

1 **Engaging the public: English local government organisations' social media**
2 **communications during the COVID-19 pandemic**

3

4 Robbie Love^{a,*}, Erika Darics^b, Rudi Palmieri^c

5 ^a*Aston University, UK*

6 ^b*University of Groningen, Netherlands*

7 ^c*University of Liverpool, UK*

8 *Corresponding author. Email: r.love@aston.ac.uk

9

10 Abstract

11 Communication has played a critical role during the initial response to the COVID-19
12 pandemic, and communicators have had a particularly difficult task in persuading different
13 types of audience to comply with ever-changing regulations. Local government
14 organisations play a crucial role in recontextualising the national messaging for a local
15 audience and encouraging the public to comply with regulations.

16 This paper investigates local government organisations' (henceforth LGOs)
17 engagement strategies in COVID-related posts on social media. In collaboration with LGOs
18 in England, we examined their communication strategies on Twitter and Facebook during
19 the second UK national lockdown of the COVID-19 pandemic in November-December
20 2020. Using methods from corpus-assisted discourse studies, the paper analyses the
21 occurrence and functions of selected interactive engagement markers, in this case
22 personal pronouns, questions and hashtags. We find that such linguistic features function
23 to encourage engagement by (a) helping to foster relatedness through ambiguity; (b)
24 creating autonomy-supporting communication; and (c) making messages 'stand out'.

25 Based on our corpus analysis, we discuss the initial response of the participating
26 councils to our findings and outline future directions including the integration of
27 multimodal approaches to studying the role of localised social media in national crisis
28 management. We argue for more attention to be paid to the many local communicators
29 who play an invaluable role in encouraging the public to comply with national measures in
30 times of crisis.

31

32 Keywords: *public health campaigns, local government organisations, social media,*
33 *corpus-assisted discourse analysis, metadiscourse*

34

35 1. Introduction

36 Communication has played a critical role during the response to and management of the
37 COVID-19 pandemic. Traditional news media and social media channels represent key
38 sites of information about the local, national and global news, guidance and policies.
39 However, the proliferation of public service and health promotional messages across many
40 channels, and the amplification of real as well as ‘fake news’, has led to what World Health
41 Organisation (WHO) Director-General Tedros Adhanom Ghebreyesus labelled as an
42 ‘infodemic’, a phenomenon just as dangerous as the virus itself (WHO, 2020).
43 Ghebreyesus appealed to social media companies, news organisations and governments
44 to help counter the spread of misinformation and help “sound the appropriate level of
45 alarm” (WHO, 2020). This call is not surprising; the success of pandemic crisis
46 management efforts relies primarily on concerted public action where members of the
47 public have to comply with guidance and regulations. Therefore, communication becomes
48 of crucial importance in providing reliable information and influencing public behaviour

49 towards compliance with COVID rules and requirements, for example staying at home
50 during lockdown or getting vaccinated.

51 Any form of strategic communication, including public health campaigns, involves
52 designing clear and persuasive messaging strategies (see Cornelissen, 2020; Gregory,
53 2020). For this purpose, conveying clear information and well-justified arguments for the
54 prescribed measures is important, but alone not sufficient for communicative
55 effectiveness. Communicative entities, such as central governments and local authorities,
56 need also to appear as trustworthy and credible sources of information,¹ and, even more
57 importantly, connect to the specific issues and emotional characteristics of the different
58 audiences.

59 In rhetorical terms, the effectiveness of public health messages is related to several
60 factors. On the one hand, sharing accurate facts and valid arguments remains a crucial
61 factor of persuasion, especially with well-informed and active public audiences (Petty &
62 Cacioppo, 1992). On the other hand, there are various contextual and socio-cultural
63 constraints, such as the increasing amount of public scepticism towards media sources
64 (e.g. fake news) and politicians. Such constraints require strategic communicators to
65 consider the potential impact of both source-related and audience-related factors on the
66 public reception of strategic messages (cf. Bui et al., 2021; Lovari, 2020).

67 The centrality of audience characteristics in determining the choice of message
68 strategies, as well as in evaluating their appropriateness, has been emphasised in public
69 relations, corporate communication and cognate areas (Rawlins, 2014). Previous research
70 on public campaigns has highlighted the diversity of audience characteristics (McGuire,

¹ In a recent survey, Nielsen et al. (2020) found that people have little confidence in news and information on social media – or indeed other digital platforms – when it comes to COVID-19. Just 9% say that they trust news and information about COVID-19 on social media – with similar figures for video sites (8%), and messaging apps (7%).

71 2013; Parrott, 1995). It is because of this diversity that gaining the audience's engagement
72 is often as (if not more) important as presenting them with compelling reasons to support
73 the advocated standpoint. Achieving an appropriate level of appreciation for the relevance
74 of an issue is a prerequisite for encouraging an audience's critical engagement with the
75 information and arguments that are communicated (Jacobs, 2006).

76 In order to understand how public messaging achieves this aim, it is important to
77 conduct a close examination of previous public science messages, as public campaigners
78 make substantial use of a range of interpersonal strategies to encourage audience
79 engagement, including metadiscourse markers such as pronouns, non-verbal devices (e.g.
80 images) and, in the context of social media, features such as hashtags and emoji (Martin
81 & MacDonald, 2020). However, the close, micro-level analysis of messages on social
82 media remains an under-investigated area within strategic communication research
83 (Aggerholm & Thomsen, 2014; Werder, 2015; Palmieri & Mazzali-Lurati, 2021). This paper
84 sets out to examine the language of COVID-related social media posts by local authorities
85 in England, focusing on markers of engagement. The aim of this paper is to report on an
86 initial investigation of how micro-level discourse patterns can work as linguistic indicators
87 of communication strategies intended to minimise negative outcomes for local public
88 health. Therefore, the results constitute the basis for further research aimed at examining
89 these strategies on a larger and broader scale and, ultimately, understanding better the
90 role of localised social media in national crisis management.

91 The specific context chosen for this study is that of local government organisations
92 (henceforth LGOs) in England. These are the county, district, borough and city councils
93 "responsible for a range of vital services for people and businesses in defined areas" (LGA,
94 2022). LGOs constitute an ideal terrain for investigating engagement strategies with
95 complex audiences; indeed, socio-demographic factors, cultural and personality traits,

96 political leaning, personal experience with COVID-19, reading and information
97 comprehension and risk aversion behaviour have all been found to influence people's
98 perception of risk, trust and, consequently, their willingness to comply with government
99 guidance (Coleman et al., 2020).² Clearly, navigating these complex audiences is an
100 extremely hard task for any communication team, in particular when asking the public to
101 change their behaviour to the extent necessary to reduce the spread of an airborne virus.
102 The broad aim of this work is to better understand how English LGOs tackled that
103 challenge.

104 The attention to LGOs is warranted for several reasons. Firstly, they play an
105 important role during national crises. As the WHO (2009) have noted, these organisations
106 act as 'translators' of central government communications, in the sense of localising the
107 national messages and helping local residents to make sense of government
108 communication. Due to their knowledge of local dynamics, these organisations are able
109 "to provide services in a way people need (and) likely to have a substantially better
110 outcome than through a top-down restrictive framework" (House of Commons, 2009).
111 Secondly, LGOs seem to enjoy much higher levels of public trust. The period before the
112 pandemic has already been characterised by decreasing levels of public trust, and
113 specifically distrust in national level government and leadership (Edelmann, 2020; Enria
114 et al., 2020). This trend was also evident during the COVID-19 pandemic when, for
115 example, people were more likely to trust messages coming from their local council than
116 from the national government (Coleman et al., 2020). Despite the evident importance of

² In the "Pandemic and its public report", Coleman and colleagues have found six distinct types of population groups differing in their attitudes, experience and behaviour (p. 5): (1) Individualist risk-takers (12% of the population); (2) Non-information-seeking sceptics (19% of the population); (3) Information-seeking rule-followers (21% of the population), (4) The complacently confident (19% of the population); (5) Information-seeking critics (16% of the population); (6) The experientially risk-averse (12% of the population).

117 local government communications, scholarly attention has thus far prioritised national
118 messaging (e.g. Gherheş et al., 2023; Lovari, 2020; Williams & Wright, 2022).

119

120 2. Literature Review

121 2.1 Trust and Compliance

122 The persuasive effect of public communication is extremely complex. Public health
123 campaigns in general have the difficult task of influencing resistant audiences, and, as
124 evidence shows, conventional public health campaigns have limited direct effects on
125 health behaviours, although they may exert “moderate to powerful” influence on thinking
126 (Atkin, 2012: 13). However, in the case of the COVID-19 pandemic, having an influence
127 merely on thinking has simply not been sufficient; early in the pandemic, the public’s active
128 compliance (i.e. change in behaviour) was predicted to be critical to the success of
129 measures brought in to overcome the crisis (Finset et al., 2020). Topics including the
130 complexity of communication aims (with an articulated focus on gaining public
131 compliance), the importance of trustworthiness and ability to engage with complex
132 audiences have already generated considerable research interest.³ In the below review of
133 existing scholarship, there emerge two particular lines of research: one that examines
134 trust and behavioural influence of COVID-related public health communication and
135 another that focusses on specific communication strategies.

136 Among the emerging scholarship on COVID-related public health communication,
137 examination of perceived risk, trust and consequent public behaviour are key themes. In
138 their comprehensive report, Coleman et al. (2020, pp. 33-47) report on how different
139 groups within the UK public trusted and responded to official guidance on COVID-19 (see
140 footnote 2). What seemed to have been an influential factor in terms of trust was the
141 source of information: people were more likely to trust information when it came to them

³ Two projects keep an up-to-date list of emerging scholarship: see

<https://c19comms.wp.horizon.ac.uk/references/> and

<https://pandemicandbeyond.exeter.ac.uk/projects/knowning-the-pandemic-communication-information-and-experience/>

142 from scientific resources such as the National Health Service (NHS), the World Health
143 Organisation (WHO) or healthcare professionals (over 88%), or local organisations (72%)
144 than from the national government (63%). In terms of the content of messages, 70% of
145 respondents thought that there was a conflict between government and scientific advice,
146 and 73% thought that government messages were too vague. A closer look at the different
147 types of public audiences gives a more refined picture. For example, 90% of people classed
148 as ‘information-seeking critics’ (characterised by an ‘entrenched suspicion of official
149 advice’) found messages too open to interpretation, compared to only 50% of those
150 labelled as ‘information-seeking rule followers’.⁴ Apart from drawing attention to the
151 general lack of trust in government advice, this report further highlights the importance of
152 communication strategies that engage with specific audiences (see also Section 2.2).

