2D plot (Fig. A3.1). Each dot represents a single op-ed, and their proximity indicates semantic similarity based on the embedding model. The colour of each dot corresponds to its assigned topic, as indicated in the legend linking colours to the Llama2 representations. Grey dots represent op-eds that score highly across multiple topics and are not representative of a single theme. Our mock op-ed, marked with a star, falls under the topic "Climate governance in Europe"—one of the 12 main topics identified in *Le Monde*. Its more central position in the plot, rather than being on the extreme left, suggests that it is semantically consistent with the rest of the op-eds published in *Le Monde*. Overall, these results underscore the relevance of our mock op-ed for our experiments.

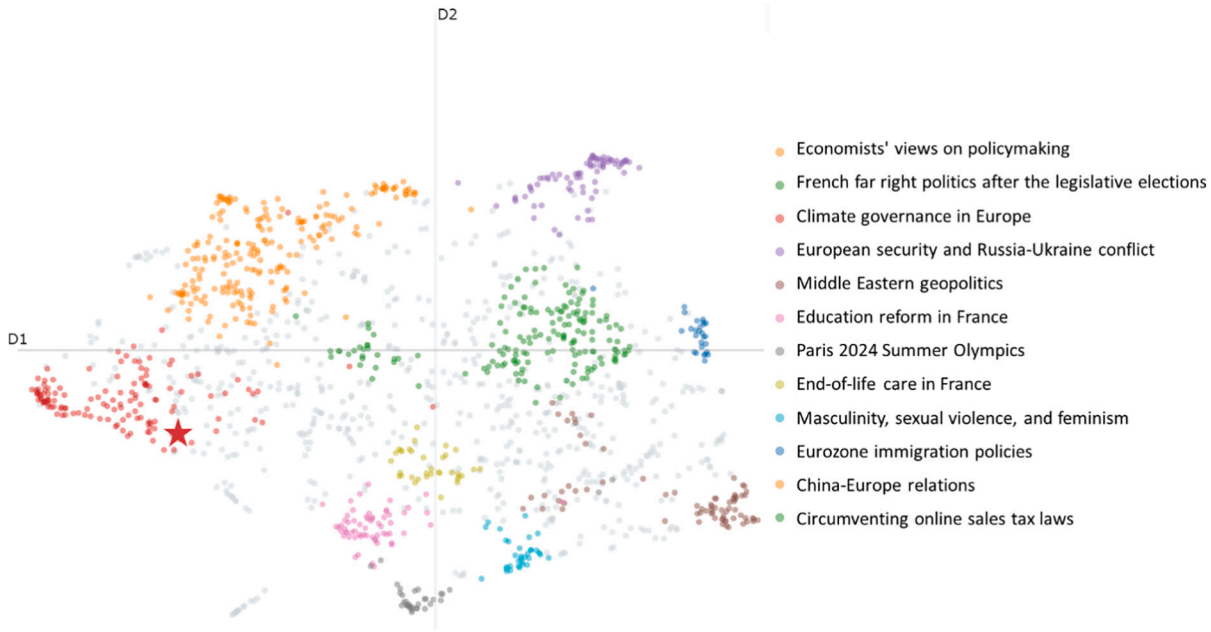

Fig. A3.1. Visualisation of the op-ed embeddings (colours represent Llama2 topic assignments; the star denotes our mock op-ed).

We conducted a series of *t*-tests to determine whether certain topics in *Le Monde* op-eds were predominantly written by academics or practitioners. Table A3.2 presents the results. Our mock op-ed falls under the topic "Climate governance in Europe." For this topic, Welch's t-test indicates that it is addressed similarly by academics ($M = 0.06$, $SD = 0.13$) and practitioners ($M = 0.06$, $SD = 0.15$; $t_{(1492)} = -0.71$, $p = .48$). This finding supports the relevance of our topic selection, as the authorship does not lean toward one group, thereby reducing potential bias in manipulating author type for our mock op-ed.

Table A3.2
Comparison of topics discussed by academics and practitioners in op-eds in *Le Monde*.