153 Academic studies provide an overview of the complex relationship between trust,
154 audience and communication in a range of geo-political contexts, such as Singapore
155 (Wong & Jensen, 2020), the UK (Enria et al., 2020; Williams & Wright, 2022), Italy (Lovari,
156 2020), Sweden (Irwin, 2020), China (Zhang et al., 2020), Australia and New Zealand (Bui
157 et al., 2021) and the Netherlands (van Dijck & Alinejad, 2020). Lovari’s (2020) study of the
158 Italian Health Ministry’s communication focuses on social media; it is especially relevant
159 to the present study because of the parallels in terms of the deep distrust in public
160 institutions, combined with the public’s growing demand for information both in Italy and
161 the UK. Lovari (2020) examined how the Italian Health Ministry turned to social media,
162 specifically Facebook, to counter the spread of misinformation. The strategies identified
163 include giving voice to influencers, using hashtags, calling out fake news and explaining
164 measures through data and visuals. Lovari concluded that, in a period of extreme

⁴ For more information about the different types of publics please see Coleman et al. (2020).

165 uncertainty, public health organisations' use of social media in a transparent, strategic
166 and proactive manner is fundamental to increasing trust.

167 Another extreme case of trust in public organisations was studied by Irwin (2020),
168 who examined public communications and international media coverage of the
169 uncommonly liberal pandemic strategy in Sweden, focusing in part on the perception of
170 high levels of trust. Irwin (2020) found that the policies in Sweden were not so different to
171 those in other countries, but what differed was the language and rhetoric relating to the
172 role of social media in the interpretation and ratification of (mis)information. Another
173 example is van Dijck and Alinejad (2020) who – in the Dutch context – reflected on the
174 role of social media in the health crisis and called for a greater understanding of the dual
175 role of social media in both undermining and enhancing public trust, as well as of the
176 importance of developing distinct communication strategies for different aspects of
177 informing and debating with the public.

178 The above studies seem to present a unified view about the importance of tailoring
179 communications to the needs of various public audiences to gain their trust. Engagement
180 is key in this process because it enhances confidence in the authorities' ability to manage
181 the situation, as opposed to unresponsive, non-transparent communication that leads to
182 the erosion of trust (Enria et al., 2020).

183

184 2.2 Communication Strategies

185 In terms of communication strategies, several researchers have reviewed existing
186 scholarship on COVID-related official communication and/or historical public health
187 communication to provide evidence of, and propose, effective communication strategies.

188 The strategies that are most often described as effective in the research include:

- 189 • tailoring messages to the specific audience and fostering relatedness between
190 the public and the source of the message (feeling cared for by others, trusted
191 and understood) (Malecki et al., 2020; Porat et al., 2020; Power & Crosthwaite,
192 2022; Ratzan et al., 2020; Stolow et al., 2020);
- 193 • empathic, compassionate communication (Finset et al., 2020; Malecki et al.,
194 2020; Bui, Moses & Dumay, 2021);
- 195 • acknowledging uncertainty (Finset et al., 2020; Porat et al., 2020; Ratzan et al.,
196 2020; Wong & Jensen, 2020; Zhang et al., 2020);
- 197 • fostering autonomy (Habersaat et al., 2020; Porat et al., 2020; McGlaughlin et
198 al., 2023; Williams & Wright, 2022);
- 199 • cutting through the ‘infodemic’ (Finset et al., 2020; Ratzan et al., 2020).

200 These findings suggest that, to achieve public compliance, communicators need to
201 balance factual information with actions that address the relationship between
202 communicator and audience, for example by communicating at strategically relevant times
203 through:

- 204 a) source-related strategies, which aim to emphasise the legitimacy of the
205 information by communicating trustworthiness and confidence in the science
206 behind the advice;
- 207 b) audience-related strategies, which aim to encourage autonomy, relatedness and
208 empathy.

209 For example, McGlaughlin et al. (2023) conducted a survey of the UK public’s response to
210 various COVID-related public health messages, finding that messaging perceived to be
211 effective provides “a clear rationale for adhering to measures and a means for the public
212 to take personal responsibility to contribute to managing the virus” (p. 14).

213 Many of the studies listed above and those mentioned in Section 2.1 are similar in
214 that their engagement with communication strategies remains at a ‘macro’ level; while
215 they provide a broad overview of the strategies of communicators, they do not draw upon
216 systematic and rigorous analyses of individual linguistic patterns. While there is some
217 acknowledgement of the importance of specific linguistic and discourse strategies (Finset
218 et al, 2020; Habersaat et al., 2020; Porat et al, 2020; Bui et al, 2021), discussion of micro-
219 level linguistic strategies is largely absent from the literature. For example, Lovari (2020)
220 notes that the Italian Health Ministry’s messages contained emoticons, infographics, and
221 integrated specific words like *falso* (false) but does not explore in detail these broad
222 observations (p. 460). The exceptions to this include the studies by Gelmini et al. (2021),
223 Power & Crosthwaite (2022) and Williams & Wright (2022). Gelmini et al. (2021), for
224 example, combined the examination of rhetorical appeals with discourse analytical
225 approaches to explore COVID-related corporate communication in Italy, while Williams &
226 Wright (2022) analysed a corpus of televised briefings from the British government,
227 criticising politicians’ strategies for minimising their own responsibility for ending the
228 pandemic and maximising the responsibility of the public.

229 Overall, however, we can say that a number of the observations about language,
230 such as references to “provocative” (Stolow et al., 2020, p. 531) or “simple” language
231 (Finset et al., 2020, p. 874), for example, lack linguistic precision, and advice given about
232 language use such as “the discourse of crisis, panic and war”, “gain-frame” or positive
233 language (Haberstaat et al., 2020, p. 683) lack the specifics that would help professional
234 communicators to apply the advice in practice. Furthermore, much of the existing research
235 on crisis communications in the context of COVID-19 concerns messaging at a national
236 level (e.g. Power & Crosthwaite, 2022; Williams & Wright; 2022). Therefore, the aims of
237 this paper are (a) to contribute to a growing body of knowledge based on detailed accounts

238 of linguistic practices, drawing on empirical data observation of micro-level linguistic
239 patterns, and (b) to explore COVID-related crisis communications at a local rather than
240 national level, investigating how linguistic patterns of engagement may contribute to the
241 communicative goals of English LGOs. As the above review has shown, engagement with
242 a range of audiences and strategic communication are central to achieving trust and public
243 action; therefore, understanding the factors that influence the perception of and
244 engagement with public health measures is key for developing effective interventions in
245 future global crises (cf. Parrott, 1995).

246

247 2.3 Engagement in Discourse

248 The interactions between writers and readers, and specifically the strategies that writers
249 use to engage audiences, have been studied in a variety of contexts, such as academic
250 writing (Hyland, 2005a), corporate discourse (Hyland, 1998) or online consumer review
251 discourse (Vásquez, 2014). In language-oriented scholarship, these strategies are
252 commonly referred to as involvement strategies and include resources that encourage
253 interaction between writers and their audiences, and encompass ways in which writers
254 connect with, express concern for, and direct the attention of, their readers (see e.g.
255 Vásquez, 2014). Hyland (2017) refers to these strategies as *metadiscourse*, a concept that
256 describes the language that writers use to help readers interpret the intended function of
257 the message. Metadiscourse links a text to its context by using language designed for
258 readers' needs, understandings, existing knowledge and prior experiences with texts. In
259 applying this concept to the pandemic context, metadiscourse strategies can be said to
260 be clearly very important in pandemic-related health messaging (as discussed in Section
261 2.2), serving as a "recipient design filter" (Hyland, 2017, p. 17) that allow messages to be
262 tailored to specific audiences in order to foster relatedness and encourage autonomy.

263 In Hyland's model, there are two broad categories of metadiscourse: interactive
264 elements, whose main function is to guide the reader's attention through the text, and
265 interactional elements that aim to involve the audience in the text (Hyland, 2005). For the
266 present study, we have chosen to study a selection of interactional features that foster
267 engagement between writers and the audience and feature in short texts typical of social
268 media. While we acknowledge that a wide range of discursive devices may also serve as
269 engagement markers, our study specifically focuses on:

- 270 • personal pronouns, which are considered as markers of linguistic strategies
271 for engaging multiple voices and communicating trustworthiness (e.g.
272 Aggerholm & Thomsen, 2014; Palmieri & Mazzali-Lurati, 2021)
- 273 • questions, which have been shown to function to engage readers through
274 dialogue and may directly influence judgement and behaviour (e.g. Lai &
275 Farbrot, 2014; Moore et al., 2012);
- 276 • hashtags, which have been studied as linguistic instruments for engaging
277 readers in discussion of public and societal relevance (Greco, 2023) and
278 shown to take on interpersonal functions as markers of engagement (e.g.
279 Lovari, 2020; Zappavigna, 2018).

280 Although these features do not represent the full range of known metadiscourse
281 strategies, our study aims to focus on these features as a window through which to
282 observe some of the patterns of use and communicative functions of engagement
283 strategies in pandemic-related communications by local government organisations.

284

285 3. Methodology

286 3.1 Data Collection

287 Social media posts from five English LGOs were collected and examined for this
288 preliminary study. The LGOs were: Blackburn with Darwen Borough Council;⁵
289 Bournemouth, Christchurch and Poole Council;⁶ Oldham Council;⁷ Stockport Metropolitan
290 Borough Council;⁸ and the Royal Borough of Windsor and Maidenhead.⁹ In collaboration
291 with the communication teams of these LGOs, all posts from the Facebook and Twitter
292 accounts of these organisations for the period 5 November - 2 December, 2020 (inclusive)
293 were gathered, representing the period in which England was in its second national
294 lockdown of the COVID-19 pandemic.¹⁰ The selection of participating organisations was
295 necessarily opportunistic; a call was put out through a local government communications
296 consultant, and those authorities that responded positively in time for inclusion in the
297 study were accepted. These organisations differ both in size and social demographic, but
298 this can be considered an advantage, as it provides an (albeit small-scale) insight into a
299 variety of English constituencies; Blackburn, Oldham and Stockport are located in the
300 north of England, while Bournemouth and Windsor are located in the south.

301 The data were provided by the communication teams of the LGOs, who consented
302 on behalf of their authorities to the use of their posts for research purposes. Both the
303 Facebook and Twitter posts were posted on public channels and are openly accessible to
304 the public. Posts created by private individuals were not gathered; consequently, privacy

⁵ <https://www.blackburn.gov.uk/>

⁶ <https://www.bcpccouncil.gov.uk/>

⁷ <https://www.oldham.gov.uk/>

⁸ <https://www.stockport.gov.uk/>

⁹ <https://www.rbwm.gov.uk/>

¹⁰ <https://www.bbc.co.uk/news/uk-54763956>

305 and ethics concerns related to private individuals did not apply (Ahmed et al., 2017). The
306 collection of the data from the social media sites was completed manually, in some
307 instances by the councils' communications teams, or otherwise by the research team,
308 foregoing any issues related to automatic scraping (Williams et al., 2017). LGOs who
309 gathered their own data manually were instructed to provide every post published within
310 the specified period, so as to match the collection procedure of the research team, which
311 was to gather all posts and subsequently eliminate those that were not related to COVID-
312 19.

313 When preparing the data for analysis, the criterion for inclusion of individual posts
314 in the study was the presence of one or more explicit (or clearly implied) references to
315 COVID-19. Explicit reference to COVID-19 was observed through direct mention of the
316 terms *COVID-19*, *COVID* and *Coronavirus*. Implicit reference was judged qualitatively on
317 the basis of posts which contained indirect contextual cues, but did not explicitly mention
318 COVID-19, such as *virus*, *pandemic*, *social distancing*, *government guidelines*, *lockdown*,
319 *uncertain times* and *difficult times*. Posts that did not refer to COVID-19 (either explicitly
320 or implicitly) were excluded from the dataset. In taking this approach, we acknowledge
321 that reference alone to COVID-19 (whether explicit or implicit) does not guarantee that
322 the topic (or 'aboutness', Scott & Tribble, 2006) of a text is centred on the referenced
323 concept, as it is possible that a single reference to COVID-19, for instance, may occur in
324 texts that are ostensibly 'about' a different topic. However, due to the relatively short
325 length of the texts in this study (compared to other commonly analysed texts in corpus-
326 assisted discourse studies, such as news articles, for example), it was deemed that even
327 one reference to COVID-19 within a short social media post would very likely indicate that
328 the post is in some way relevant to the topic in question.

329 Only posts that originated from the councils' social media accounts were gathered,
330 thus excluding posts from other accounts that may have been 'shared' (on Facebook) or
331 'retweeted' (on Twitter) by the council accounts. In doing so, it is important to
332 acknowledge that some discursive strategies, as evidenced in the sharing of posts from
333 other accounts (see e.g. McEnery et al., 2015), may be omitted from the analysis; however,
334 in order to comment on the councils' own engagement strategies, it was necessary to
335 isolate the linguistic content that was authored by council staff. The number and type of
336 posts, as well as the scale of engagement, are summarised in Table 1.¹¹

¹¹ We observed differences in the ratio of pandemic and non-pandemic related posts. For example, of the 47 Twitter posts published by Bournemouth, Christchurch and Poole Council, 37 were COVID-related (79%), while Blackburn with Darwen Borough Council published 28 COVID-related tweets out of the 97 during the examined period (29%); however, all 82 tweets posted by Stockport Metropolitan Borough Council during this period related to COVID-19 (100%).

337 Table 1. Frequency of posts and total words gathered from the Facebook and Twitter accounts of the participating councils and their
 338 followerships (followership recorded in June, 2021).

Council	Facebook sub-corpus			Twitter sub-corpus		
	Username (followers)	Posts	Words	Username (followers)	Posts	Words
Blackburn	@BlackburnDarwenCouncil (15,366)	41	5,784	@blackburndarwen (15,200)	28	1,117
Bournemouth	@MyBCPCouncil (51,185)	63	5,419	@BCPCouncil (30,900)	37	1,710
Oldham	@loveoldham (24,876)	58	3,142	@OldhamCouncil (26,400)	144	6,611
Stockport	@StockportMBC (24,937)	98	4,306	@StockportMBC (27,200)	82	3,361
Windsor	No data received	0	0	@RBWM (17,400)	36	1,565
Total		260	18,651		327	14,424

339

340 3.2 Analytical Approach

341 The analysis was conducted using methods from corpus-assisted discourse studies
342 (CADS), an approach that, broadly speaking, combines the quantitative elements of
343 corpus linguistics with the qualitative elements of discourse analysis. The use of corpus
344 linguistics in discourse studies (i.e. CADS) allows access to repeating discourse patterns
345 via the extraction of frequency-based data, which is then analysed and interpreted
346 qualitatively by the researcher; this approach is discussed by Baker (2006), for example,
347 who provides a general introduction, and Taylor and Marchi (2018), who provide a critical
348 review of recent developments in CADS. Such approaches have been applied to social
349 media data (e.g. Rüdiger & Dayter, 2020; Zappavigna, 2012) and have been used to
350 examine language in the context of COVID-related public communications (e.g. Williams
351 & Wright, 2022).

352 The corpus analysis was conducted using *AntConc* (version 3.5.9; Anthony, 2020),
353 a freeware corpus analysis toolkit that is well-suited to handling small datasets such as
354 the corpus investigated in this study. *AntConc* was used firstly to search for strings that
355 correspond with the engagement markers included in our study (discussed in Section 2.3);
356 these search terms are listed in Table 2.

357 Then, the relative frequency of these terms was normalised to a basis of 10,000.
358 Rather than using a basis of one million, which is common in corpus linguistics, a basis of
359 10,000 avoids artificially inflating the frequency of features relative to the size of the
360 corpus in this study (Brezina, 2018: 43). Relative frequency was used to inform the
361 selection of individual terms for further, qualitative exploration, with a preference for the
362 most commonly occurring terms. This step involved the extraction of all concordance lines
363 of a given term as occurring in both sub-corpora, and the manual examination and
364 categorisation of the examples in a spreadsheet. The task of qualitative coding was shared

365 equally among the three co-authors with regular review and discussion of each other's'
 366 coding decisions. The specific categorisation schemes employed vary according to the
 367 terms in question; these are discussed in Section 4.

368

369 Table 2. Engagement marker categories and search terms investigated in the study.

Engagement marker	Search terms
Personal pronouns (including possessive pronouns and determiners)	First person: <i>I, me, my, mine, we, us, our, ours</i> Second person: <i>you, your, yours</i> Third person: <i>he, him, his, she, her, hers, it, its, they, them, their, theirs</i>
Questions ¹²	\?
Hashtags ¹³	\#

370

371 Following the analysis, we then presented our findings to representatives from the
 372 participating local government organisations and held a focus group to discuss their
 373 response and feed forward to the next phase of the project. While it is likely that a close
 374 observation of data, limited to five research partners, may not yield widely generalisable
 375 results, our approach in this study is, nonetheless, to provide an initial overview of some
 376 of the discursive engagement strategies in the context of English LGOs. Importantly, the
 377 identification of these strategies and their patterns of occurrence may provide a source
 378 for the further exploration of possible causative relationships between message and

¹² Questions were accessed through the retrieval of all question marks in the data, rather than searching for interrogative structures. Therefore, we acknowledge that questions that do not make use of question marks are omitted from our analysis. Question marks were searched as escaped characters using regular expressions.

¹³ Hashtags were searched as escaped characters using regular expressions.

379 action (for further argument see Grieve, 2021). Following the discussion of our initial
380 findings in Section 4, and the response of the participating organisations in Section 5, we
381 discuss – in Section 6 – how this study will inform the next phase of our work.

382

383 4 Findings and Discussion

384 This section presents the analysis of the engagement markers under investigation,
385 starting with overall frequency data (Section 4.1) and then describing the qualitative
386 analysis of some of the most frequently occurring terms for each engagement marker type:
387 personal pronouns and possessive determiners (Sections 4.2.1-4.2.3), questions (Section
388 4.2.4) and hashtags (Section 4.2.5).

389

390 4.1 Frequency Data

391 Table 3 shows the frequency of each of the search terms in the Facebook and Twitter sub-
392 corpora. For each engagement marker type, the broad distribution of frequency is similar
393 for both Facebook and Twitter sub-corpora, with the exception of the hashtag, which is
394 notably more frequent for the Twitter data; this is expected, as the modern usage of the
395 hashtag as a linguistic meta-tag originated on – and is most closely associated with –
396 Twitter, but has spread to other social media sites including Facebook (Zappavigna, 2018).
397 We refer to the frequency data in Table 3 throughout our analysis in Section 4.2.

398 Table 3. Frequency data for each engagement marker category.

Engagement marker	Search term	Facebook sub-corpus		Twitter sub-corpus	
		Frequency	Relative frequency (per 10,000)	Frequency	Relative frequency (per 10,000)
Personal pronouns (including possessive pronouns and determiners)	<i>you</i>	377	202.13	298	206.60
	<i>your</i>	196	105.09	161	111.62
	<i>we</i>	153	82.03	109	75.57
	<i>our</i>	126	67.56	94	65.17
	<i>it</i>	86	46.11	57	39.52
	<i>they</i>	46	24.66	40	27.73
	<i>them</i>	32	17.16	18	12.48
	<i>their</i>	32	17.16	10	6.93

	<i>us</i>	29	15.55	11	7.63
	<i>I</i>	16	8.58	8	5.55
	<i>its</i>	10	5.36	1	0.69
	<i>my</i>	6	3.22	3	2.08
	<i>she</i>	6	3.22	0	0.00
	<i>he</i>	5	2.68	4	2.77
	<i>her</i>	5	2.68	0	0.00
	<i>me</i>	3	1.61	0	0.00
	<i>his</i>	1	0.54	3	2.08
	<i>mine</i>	0	0.00	0	0.00
	<i>ours</i>	0	0.00	0	0.00
	<i>yours</i>	0	0.00	2	1.39

	<i>him</i>	0	0.00	1	0.69
	<i>hers</i>	0	0.00	0	0.00
	<i>theirs</i>	0	0.00	0	0.00
Questions	<i>?</i>	45	24.13	30	20.80
Hashtags	<i>#</i>	167	89.54	259	179.56

399

400 4.2 Corpus-assisted discourse analysis

401 The analysis begins by analysing three major categories of personal reference: second
402 person, first person plural and first person singular.

403

404 4.2.1 Second person pronouns and agentivity

405 The second person pronoun *you* is by far the most frequently-occurring personal pronoun
406 in the corpus (see Table 3). The importance of *you* in creating engagement has been well
407 documented in health communication (Chang, 2011; Parrott 1995) and social media
408 advertising (Lai & Farbrot, 2014). In analysing the use of *you*, we examined the following
409 features:

- 410 • the clause type (*declarative, exclamative, imperative, interrogative and conditional*
411 *dependent clause*);
- 412 • the framing operated by the clause (*action/event/situation and subject/object*);
- 413 • the overarching communicative aim of the whole posted message – in public health
414 communication scholarship and practice there is a distinction between persuasive
415 and informative communicative goals (Atkin & Rice, 2012). Following the close
416 reading and analysis of a sample of our data, we inductively specified further goals
417 within the persuasive category to capture the strength of the deontic modality of
418 the message: *advise, encourage, inform, instruct, order*.