Topic	Author type	Mean (SD)	*t*-Test
Economists' views on policymaking	Academic	0.12 (0.19)	Welch's $t_{(1125)} = 6.88$, $p < .001$
	Practitioner	0.06 (0.12)	
French far right politics after the legislative elections	Academic	0.09 (0.18)	Welch's $t_{(1360)} = 1.57$, $p = .12$
	Practitioner	0.08 (0.15)	
Climate governance in Europe	Academic	0.06 (0.13)	Welch's $t_{(1492)} = -0.71$, $p = .48$
	Practitioner	0.06 (0.15)	
European security and Russia-Ukraine conflict	Academic	0.05 (0.14)	Student's $t_{(1492)} = -0.81$, $p = .42$
	Practitioner	0.06 (0.16)	
Middle Eastern geopolitics	Academic	0.06 (0.14)	Student's $t_{(1492)} = -0.86$, $p = .39$
	Practitioner	0.06 (0.15)	
Education reform in France	Academic	0.07 (0.15)	Student's $t_{(1492)} = -1.33$, $p = .19$
	Practitioner	0.06 (0.13)	
Paris 2024 Summer Olympics	Academic	0.04 (0.10)	Welch's $t_{(1403)} = -2.36$, $p = .018$
	Practitioner	0.06 (0.15)	
End-of-life care in France	Academic	0.06 (0.10)	Welch's $t_{(1492)} = -2.48$, $p = .013$
	Practitioner	0.07 (0.15)	
Masculinity, sexual violence, and feminism	Academic	0.05 (0.13)	Welch's $t_{(1492)} = -1.32$, $p = .19$
	Practitioner	0.06 (0.14)	
Eurozone immigration policies	Academic	0.06 (0.13)	Student's $t_{(1492)} = -0.14$, $p = .89$
	Practitioner	0.06 (0.13)	
China-Europe relations	Academic	0.06 (0.14)	Student's $t_{(1492)} = -1.28$, $p = .20$
	Practitioner	0.06 (0.13)	
Circumventing online sales tax laws	Academic	0.06 (0.11)	Welch's $t_{(1492)} = -1.59$, $p = .11$
	Practitioner	0.07 (0.15)	

To further validate the realism of our experimental stimulus, we compared the topic distribution of the mock op-ed with that of the original *Le Monde* article on which it was based. While BERTopic assigns a dominant topic to each document, HDBSCAN's soft-clustering allows for probabilistic affiliation with all topics. We used this probability matrix to assess semantic similarity between the two texts. As shown in Table A3.3, the topic probability profiles of the mock and original op-eds are nearly identical across the 12 identified topics. Both texts show the highest probability for "Climate governance in Europe," with closely aligned scores across the remaining topics, and minimal deviation. This strong correspondence confirms that the mocked-up op-ed retains the thematic structure and semantic footprint of the original article, thus reinforcing the ecological validity of our stimulus design.

Table A3.3
Comparison of the mock op-ed and the original op-ed.

Topic	HDBSCAN probability		
	Mock op-ed	Original op-ed	Sample mean (SD)
Economists' views on policymaking	0.064	0.066	0.087 (0.159)
French far right politics after the legislative elections	0.024	0.024	0.083 (0.161)
Climate governance in Europe	0.084	0.078	0.060 (0.143)
European security and Russia-Ukraine conflict	0.024	0.023	0.058 (0.148)
Middle Eastern geopolitics	0.022	0.023	0.060 (0.148)
Education reform in France	0.027	0.031	0.060 (0.139)
Paris 2024 Summer Olympics	0.030	0.034	0.053 (0.131)
End-of-life care in France	0.035	0.039	0.064 (0.131)
Masculinity, sexual violence, and feminism	0.024	0.026	0.057 (0.135)
Eurozone immigration policies	0.029	0.029	0.063 (0.130)
China-Europe relations	0.049	0.042	0.060 (0.131)
Circumventing online sales tax laws	0.056	0.051	0.063 (0.131)

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A.4. Example stimulus

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TRIBUNE

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Entrée en vigueur de la CSRD : les conséquences de cette nouvelle directive environnementale sur l'économie sont à anticiper dès à présent

Dans sa tribune, Camille Benoit, Enseignant-Chercheur en Gestion au sein de l'une des meilleures institutions européennes, examine les répercussions de la directive européenne CSRD (Corporate Sustainability Reporting Directive) qui entre en vigueur dès 2024. Cette réglementation requiert des entreprises qu'elles rapportent leurs impacts sociaux et environnementaux selon des normes établies par l'Union européenne. Cette tribune interroge les conséquences majeures de cette nouvelle directive sur l'économie.