419 As shown in Table 4, The great majority of clauses containing *you* are declaratives,
420 followed by conditional dependent clauses, imperatives, interrogatives and exclamatives.

421 As for the communicative aim of the posted message (Table 5), ordering prevails, followed
422 by instructing, encouraging , informing and advising.

423

424 Table 4. Frequency data for clause type containing *you*.

Clause type	Facebook sub-corpus		Twitter sub-corpus	
	Frequency	Relative frequency (per cent)	Frequency	Relative frequency (per cent)
declarative	241	65.49	180	62.71
conditional (dependent clause)	82	22.28	76	26.48
interrogative	21	5.71	10	3.48
imperative	19	5.16	20	6.97
exclamative	5	1.36	1	0.35
TOTAL	368	100	287	100

425

426 Furthermore, out of 318 posts aimed at directing and giving orders (across both
 427 sub-corpora), only 15 are expressed with imperative clauses, while the majority (224) are
 428 declaratives, followed by conditionals (75). Therefore, the public authorities seem to
 429 favour a communicative style that is at the same time official/formal and non-paternalistic
 430 This means favouring strategies that can be described in terms of negative politeness
 431 (Brown & Levinson, 1987); compared to imperatives, which may be perceived as explicitly
 432 imposing on the reader’s freedom of choice, declaratives and conditionals leave the reader
 433 space for individual decision-making and minimise interference with “the addressee’s
 434 freedom of action” (Brown & Levinson, 2006: 317). This contributes to the framing of local
 435 authorities as reliable and expert sources of information and directions rather than merely
 436 promotional agents.

437 Table 5. Frequency data for communicative aim of clause containing *you*.

Communicative aim	Facebook sub-corpus		Twitter sub-corpus	
	Frequency	Relative frequency (per cent)	Frequency	Relative frequency (per cent)
order	161	43.75	157	54.70
instruct	99	26.90	44	15.33
encourage	62	16.85	41	14.29
inform	34	9.24	31	10.80
advise	12	3.26	14	4.88
TOTAL	368	100.	287	100

438

439 The prevailing use of declaratives may compromise audience engagement
 440 compared to using other types of clauses, such as imperatives and exclamatives. Yet, the
 441 use of conditionals and interrogatives, which together represent 29% of instances of *you*
 442 across both sub-corpora, indicates that an attempt to engage the readers is present.
 443 Indeed, conditional clauses are useful for selecting specific audience groups, attracting
 444 their attention and creating a sense of involvement. For example, in Extract 1 shows,
 445 readers are invited to verify whether they belong to the category at issue and, if so, to
 446 follow the advocated order (compare with observations in Section 4.2.4).

447

448 Extract 1

449 *If you are told to self-isolate you must go home immediately ! Only leave your*

450 *home to go for a test and do not stop self-isolating until you have been given the*
451 *all clear. This is to stop the spread of #coronavirus*

452 (Oldham Council, 28 November 2020, Twitter)

453

454 Furthermore, this demonstrates a strategy of synthetic personalisation that is compatible
455 with the mass-mediated nature of the social media post; the use of *you* simulates a
456 personalised messaging style that encourages engagement by giving an “impression of
457 treating each of the people ‘handled’ *en masse* as an individual” (Fairclough, 2001: 52)..

458 As for interrogatives, the questions asked by the writers appear to be intended to
459 (a) stir the curiosity or attention of the audience, inviting them to engage with the content
460 of the post, and (b) personalise the message to the expectation of specific individual
461 readers. Interestingly, the most frequent communicative aim of the posts containing
462 interrogatives is to encourage action (discussed further in Section 4.2.4).

463 Clauses containing *you* put the active role of the readers in the foreground,
464 assigning them responsibility. Among the declaratives, actions in which *you* is the subject
465 dominate. A frequent pattern (50.36% of all 421 *you*-subject declaratives in the corpus) is
466 the use of modal auxiliaries with deontic function (e.g. *you should, you must*), almost
467 exclusively when referring to actions mandated by COVID-related rules. Of these, the
468 majority (79.25%) order or permit affirmative action (e.g. “Despite national restrictions,
469 you can still exercise outdoors”), while examples of explicit prohibition via negation (e.g.
470 “You must not meet socially indoors with family or friends”) are relatively rare (20.75%).

471 This can be interpreted as an autonomy-facilitating strategy whereby LGOs attempt to
472 remind readers of the freedoms that remain, despite the restrictions in place. There is a
473 low frequency of advising compared to encouragements, where the former entails
474 responsibility on the writer while the latter shifts responsibility on the reader.

475 Taken as a whole, the posts containing *you* appear to be structured in such a way
476 to make the readers responsible and interested (cf. Chang 2011) in the post while allowing
477 the writers to maintain an image consistent with the ethos of a public authority.

478

479 4.2.2 First person plural pronouns and inclusivity

480 In both the Facebook and Twitter sub-corpora, *we* is the second most frequently used
481 personal pronoun, behind *you*. In political discourse, *we* has been identified as one of the
482 most widely used discursive resources to perform inclusion (e.g. Jaworska & Sogomonian,
483 2019). This is unsurprising – *we* is a notoriously ambiguous pronoun; it has meanings that
484 can be categorised broadly as *exclusive* or *inclusive*. Exclusive usage refers only to the
485 writer (and the people they represent, e.g. “We’d love to hear your stories”). Inclusive
486 usage is, in our analysis, categorised into three types: *general* (referring to all people, e.g.
487 “We must follow the latest national restrictions”), *local* (referring to the writer and the
488 reader(s) only, e.g. “These shops will only survive if we continue to spend locally”) (see
489 Darics & Koller, 2019), and *pseudo 2nd person*. Pseudo 2nd person usage occurs when
490 *we* refers to the reader(s) only and not the writer – this usage does not refer to the writer
491 but instead implies a command (cf. Lammers, 2001 quoted in Van de Mieroop, 2009). We
492 coded instances as pseudo 2nd person when it was clear from elsewhere in the tweet that
493 the command is actually addressed to the audience (e.g. “We all have a responsibility to
494 stop the spread of Coronavirus. Remember to: Wash your hands regularly”). The
495 exclusive/inclusive distinction can also be applied to *us* and *our*. The ambiguity of the
496 pronominal referent may be used as a strategy to share responsibility for managing the
497 pandemic with the public (cf. Williams & Wright, 2022) and mitigate the directness of the
498 command.

499 In the corpus data, inclusive usage of *we* comprises the majority of instances of *we*
500 in both the Facebook and Twitter sub-corpora (58% and 65%, respectively). The pronoun
501 *us* occurs much less frequently (29 times and 11 times in the Facebook and Twitter sub-
502 corpora, respectively); among these instances, inclusive usage of *us* accounts for 11
503 instances (38%) on Facebook and 6 instances (55%) on Twitter. The third type of 1st
504 person plural reference we investigated, possessive determiner *our*, is used inclusively
505 more on Facebook (52%) but relatively less on Twitter (46%).

506 The predominance of the inclusive usage of *we* and, to a lesser extent, *us* and *our*,
507 clearly demonstrates the effort from councils to create a sense of inclusivity, even in
508 instances where the pronoun refers primarily to the audience and not the writer (pseudo
509 2nd person) in the guise of a command or order. The ambiguity of the pronoun is an
510 advantage here, used to amplify the sense of inclusion and shared experiences: on the
511 one hand, messages may include several 1st person pronouns with different referents; on
512 the other hand, some pronoun usage is ambiguous by itself, as exemplified in Extract 2.

513

514 Extract 2

515 [...] *so we urge residents to continue to work with us and do everything they can to*
516 *help stop the spread of the virus. Please stay at home as much as possible and*
517 *don't mix with people you don't live with. This awful situation will only go on longer*
518 *if people break the rules, risking further spread of the virus and causing more*
519 *illness and economic pain. Please we all need to work together and help each other.*
520 *The basics of washing hands, wearing a face covering, keeping 2m from others,*
521 *getting a test if you have symptoms and self-isolating when told to do so, are simple*
522 *steps and need to be adhered to. Together we believe we can do this and make*
523 *progress to moving towards more pleasant times.*

524 (Blackburn with Darwen Council, 5 November 2020, Facebook)

525

526 In the first sentence, *we* and *us* are used with an exclusive referent, denoting the council;
527 this meaning is further strengthened by the contrast of referring to the constituents
528 (*residents* and *they*). The referent of *we* then becomes inclusive (“please we all need to
529 work together”), reinforced by adverbs and pronouns referring to collective action
530 (*together, each other*). Yet, the use of *please* in this sentence signals a request or advice,
531 which may indicate that the writer uses 1st person pronouns to mean the audience, not
532 themselves. Subsequently, there are two more shifts in levels of inclusivity revealed by a
533 closer look at the context of the pronouns: after adverb *together*, the sentence shifts to an
534 exclusive reference to the council (*we believe*) and then again to the shared action of the
535 public (*we can do this*). This may be indicative of an attempt to provide social justification
536 for the council’s encouragement of behaviour among the public that is ultimately reliant
537 on individual responsibility.

538 Exclusive references of *we*, which account for 42% of instances of *we* in the
539 Facebook sub-corpus and 35% in the Twitter sub-corpus, occur in contexts where councils
540 explicitly refer to their own activities. Exclusive use of *we* also occurs when the council
541 expresses sympathy or understanding through a personification of the organisation (e.g.
542 *we know, we hope, or we believe, please share with us*; see Extract 2) thus projecting the
543 image of a trustworthy, benevolent group of people, as opposed to an abstract
544 organisation (Fuoli, 2018; Palmieri & Musi, 2020).

545 Reflecting on the predominance of inclusive as opposed to exclusive *we* in the data,
546 the discursive creation of common responsibility can be viewed as a strategy to address
547 “sociable rule-follower” audiences (Coleman et al., 2020, p. 14). The sense of inclusivity
548 and shared sense of experiences created through linguistic strategies can also serve to

549 address the public's crisis response, mitigating the emotional extremes, especially outrage
550 (Malecki, 2021). Although, at surface level, the exclusive use of the 1st person plural
551 pronoun may not be seen as a strategy to create engagement, the data suggests that,
552 through personification, it helps to discursively create features with the apparent intention
553 to increase trust and consequently encourage compliance.

554

555 4.2.3 First person singular pronouns and the hypothetical reader

556 Even though the 1st person singular pronouns *I* and *me* are much less prevalent than those
557 discussed above (see Table 3), our analysis reveals a communicative strategy that can be
558 labelled 'hypothetical reader'. Across both the Facebook and Twitter sub-corpora, 54% of
559 the instances of *I* are used in reference to a speaker who has been created by the
560 communication team itself, often in a mock Q&A format, as demonstrated by Extract 3.

561

562 Extract 3

563 *Q: My Favourite pastime is going to the gym. How am I supposed to stay fit and*
564 *healthy during national lockdown. [sic]*

565 *A: The gym might be closed but you can still take unlimited exercise outdoors with*
566 *your household [...]*

567 (Stockport Council, 27 November 2020, Twitter)

568

569 This communication strategy seems to respond to the informational needs of the audience
570 by creating an illusion of bottom-up communication and the co-creation of knowledge.
571 However, since the questions asked in the social media posts have been written by local
572 government organisations themselves, they do not necessarily represent the actual
573 informational needs of their audiences, but rather the 'design' of what these audiences

574 may (need to) be interested in; the questions, presented as part of dialogic interactions
575 between the public and LGOs, may be interpreted as originating from the pro-active
576 listening to people’s concerns. This linguistic strategy is autonomy-fostering in two ways:
577 firstly, it creates competence and behavioural change through the internalization of
578 communication (Porat et al., 2020); and, secondly, it solicits the public to take personal
579 responsibility through the construction of the voice of the reader.

580

581 4.2.4 Questions and reader engagement

582 Questions are a highly effective device to achieve communication goals in pandemic-
583 related health communication; they engage readers through dialogue and may directly
584 influence judgement and behaviour (Moore et al., 2012). For written texts, questions are
585 typically rhetorical; they create a semblance of dialogic interaction, without the reader
586 being able to actually respond to the writer (Curry, 2021). On social media, this situation
587 is slightly different, because readers do have the opportunity to respond, although in our
588 dataset the type of questions and their linguistic context (for example that questions are
589 often followed by an answer) seem to suggest that they were not necessarily meant to
590 elicit actual responses. Whether written with a genuine request for information or
591 rhetorically, questions allow authors to share “some of the processes of meaning-making
592 with their readers [...], [thus positioning readers] as active participants in the discourse”
593 (Vásquez, 2014, p. 107). Previous research has shown that on social media – Twitter
594 particularly – questions (as opposed to statements) lead to a significant increase in
595 engagement with the readership, especially if the questions contain 1st and 2nd person
596 pronouns (Lai & Farbroth, 2014).

597 Syntactically, questions can be grammatically complete or elliptical, meaning that
598 they contain reduced clauses or phrases (Carter & McCarthy, 2006). Across both sub-

599 corpora, 40% of questions that make use of the question mark are elliptical, typically
600 lacking the modal auxiliary or subject. This usage can be explained by the need for brevity
601 – this is evidenced by the difference between the frequency of elliptical questions on
602 Facebook (where there are no constraints on length) and Twitter (where there is a
603 character constraint) – 31% and 60%, respectively. Another (or perhaps parallel)
604 explanation is that digital discourse often mimics spoken language, which is typically more
605 fragmented than writing (Carter & McCarthy, 1995). Such spoken-ness in digital writing
606 has previously been found to create a sense of shared experiences and lead to greater
607 engagement (Darics, 2020).

608 As Vásquez (2014: 107) observes in the context of online consumer reviews,
609 questions can serve many functions, including requesting information, expressing
610 suggestions and bringing a topic into focus. The following extracts exemplify the functions
611 identified among the 72 questions in our data.

612

613 Extracts 4a-4e

614 Extract 4a

615 *"It's just a cough, I'll be fine!" **Sound familiar?** You might think it is 'just a cough'*
616 *but it could be #coronavirus.*

617 (Oldham Council, 27 November 2020, Twitter)

618

619 Extract 4b

620 ***Want to help your loved ones stay connected during the coronavirus crisis?***

621 *@goodthingsfdn provide free Learn My Way courses on a range of things [...]*

622 (Stockport, 12 November 2020, Twitter)

623

624 Extract 4c

625 ***Got Coronavirus symptoms? 😞 OR Tested positive? 🤒 You must self-isolate***
626 *for 10 days.*

627 (Blackburn with Darwen Council, 24 November 2020, Twitter)

628

629 Extract 4d

630 ***Do you know of any businesses that have breached Covid guidelines?***

631 *Report them here* 📌

632 (Blackburn with Darwen Council, 18 November 2020, Facebook)

633

634 Extract 4e

635 ***How will you be remembering this year? 🍷*** *Due to the coronavirus restrictions in*
636 *place, things are a little different [...]*

637 (Blackburn with Darwen Council, 7 November 2020, Facebook)

638

639 Extracts 4a-c show questions that function to draw focus to a specific topic in order
640 to provide information. This is the most common question function, accounting for 83.3%
641 of examples. This strategy appears to be most useful when the information being
642 introduced does not apply to all potential readers but specific subsections. Questions of
643 this type function similarly to conditionals (Section 4.2.1) as focussing devices that appeal
644 to the reader to determine, based upon the criteria encoded in the question, whether they
645 are a member of the targeted subsection, and thus whether the information provided
646 subsequently applies to them. This strategy is used to facilitate reader engagement in the
647 communication of informational propositions, functioning variously to provide advice
648 (34.7%; e.g. 4a), offer support (25%; e.g. 4b) and issue orders (23.6%; e.g. 4c).

649 Extract 4d is, like 4a-c, a closed question, which acts as a filter of the relevance to
650 the reader of the information that follows. However, unlike 4a-c, the next line is an
651 instruction to provide the information requested by the question, meaning that this is an
652 example of a genuine request for information from the reader, rather than a provision of
653 information by the writer. Requests account for 13.9% of examples.

654 Extract 4e contains an open question that, like Extracts 4a-c, acts as a preamble
655 to a proposition, in this case information about Remembrance Day celebrations. However,
656 what is notable about 4e is the use of this question to encode a presupposition, defined
657 pragmatically as a proposition that is assumed by the writer to be accepted by the reader
658 (see e.g. Stalnaker, 1974). In this example, the presupposition is that readers should plan
659 to celebrate Remembrance Day in a way that complies with current COVID-related
660 restrictions. This is encoded firstly by *how*, which assumes that the reader will be
661 celebrating Remembrance Day, and secondly by *this year*, which assumes that the reader
662 already knows that they should celebrate differently than in previous years. Arguably, this
663 is an example of informative presupposition, whereby the writer deploys a presupposition
664 that may not be shared by the reader (Lewis, 1979), the function of which being to
665 persuade the reader to adopt the presupposed idea (Sbisà, 1999). Questions of this type
666 are coded as implicit suggestions, and account for 4.2% of examples.

667 Another noteworthy observation regarding questions is the voice that is
668 represented. In most cases (91% on Facebook; 96% on Twitter), the voice represented by
669 the question is that of the relevant council. However, the voice of the remainder of
670 questions is implied – as if the tweet gave voice to a hypothetical audience member (as
671 discussed in Section 4.2.3), in the form of a mock Q&A.

672 Questions are used as a productive resource for generating engagement. The
673 analysis shows that even though the majority (80.5%) are closed ‘yes/no’ questions, which

674 appear simply to elicit information from the reader, they actually fulfil a range of roles in
675 pandemic health communication that mostly serve to provide (as opposed to gather)
676 information. When not eliciting information, they serve as attention grabbing devices, a
677 role that has been proven to effectively engage readership (Lai & Farbroth, 2014). This is
678 particularly true for questions we identified as focusing on new topics (Extracts 4a-c) and
679 implicit suggestions (Extract 4e). Prompts and suggestions also serve an important role in
680 affecting judgement and behaviour explicitly by highlighting discrepancies between the
681 audience's knowledge and societal/government expectations (Moore et al., 2012), as
682 shown in Extract 4e. Such attention grabbing can help council messages to be more
683 personal and stand out in the social media information overload.

684

685 4.2.5 Hashtags and salient information reinforcement

686 Hashtags are metadiscourse resources typical of microblogging and other social media
687 platforms. Their original function was to create tags that identify topics of discussion, and
688 indeed researchers made use of these identifiers to explore emerging topics during the
689 pandemic (Petersen & Gerken, 2021). However, apart from their role as tags, hashtags
690 can take on a range of communication functions, from experiential functions such as
691 marking topics to interpersonal functions such as providing evaluative metacommentary
692 (Zappavigna, 2018). Structure-wise, hashtags can occur independently (at the beginning
693 or end of the social media post) or embedded in the syntactic structure.

694 Although the relatively low frequency of hashtags in the data (a result of the small
695 size of our dataset) forces us to be hesitant in our conclusions, independent hashtags
696 constitute 55% and 46% of all hashtags on Facebook and Twitter, respectively. While there
697 are several examples of independent hashtags functioning as topic markers, providing a
698 description of what the post is about (for example *#coronavirus*, *#COVID19* and *#Diwali*;

699 see Table 6), the most common function of independent hashtags, constituting 48% of all
700 independent hashtags, is to perform orders. Hashtags such as *#doyourbit*, *#StayatHome*,
701 *#StaySafe*, and *#StopTheSpread* have a clearly identifiable imperative structure, and
702 others, such as *#HandsFaceSpace*, are abbreviated references to orders. Together, in the
703 broader context of the government pandemic crisis communication efforts, these
704 examples can be understood as standpoints – points of view that are defended or justified
705 by means of argumentation (van Eemeren & Grootendorst, 2004). Specifically, these are
706 prescriptive standpoints – they ask the reader not only “to accept the [writer’s] evaluation
707 of a particular situation, but also that a certain course of action needs [...] to be
708 undertaken in order to change that situation” (Wackers et al., 2021: 71). In other words,
709 they say that the current situation requires action to be taken, but not why, because the
710 reader is expected to infer the rationale from the co-text in the post and/or through
711 presupposition of readers’ awareness of the pandemic.

712 The imperative function is amplified when posts feature several hashtags, such as
713 Figure 1, where *#StaySafe* and *#DoYourBit* have a clear imperative function, the latter
714 repeated in the attached image and with a marked colour distinction, and the third hashtag
715 taking on a function of topic marker.