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Devant la Commission européenne, à Bruxelles, le 04 février 2024. YVES HERMAN / REUTERS

Dès 2024, la directive européenne CSRD (Corporate Sustainability Reporting Directive) entrera en vigueur. Elle exige des entreprises qu'elles rendent compte de leurs impacts environnementaux et sociaux selon des normes établies par l'Union européenne. Cette directive couvre des domaines tels que le changement climatique, la biodiversité, la gestion de l'eau, les ressources marines et l'économie circulaire. Ce que cette directive tend par contre à négliger, ce sont les effets majeurs sur...

A.5. English translation of the stimulus

"[Webpage Title]: DEBATES - BUSINESSES
[Left side]: OP-ED
Camille Benoit
Professor, Management Science
[Title of the op-ed]: Entry into force of the CSRD: The consequences of this new environmental directive for businesses are to be anticipated from now on
[Introduction of the op-ed]: In this op-ed, Camille Benoit, Professor in Management Science at one of the leading European institutions, examines the implications of the European CSRD (Corporate Sustainability Reporting Directive), which will come into effect in 2024. This regulation requires companies to report their social and environmental impacts according to standards established by the European Union. This op-ed questions the major consequences of this new directive for businesses.
[Indication below the introduction]: Published on February 6, 2024, at 05:00 | Reading time: 3 min
[Indication below the introduction]: Article reserved for subscribers
[Picture]
[Picture information]: In front of the European Commission, Brussels, February 4, 2024. YVES HERMAN/REUTERS
[Beginning of the op-ed]: From 2024, the European CSRD (Corporate Sustainability Reporting Directive) will come into force. This requires companies to report their environmental and social impacts according to standards established by the European Union. This directive covers areas such as climate change, biodiversity, water management, marine resources, and the circular economy. What this directive tends to overlook, however, are the major effects on...
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A.6. Robustness of the experimental design

We conducted several analyses to ensure the robustness of the experimental design, including common method variance and post hoc power analysis. We also provide details of the manipulation check assessment.

- Common method variance

  The results of the hypothesis tests may be influenced by common method variance (CMV), a concern often associated with self-report surveys. To address this issue, we followed the procedure outlined by Podsakoff et al. (2003). Initially, we employed the ConMET package (De Schutter, 2021) to test competitive models by loading items from two distinct constructs onto the same latent variable. In each case, the model's fit significantly deteriorated, as evidenced by a notable increase in the chi-square statistic (χ^2) with $p < .001$, as shown in Table A6.1 We also performed Harman's single-factor test (Harman, 1967) to further evaluate the presence of CMV. The results indicated that the single-factor model was significantly inferior to the original measurement model ($p < .001$), suggesting that CMV is unlikely to substantially affect our results.

Table A6.1
Common method variance estimation.

	χ^2	df	cfi	rmsea	srmr	χ^2/df	$\Delta\chi^2$
Proposed model	1336.067	220	0.969	0.069	0.019	6.073	
Alternative models							
TRUST + EXP	2546.903	224	0.936	0.098	0.027	11.37	1210.836***
TRUST + LEGI	2964.129	224	0.925	0.106	0.029	13.233	1628.062***
TRUST + SELF EXP Discipline	10,077.934	224	0.730	0.202	0.248	44.991	8741.867***
TRUST + SELF EXP Context	10,557.102	224	0.717	0.207	0.250	47.13	9221.035***
EXP + LEGI	2776.554	224	0.930	0.103	0.027	12.395	1440.487***
EXP + SELF EXP Discipline	10,058.421	224	0.731	0.202	0.247	44.904	8722.354***
EXP + SELF EXP Context	10,533.225	224	0.718	0.206	0.249	47.023	9197.158***
LEGI + SELF EXP Discipline	6187.476	224	0.837	0.157	0.229	27.623	4851.409***
LEGI + SELF EXP Context	6200.133	224	0.837	0.157	0.230	27.679	4864.066***
SELF EXP Discipline + SELF EXP Context	5138.405	224	0.866	0.143	0.043	22.939	3802.338***
Harman's one factor	20,772.79	230	0.438	0.288	0.291	90.316	19,436.723***