716

717 Figure 1. Screenshot of tweet from Bournemouth, Christchurch and Poole (BCP) Council,
718 posted 8 November 2020.

719

720 In a small number of cases (11% of all independent hashtags), we have identified
721 hashtags that provide what Wikström (2014) calls parenthetical or additional information,
722 such as *#greatertogether* and *#BetterTogether*. In contrast to the imperative hashtags,
723 these can be interpreted not as expressing a standpoint but as expressing arguments in
724 favour of a standpoint. *#BetterTogether*, for example, is used by Oldham Council in an
725 announcement of local funding from the Greater Manchester Combined Authority for
726 businesses impacted by COVID-19 (Extract 5). Unlike the imperative hashtags, which have
727 an implied subject (the reader), the subject of the parenthetical hashtags is ambiguous;
728 whom or what is ‘better together’ is ambiguous, even when taking into account the content
729 of the post. Therefore, the hashtag may support one or more of several possible evaluative
730 standpoints – expressions of judgement about facts (Wackers et al., 2021: 70). In Extract
731 5, *#BetterTogether* may refer specifically to the authorities having intervened to support

732 the survival of local businesses. It may (alternatively, or in addition) appeal to the broader
733 sense of collective action required by all citizens in order to get through the pandemic (see
734 Section 4.2.2 on inclusivity).

735

736 Extract 5

737 @greatermcr pledge £10m to support businesses unable to access
738 #BounceBackLoans.

739 Delivered by @GC_BizFinance, there's no need to be an existing customer or open
740 an account.

741 For the businesses that make Greater Manchester GREAT!

742 <https://bit.ly/2WQqYPg>

743 **#BetterTogether**

744 (Oldham Council, 16 November 2020, Twitter)

745

746 In such examples, the additional information seems to take on a motivational, emotionally
747 expressive force, resulting in the compassionate communication that Finset et al. (2020)
748 and Malecki et al. (2020) define as crucial for the effective management of the pandemic.

749

750 Table 6. Top 15 most commonly-used hashtags in the Facebook and Twitter sub-corpora.

Rank	Facebook sub-corpus			Twitter sub-corpus		
	Hashtag	Frequency	Relative frequency (per 10,000)	Hashtag	Frequency	Relative frequency (per 10,000)
1	#coronavirus, #Coronavirus	32	17.16	#coronavirus, #Coronavirus	49	33.97
2	#DoYourBit, #doyourbit	27	14.48	#DoYourBit, #doyourbit	23	15.95
3	#HandsFaceSpace	12	6.43	#Oldham	17	11.79
4	#COVID19	11	5.90	#HandsFaceSpace	12	8.32
5	#StaySafe	9	4.83	#CouncilsCan	11	7.63
6	#StayAtHome, #StayatHome	7	3.75	#WeAreOldham	11	7.63

7	#Diwali	5	2.68	#COVID19	10	6.93
8	#OneStockport, #onestockport	5	2.68	#StaySafe	10	6.93
9	#TestAndTrace	5	2.68	#MentalHealth	8	5.55
10	#ShopLocal, #shoplocal	4	2.14	#RemembranceSunday	8	5.55
11	#BandiChhorDivas	3	1.61	#Diwali	6	4.16
12	#greatertogether, #GreaterTogether	3	1.61	#England	6	4.16
13	#hereforbusiness	3	1.61	#BetterTogether	4	2.77
14	#RediscoverSafely	3	1.61	#BounceBack	4	2.77
15	#TransformingTravel	3	1.61	#StayAtHome, #StayatHome	4	2.77

752 Embedded hashtags make up 45% and 54% of hashtags on Facebook and Twitter
753 respectively. In the majority of cases (84% overall), embedded hashtags function as topic
754 markers, where the # symbol acts as a form of punctuation to signal the tag (Zappavigna,
755 2018). In other cases, embedded hashtags can take on the communicative function of the
756 clause in which they feature; most typically, this means the incorporation of the imperative
757 tags into the sentence structure (for example: “They mean you must #Stayathome as
758 much as possible”). Here too, the hashtag symbol adds an additional markedness to the
759 directive, while simultaneously referencing the broader discourse of the stay-at-home
760 message of the government.

761

762 5. Response of the participating local government organisations

763 Following our analysis, we presented our findings to communications professionals from
764 the five local government organisations that participated in our study and held an online
765 focus group to gather their feedback.

766 The fact that our data collection focussed on the second national lockdown was a
767 strategic decision in the hope that, by November 2020 (some nine months into the national
768 pandemic response in the UK), councils would have had time to develop guidelines for
769 COVID-related communication. In reality, only one of our partner organisations had
770 developed such a document. Because of the sudden onset and unprecedented
771 development of the situation, and the extremely high stakes regarding public health, local
772 council organisations were eager to gain some insight about the effectiveness of their, and
773 others’, practices.

774 In response to our findings, the communications professionals were receptive to
775 the opportunity to reflect on their practice and pause to consider how they responded to
776 the challenges of the pandemic response. Especially valuable was the opportunity to

777 compare their communications to those of other councils from elsewhere in England who
778 were dealing with the same challenge but in varying geographical and socio-political
779 circumstances. One participant saw value in being shown “the way we can use language
780 and in particular 'you' and 'we' to engage with the audience”, while another appreciated
781 “understanding more about what we do and the science behind it”. A third was excited to
782 “share with the team around use of language, empathy and other key points to help
783 improve what we do”.

784 Another takeaway from our participants was the sense that, as communications
785 professionals, they had felt largely overlooked and undervalued during the pandemic
786 response, often receiving decisions about national restrictions at the same time as the
787 general public with no advance warning. This, as they reported to us, created a situation
788 where much of the local communication was hurriedly scrambled to keep up with the
789 national messaging. One participant noted that, as a result, much of their COVID-related
790 communication was produced “intuitively...at speed”; therefore, being shown by
791 researchers how linguistic patterns in the data can be ascribed to specific communicative
792 functions made them realise that their work “actually is hugely skilful and valuable”.
793 Related to this is the fact that, while these people were working for local councils to help
794 the public respond appropriately to the pandemic, they were also affected by COVID-19
795 as personally and emotionally as everyone else and they were adjusting to the ever-
796 changing national restrictions at the same time as the people they were supporting. One
797 participant noted “it's a reminder really that comms doesn't [just] affect our audiences; it
798 affects us too. So staying in the mindset of this for future campaigns is really important.”

799 Overall, the response to our initial study was encouraging. All participants shared
800 an enthusiasm and appreciation for the analysis we conducted and expressed interest in
801 contributing data towards a larger study. We are currently working with these and other

802 local government organisations to gather more data from other key time periods (e.g. the
803 first and third national UK lockdowns, and the 2021-22 wave of the Omicron variant) to
804 explore how communications strategies developed across the first two years of the
805 pandemic in the UK. We have also begun to expand upon our analysis by considering the
806 important role of visual modes of communication in LGO social media posts (Darics &
807 Love, 2023). We have noted, for instance, the presence of a large number of emoji
808 embedded within the texts of the posts, as well as the use of a variety of images that
809 accompany many of the posts. In future, multimodal corpus analysis (e.g. Oakey et al.,
810 2022) will be necessary to properly take these communicative tools into account alongside
811 the textual mode. Ultimately, our aim is to reveal to the communications professionals the
812 underlying logic behind their communicative strategies and make our findings available to
813 representatives from LGOs across the UK.

814

815 6. Conclusion

816 This paper began by outlining the complex nature of public health communication during
817 the pandemic, especially from the point of view of strategic communication, the main aim
818 of which is to achieve public compliance. It has been shown that communicators had a
819 particularly hard task in navigating the ‘infodemic’ and attending to different types of
820 audiences (Coleman et al, 2020) and communication aims, and this paper set out to
821 provide an initial snapshot into how a small sample of local councils in England were able
822 to navigate these challenges. The analysis was based on the premise that audiences are
823 more likely to comply with the health messaging if they are ‘involved’ with the message
824 (Parrot, 1995). To this end, the study examined how micro-level linguistic features were
825 used to encourage engagement while helping to address the various publics and fostering
826 relatedness, fostering autonomy and cutting through the ‘infodemic’.

827 One feature that occurred repeatedly in the analysis above is the ambiguity of
828 linguistic resources. This is somewhat counter to the advice previously given in public
829 health communication about avoiding ambiguity (Parrott, 1995), though it has been
830 observed by scholars in pandemic-related communication elsewhere (Gelmini et al.,
831 2021). As we have shown in Section 1, the complexity of pandemic crisis communication
832 is in part the result of the presence of a wide range of audiences, all of whom should be
833 addressed and engaged. The ambiguous and widening referent base of *we* and *us*, for
834 example, allows for differing interpretations by the audiences, depending on whether they
835 prefer to be affiliated with the authors of the posts or not.

836 Ambiguity was also observed in some types of hashtags. Among the independent
837 hashtags, directive hashtags (e.g. *#StaySafe*) appear to serve as explicit commands (cf.
838 Pérez-Hernández, 2018), representing prescriptive argumentative standpoints (Eemeren
839 & Grootendorst, 2004; Wackers et al., 2021). However, albeit less frequently, parenthetical
840 hashtags (Wikström, 2014) such as *#bettertogether* demonstrate the interpersonal,
841 evaluative functions of hashtags (Zappavigna, 2018). They put forward arguments in
842 support of ambiguous standpoints, thus relying on readers to supply their individual
843 interpretations. However, hashtags used to perform the most common function in our data,
844 topic marking (e.g. *#coronavirus*), are unambiguous; they explicitly reinforce connotations
845 related to the overall message, making key information salient, which reflects the LGOs'
846 efforts to cut through the 'infodemic', while appealing to a range of audiences.

847 There is also evidence of how the councils used autonomy-supporting
848 communication strategies, which, according to Porat et al. (2020), lead to autonomous
849 motivation, and are more likely to lead to sustainable change. One such strategy is the use
850 of questions which, although not often inviting actual responses, nonetheless involve
851 readers in the meaning-making process by giving them the sense of interactive, reader-

852 involved engagement (cf. Curry, 2021). The analysis of 2nd person pronoun *you* has also
853 shown similar efforts, whereby deontic posts were predominantly articulated in the form
854 of encouragement, thus shifting the responsibility to the readers. Both in conditional
855 sentences (Section 4.2.1) and in questions encouraging desired behaviours through
856 presupposition (Section 4.2.4), readers were encouraged to individually interpret their
857 experience and verify for themselves whether it matched the scenario hypothesized in the
858 post and take responsibility for the consequent behaviour. The use of 1st person pronouns
859 in what was identified as mock Q&A provided a voice for the reader (albeit a hypothetical
860 one), creating a sense of personal responsibility and encouraging the internalization of the
861 messages.