Notes. The table compares the fit of the proposed measurement model against various alternative models where different constructs are combined. The metrics include chi-square (χ^2), degrees of freedom (df), comparative fit index (CFI), root mean square error of approximation (RMSEA), standardised root mean square residual (SRMR), chi-square per degree of freedom (χ^2/df), and change in chi-square ($\Delta\chi^2$). TRUST: trustworthiness, EXP: expertise, LEGI: legitimacy, SELF EXP: self-assessed expertise.
Notes. ***$p < .001$, **$p < .01$, *$p < .05$, ns: non-significant.

- Post hoc power analysis

  Post hoc power analysis was used to determine whether the sample was large enough to provide robust estimates (Moshagen and Erdfelder, 2016). We used the semPower package (Jobst et al., 2021) to evaluate the power of the analysis. Given that the RMSEA was 0.069, sample size was 1080, degrees of freedom were 220, and the alpha was 0.05, the computation showed that the power ($b > 0.99$) is satisfactory (i.e., >0.80). Fig. A6.1 shows the associated central and non-central χ^2 distributions.

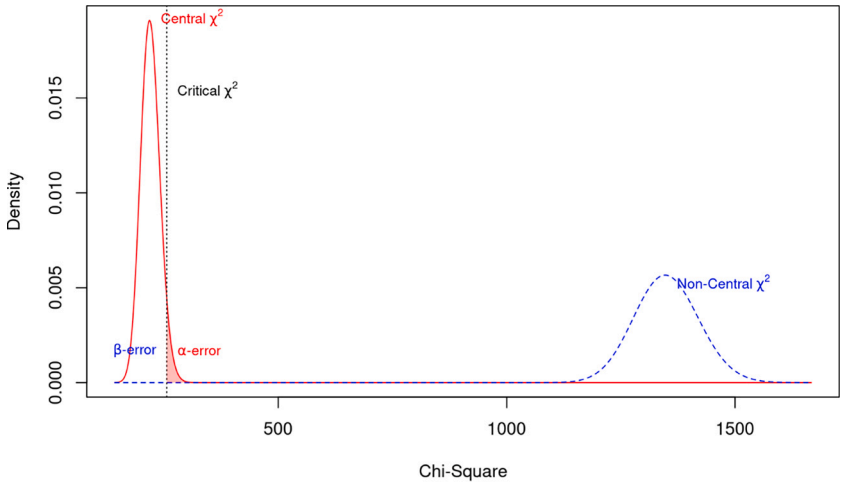

Fig. A6.1. Associated central and non-central χ^2 distributions.
Notes. The image shows two overlaid density curves. The red curve represents the central chi-square distribution that we would expect by chance when the null hypothesis is true, and the blue dashed curve represents the noncentral distribution when the null hypothesis is not true. The vertical line is expected to represent the chi-square critical value at the 0.05 alpha level. This is the cut-off point where if the observed chi-square statistic is to the right of this line, the result would be considered statistically significant, leading to rejection of the null hypothesis.

- Assessment of manipulation checks

  To assess the manipulation check, we tested the effects of the congruence conditions on the congruence scale. Student's *t*-test revealed a significant difference ($t_{(1078)} = -4.49$, $p < .001$), indicating that the respondents perceived the condition as more congruent when the op-ed matched the author's expertise ($M = 5.49$, $SD = 1.1078$) than when it did not ($M = 5.08$, $SD = 1.45$).

Data availability

Data will be made available on request.

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