862 Finally, the analysis shows the councils' efforts to balance an image consistent
863 with the ethos of a public authority with strategies that make information and guidance
864 stand out in the 'infodemic'. Messages used a range of attention-grabbing devices
865 (questions and mock Q&A), visual markedness (hashtags) and discourse strategies to
866 appeal to a shared sense of physical experiences (spoken features). Through use of direct
867 address (*you*) and inclusivity (*we*), a prevalent number of social media posts used
868 synthetic personalisation to encourage readers to interpret the guidance as having direct
869 relevance to them – this process has previously been found to successfully facilitate active
870 engagement and compliance with public health messaging (Parrott, 1995).

871 Perhaps the most important realisation is that the examined metadiscourse
872 devices – first and second person pronouns, questions, and hashtags – take on a range of
873 concurrent interactive functions that make official social media crisis communication
874 trustworthy, interesting, relevant and relatable: the four exact message quality features
875 Atkin (2012) calls for in persuasive health communication. Although the analysis in this
876 paper has only been able to provide a snapshot of select linguistic features, it nonetheless

877 provides scholars and practitioners with an insight into the importance of exploring micro-
878 level language phenomena in strategic communication. We hope that the linguistic and
879 discourse strategies shown in this paper may serve as concrete examples that provide a
880 basis for reflection for communication practitioners so that they can craft messages with
881 a greater chance of success in mobilising the public.

882 Finally, the response of both our communications consultant and representatives
883 from the councils who participated in this study reinforce the crucial role that local
884 organisations had in mediating and ‘translating’ messaging from government
885 communications. The communication teams of these local government organisations
886 found themselves under immense pressure. While personally battling through the
887 unprecedented times of a global pandemic, they had to respond professionally in an
888 unfamiliar communication context, working with oftentimes problematic, ambiguous
889 government messaging (e.g. Williams & Wright, 2022). As we learned from our
890 participants, their work very much relied on instinctive responses to national regulations.
891 As our work with these and other local government organisations continues, we aim to
892 develop communicative guidelines to help these previously under-appreciated
893 communications professionals feel better supported in advising their local public in times
894 of crisis.

895

896 Acknowledgements

897 The authors wish to thank Darren Caveney of *comms2point0* for his support with data
898 collection, as well as the representatives from the five participating local government
899 organisations. The research presented in this paper was supported by Research England
900 (Research and Knowledge Exchange Pump-Priming Fund, Aston University).

901

902 References

- 903 Aggerholm, H. K., & Thomsen, C. (2014). Strategic communication: The role of polyphony
904 in management team meetings. In D. Holtzhausen (Ed.), *The Routledge handbook of*
905 *strategic communication* (pp. 196–213). Routledge.
- 906 Ahmed, W., Bath, P., & Demartini, G. (2017). Using Twitter as a data source: An overview
907 of ethical, legal, and methodological challenges. In K. Woodfield, (Ed.), *The ethics of*
908 *online research* (pp. 79-107). Emerald.
- 909 Anthony, L. (2020). *AntConc* (Version 3.5.9) [Computer Software]. Tokyo, Japan: Waseda
910 University. <https://www.laurenceanthony.net/software>
- 911 Atkin, C. (2012). Persuasive strategies in health campaigns. In J. P. Dillard, & L. Shen
912 (Eds.). *The SAGE handbook of persuasion: Developments in theory and practice* (pp.
913 278-295). SAGE Publications, Inc.
- 914 Atkin, C., & Rice, R. (2013). Theory and principles of public communication campaigns. In
915 R. Rice, & C. Atkin (Eds.), *Public communication campaigns* (pp. 2-19). SAGE
916 Publications, Inc.
- 917 Baker, P. (2006). *Using corpora in discourse analysis*. Continuum.
- 918 Brezina, V. (2018). *Statistics in corpus linguistics: A practical guide*. Cambridge
919 University Press.
- 920 Brown, P., & Levinson, S.C. (1987). *Politeness: Some universals in language usage*.
921 Cambridge University Press.
- 922 Brown, P., & Levinson, S.C. (2006). 'Politeness: Some universals in language usage'. In A.
923 Jaworski & N. Coupland (Eds.), *The discourse reader* (2nd ed.), Routledge (pp. 311-
924 323).
- 925 Bui, B., Moses, O., & Dumay, J. (2021). The rhetoric of New Zealand's COVID-19
926 response. *Accounting, Auditing & Accountability Journal*. Advance online publication.

927 Carter, R., & McCarthy, M. (1995). Grammar and the spoken language. *Applied*
928 *Linguistics*, 16(2), 141-158. <https://doi.org/10.1093/applin/16.2.141>

929 Carter, R., & McCarthy, M. (2006). *Cambridge grammar of English: A comprehensive*
930 *guide: Spoken and written English grammar and usage*. Cambridge University Press.

931 Chang, C. (2011). Enhancing self-referencing to health messages. *Journal of Consumer*
932 *Affairs*, 45(1), 147-164. <https://www.jstor.org/stable/23859768>

933 Coleman, S., Konstantinova, N., & Moss, G. (2020). *The pandemic and its publics: how*
934 *people receive, interpret and act upon official guidance*. University of Leeds.
935 [https://ahc.leeds.ac.uk/download/downloads/id/635/the_pandemic_and_its_publics_](https://ahc.leeds.ac.uk/download/downloads/id/635/the_pandemic_and_its_publics_how_people_receive_interpret_and_act_upon_official_guidance.pdf)
936 [how_people_receive_interpret_and_act_upon_official_guidance.pdf](https://ahc.leeds.ac.uk/download/downloads/id/635/the_pandemic_and_its_publics_how_people_receive_interpret_and_act_upon_official_guidance.pdf)

937 Covello, V. T. (2003). Best practices in public health risk and crisis communication.
938 *Journal of Health Communication*, 8(S1), 5-8. <https://doi.org/10.1080/713851971>

939 Curry, N. (2021). *Academic writing and reader engagement: Contrasting questions in*
940 *English, French and Spanish corpora*. Routledge.

941 Darics, E. (2020). E-leadership or “How to be boss in instant messaging?” The role of
942 nonverbal communication. *International Journal of Business Communication*, 57(1), 3-
943 29. <https://doi.org/10.1177/2329488416685068>

944 Darics, E., & Koller, V. (2019). Social actors “to go”: An analytical toolkit to explore
945 agency in business discourse and communication. *Business and Professional*
946 *Communication Quarterly*, 82(2), 214-238.
947 <https://doi.org/10.1177/2329490619828367>

948 Darics, E., & Love, R. (2023). Hands 🤝, Face 😊, Space ↔: *The communicative role of*
949 *emoji in public communication during the COVID-19 pandemic*. Paper presented at
950 the Association for Business Communication Regional Conference Naples 2023.
951 University Federico II, Italy. January 2023.

952 Edelman (2020), 20th Annual Edelman Trust Barometer. Edelman.
953 <https://www.edelman.com/trustbarometer>

954 Enria, L., Waterlow, N., Rogers, N. T., Brindle, H., Lal, S., Eggo, R. M., ... & Roberts, C. H.
955 (2021). Trust and transparency in times of crisis: Results from an online survey during
956 the first wave (April, 2020) of the COVID-19 epidemic in the UK. *PloS one*, *16*(2),
957 e0239247. <https://doi.org/10.1371/journal.pone.0239247>

958 Evans, A. (2016). Stance and identity in Twitter hashtags. *Language@ internet*, *13*(1).
959 urn:nbn:de:0009-0-54947

960 Fairclough, N. (2001). *Language and Power* (2nd ed.). Longman.

961 Finset, A., Bosworth, H., Butow, P., Gulbrandsen, P., Hulsman, R. L., Pieterse, A. H., ... &
962 van Weert, J. (2020). Effective health communication—a key factor in fighting the
963 COVID-19 pandemic. *Patient Education and Counseling*, *103*(5), 873-876.
964 <https://doi.org/10.1016/j.pec.2020.03.027>

965 Fuoli, M. (2018). Building a trustworthy corporate identity: A corpus-based analysis of
966 stance in annual and corporate social responsibility reports. *Applied Linguistics*,
967 *39*(6), 846-885. <https://doi.org/10.1093/applin/amw058>

968 Gelmini, L., Minutiello, V., Tettamanzi, P., & Comoli, M. (2021). Rhetoric, accounting and
969 accountability: COVID-19 and the case of Italy. *Sustainability*, *13*(8), 4100.
970 <https://doi.org/10.3390/su13084100>

971 Gherheș, V., Cernicova-Buca, M., & Fărcașiu, M. A. (2023). Public Engagement with
972 Romanian Government Social Media Accounts during the COVID-19 Pandemic.
973 *International Journal of Environmental Research and Public Health*, *20*(3), 2372. MDPI
974 AG. Retrieved from <http://dx.doi.org/10.3390/ijerph2003237>

975 Greco, S. (2023). Twitter Activists' Argumentation Through Subdiscussions: Theory,
 976 Method and Illustration of the Controversy Surrounding Sustainable Fashion.
 977 *Argumentation*, 1-23. <https://link.springer.com/article/10.1007/s10503-022-09579-1>

978 Grieve, J. (2021). Observation, experimentation, and replication in linguistics. *Linguistics*,
 979 000010151520210094. <https://doi.org/10.1515/ling-2021-0094>

980 Habersaat, K. B., Betsch, C., Danchin, M., Sunstein, C. R., Böhm, R., Falk, A., ... & Butler,
 981 R. (2020). Ten considerations for effectively managing the COVID-19 transition.
 982 *Nature Human Behaviour*, 4(7), 677-687. <https://doi.org/10.1038/s41562-020-0906-x>

983 House of Commons (2009). The balance of power: central and local government. HC 33-I
 984 [Incorporating HC 813-i-iv, Session, 2007-08]

985 Hyland, K. (2005a). Stance and engagement: A model of interaction in academic
 986 discourse. *Discourse Studies*, 7(2), 173-192.
 987 <https://doi.org/10.1177/1461445605050365>

988 Hyland, K. (2005b) *Metadiscourse: Exploring writing in interaction*. Continuum.

989 Hyland, K. (1998) Exploring corporate rhetoric: Metadiscourse in the CEO's letter.
 990 *Journal of Business Communication*, 35(2), 224-245.
 991 <https://doi.org/10.1177/002194369803500203>

992 Hyland, K. (2017). Metadiscourse: What is it and where is it going? *Journal of*
 993 *Pragmatics*, 113, 16-29. <https://doi.org/10.1016/j.pragma.2017.03.007>

994 Irwin, R. E. (2020). Misinformation and de-contextualization: international media
 995 reporting on Sweden and COVID-19. *Globalization and Health*, 16(1), 1-12.
 996 <https://doi.org/10.1186/s12992-020-00588-x>

997 Jaworska, S., & Sogomonian, T. (2019). After we# VoteLeave we can# TakeControl. In
 998 Lutzky, U. & Nevala, M. (Eds.). *Reference and Identity in Public Discourses*,

999 Pragmatics & Beyond New Series (306) pp. 181-202.
1000 <https://doi.org/10.1075/pbns.306.07jaw>

1001 Lai, L., & Farbroth, A. (2014). What makes you click? The effect of question headlines on
1002 readership in computer-mediated communication. *Social Influence*, 9(4), 289-299.
1003 <https://doi.org/10.1080/15534510.2013.847859>

1004 Lewis, D. (1979). Scorekeeping in a Language Game. *Journal of Philosophical Logic*, 8,
1005 339–359.

1006 Local Government Association. (2022). *What is local government?*
1007 <https://www.local.gov.uk/about/what-local-government>

1008 Lovari, A. (2020). Spreading (dis) trust: COVID-19 misinformation and government
1009 intervention in Italy. *Media and Communication*, 8(2), 458-461.
1010 <https://doi.org/10.17645/mac.v8i2.3219>

1011 Malecki, K. M., Keating, J. A., & Safdar, N. (2021). Crisis communication and public
1012 perception of COVID-19 risk in the era of social media. *Clinical Infectious Diseases*,
1013 72(4), 697-702. <https://doi.org/10.1093/cid/ciaa758>

1014 Martin, C., & MacDonald, B.H. (2020). Using interpersonal communication strategies to
1015 encourage science conversations on social media. *PLoS ONE*, 15(11): e0241972.
1016 <https://doi.org/10.1371/journal.pone.0241972>

1017 McEnery, T., McGlashan, M., & Love, R. (2015). Press and social media reaction to
1018 ideologically inspired murder: The case of Lee Rigby. *Discourse & Communication*,
1019 9(2), 1-23. <https://doi.org/10.1177/1750481314568545>

1020 McGuire, W. (2013). McGuire's classic input–output framework for constructing
1021 persuasive messages. In R. Rice, & C. Atkin (Eds.), *Public communication campaigns*
1022 (pp. 133-145). SAGE Publications, Inc.

- 1023 McClaughlin, E., Vilar-Lluch, S., Parnell, T., Knight, D., Nichele, E., Adolphs, S., Clos, J., &
1024 Schiazza, G. (2023). The reception of public health messages during the COVID-19
1025 pandemic. *Applied Corpus Linguistics*, 3(1).
1026 <https://doi.org/10.1016/j.acorp.2022.100037>
- 1027 Moore, S. G., Neal, D. T., Fitzsimons, G. J., & Shiv, B. (2012). Wolves in sheep's clothing:
1028 How and when hypothetical questions influence behavior. *Organizational Behavior*
1029 *and Human Decision Processes*, 117(1), 168-178.
1030 <https://doi.org/10.1016/j.obhdp.2011.08.003>
- 1031 Nielsen, R. K., Kalogeropoulos, A., & Fletcher, R. (2020). Social media very widely used,
1032 but use for news and information about COVID-19 is declining. Reuters Institute for
1033 the Study of Journalism. [https://reutersinstitute.politics.ox.ac.uk/social-media-very-](https://reutersinstitute.politics.ox.ac.uk/social-media-very-widely-used-use-news-and-information-about-COVID-19-declining)
1034 [widely-used-use-news-and-information-about-COVID-19-declining](https://reutersinstitute.politics.ox.ac.uk/social-media-very-widely-used-use-news-and-information-about-COVID-19-declining)
- 1035 Oakey, D., Jones, C., & O'Halloran, K. L. (2022). Phraseology and imagery in UK public
1036 health agency COVID-19 tweets. In S. Tan & M. K.L.E. (Eds), *Discourses, Modes,*
1037 *Media and Meaning in an Era of Pandemic* (pp. 89-114). Routledge.
1038 doi:10.4324/9781003168195-8
- 1039 Palmieri, R., & Mazzali-Lurati, S. (2021). Strategic Communication with Multiple
1040 Audiences: Polyphony, Text Stakeholders, and Argumentation, *International Journal of*
1041 *Strategic Communication*, 15:3, 159-176.
1042 <https://doi.org/10.1080/1553118X.2021.1887873>
- 1043 Palmieri, R., & Musi, E. (2020). Trust-repair strategies in crisis rhetorical (sub-) arenas:
1044 An argumentative perspective. *International Journal of Strategic Communication*,
1045 14(4), 272-293. <https://doi.org/10.1080/1553118X.2020.1805452>
- 1046 Parrott, R. L. (1995) Motivation to attend to health messages: Presentation of content
1047 and linguistic considerations. In E. Maibach, & R. L. Parrott. *Designing health*

1048 *messages: Approaches from communication theory and public health practice* (pp 7–
1049 23). SAGE.

1050 Pérez-Hernández, L. (2018). Building brand narratives with hashtags on Twitter: A
1051 cognitive-pragmatic analysis on the emergence of a new advertising subgenre.
1052 *Pragmatics & Cognition*, 25(3), 515-542. <https://doi.org/10.1075/pc.18020.per>

1053 Petersen, K., & Gerken, J. M. (2021). #COVID-19: An exploratory investigation of hashtag
1054 usage on Twitter. *Health Policy*, 125(4), 541-547.
1055 <https://doi.org/10.1016/j.healthpol.2021.01.001>

1056 Porat, T., Nyrup, R., Calvo, R. A., Paudyal, P., & Ford, E. (2020). Public health and risk
1057 communication during COVID-19—enhancing psychological needs to promote
1058 sustainable behavior change. *Frontiers in Public Health*, 8, 637.
1059 <https://doi.org/10.3389/fpubh.2020.573397>

1060 Power, K., & Crosthwaite, P. (2022). Constructing COVID-19: A corpus-informed analysis
1061 of prime ministerial crisis response communication by gender. *Discourse & Society*,
1062 33(3), 411–437. <https://doi.org/10.1177/09579265221076612>

1063 Ratzan S,C., Sommariva S., Rauh L. (2020). Enhancing global health communication
1064 during a crisis: lessons from the COVID-19 pandemic. *Public Health Research and*
1065 *Practice* 30(2): e3022010. <https://doi.org/10.17061/phrp3022010>

1066 Rüdiger, S., & Dayter, D. (Eds.) (2020). *Corpus approaches to social media*. John
1067 Benjamins.

1068 Sbisà, M. (1999). Ideology and the persuasive use of presupposition. In J. Verschueren
1069 (Ed.), *Language and Ideology. Selected Papers from the 6th International Pragmatics*
1070 *Conference* (pp. 492–509). Antwerp: International Pragmatics Association.

1071 Scott, M. & Tribble, C. (2006). *Textual patterns: Keyword and corpus analysis in*
1072 *language education*. Benjamins.

1073 Stolow, J. A., Moses, L. M., Lederer, A. M., & Carter, R. (2020). How fear appeal
1074 approaches in COVID-19 health communication may be harming the global
1075 community. *Health Education & Behavior*, 47(4), 531-535.
1076 <https://doi.org/10.1177/1090198120935073>

1077 Taylor, C., & Marchi, A. (Eds.) (2018). *Corpus approaches to discourse: A critical review*.
1078 Routledge.

1079 van Dijck, J., & Alinejad, D. (2020). Social media and trust in scientific expertise:
1080 Debating the COVID-19 pandemic in the Netherlands. *Social Media+ Society*, 6(4).
1081 <https://doi.org/10.1177/2056305120981057>

1082 van Eemeren, F.H., & Grootendorst, R. (2004). *A systemic theory of argumentation: The*
1083 *pragma-dialectical approach*. Cambridge University Press.

1084 Vásquez, C. (2014). *The discourse of online consumer reviews*. Bloomsbury.

1085 Wackers, D.Y.M., Plug, H.J., & Steen, G.J. (2021). “For crying out loud, don’t call me a
1086 warrior”: Standpoints of resistance against violence metaphors for cancer. *Journal of*
1087 *Pragmatics*, 174, 68-77. <https://doi.org/10.1016/j.pragma.2020.12.021>

1088 Werder, K. P. (2015). A theoretical framework for strategic communication messaging. In
1089 D. Holtzhausen & A. Zerfass (Eds.), *The Routledge handbook of strategic*
1090 *communication* (pp. 269–284). Routledge.

1091 Wikström, P. (2014). #srynotfunny: Communicative functions of hashtags on Twitter.
1092 *SKY Journal of Linguistics*, 27, 127-152.

1093 Williams, J., & Wright, D. (2022). Ambiguity, responsibility and political action in the UK
1094 daily COVID-19 briefings. *Critical Discourse Studies*.
1095 <https://doi.org/10.1080/17405904.2022.2110132>

1096 Williams, M. L., Burnap, P., & Sloan, L. (2017). Towards an ethical framework for
1097 publishing Twitter data in social research: Taking into account users’ views, online

- 1098 context and algorithmic estimation. *Sociology*, 51(6), 1149-1168.
- 1099 <https://doi.org/10.1177/0038038517708140>
- 1100 Wong, C. M. L., & Jensen, O. (2020). The paradox of trust: perceived risk and public
1101 compliance during the COVID-19 pandemic in Singapore. *Journal of Risk Research*,
1102 23(7-8), 1021-1030. <https://doi.org/10.1080/13669877.2020.1756386>
- 1103 World Health Organization. (2009). *Pandemic influenza preparedness and response: A*
1104 *WHO guidance document*. <https://www.ncbi.nlm.nih.gov/books/NBK143067/>
- 1105 World Health Organization. (2020). *Munich Security Conference*.
1106 <https://www.who.int/director-general/speeches/detail/munich-security-conference>
- 1107 Zappavigna, M. (2012). *Discourse of Twitter and social media: How we use language to*
1108 *create affiliation on the web*. Continuum.
- 1109 Zappavigna, M. (2018). *Searchable talk: Hashtags and social media metadiscourse*.
1110 Bloomsbury.
- 1111 Zerfass, A., Verčič, D., Nothhaft, H. & Werder, K. P. (2018) Strategic communication:
1112 Defining the field and its contribution to research and practice. *International Journal*
1113 *of Strategic Communication*, 12(4), 487-505.
1114 <https://doi.org/10.1080/1553118X.2018.1493485>
- 1115 Zhang, L., Li, H., & Chen, K. (2020). Effective risk communication for public health
1116 emergency: Reflection on the COVID-19 (2019-nCoV) outbreak in Wuhan, China.
1117 *Healthcare*, 8(1), 64. <https://doi.org/10.3390/healthcare8010064>