



Exploring Health Experts' and Creative Communicators' Focus in Pandemic Video Communication: A Qualitative Study

Marie Therese Shortt^{1*}, Siv Hilde Berg¹, Siri Wiig¹, Daniel Adrian Lungu¹, Ionica Smeets², Henriette Thune¹ and Jo Røislien¹

¹ SHARE - Centre for Resilience in Healthcare, Faculty of Health Sciences, University of Stavanger, Stavanger, Norway,

² Science Communication and Society, Institute of Biology, Leiden University, Leiden, Netherlands

OPEN ACCESS

Edited by:

Nasir Saeed,
National University of
Technology, Pakistan

Reviewed by:

Shamsiah Abd Kadir,
National University of
Malaysia, Malaysia
Rita Gill Singh,
Hong Kong Baptist University, Hong
Kong SAR, China

*Correspondence:

Marie Therese Shortt
marie.t.shortt@uis.no

Specialty section:

This article was submitted to
Health Communication,
a section of the journal
Frontiers in Communication

Received: 28 February 2022

Accepted: 14 April 2022

Published: 30 May 2022

Citation:

Shortt MT, Berg SH, Wiig S,
Lungu DA, Smeets I, Thune H and
Røislien J (2022) Exploring Health
Experts' and Creative
Communicators' Focus in Pandemic
Video Communication: A Qualitative
Study. *Front. Commun.* 7:886768.
doi: 10.3389/fcomm.2022.886768

Pandemic video communication aimed at the general public often lacks creativity and fails to reach large audiences. Yet, the scientific content should not be compromised by attempts to improve the creativity or reach. This study explores the processes utilised by various health experts and professional communicators when creating communication, to identify similarities and differences, and how pandemic video communication thus can be improved through an interdisciplinary approach. We interviewed 12 individuals from 6 different professional domains: health, public health, film/science communication, video journalism, advertising, and social media/YouTube. Semi-structured individual interviews were conducted using the same interview guide. The interview data were subjected to thematic analysis with both deductive and inductive coding, and the results were visualised in a bubble chart. Our study has highlighted both similarities and differences between health professionals and creative communicators relating to their creative processes and their approaches to pandemic video communication. We found that participants from health domains assigned great importance to and efforts on the content, but were unsure or lacked experience in how content is translated through form and creativity. Creative communicators, on the other hand, emphasise and specialise in form, yet depend on health professionals, experts, and scientists to provide and validate content. The key to improving pandemic-related video communication appears to lie in striking the right balance between high-quality and evidence-based content and creativity. This study found that both health professionals and creative communicators play crucial roles in reaching a solid end result, and we suggest a fusion model approach to interdisciplinary collaboration.

Keywords: interdisciplinary, creative process, creativity, pandemic (COVID-19), video communication, public health, health communication

INTRODUCTION

Pandemic video communication aimed at the general public tends to lack creativity and may fail to reach large audiences (Shortt et al., 2021). Creative and contemporary practises and techniques used by professional creative communicators are not yet reflected in online pandemic-related video and social media communication by health authorities (Li et al., 2020; Moon and Lee, 2020; Berg et al., 2021). More specifically, the use of professional communicators, narratives, humour, and advanced graphic visualisations is underexplored, yet might hold much potential for improving reach, as well as recall and learning (Hut et al., 2016; Erviti, 2018; García-Avilés and de Lara, 2018; León and Bourk, 2018; Davis et al., 2020; Shortt et al., 2021). Message framing, on the other hand, has been explored and identified as an important topic in studies on health risk communication (Berg et al., 2021). Public health messages, during and beyond the COVID-19 pandemic, often rely on persuading people to change their attitudes and behaviours (Heffner et al., 2021; Oxman et al., 2022). Emotions, both positive (e.g., curiosity, wonder, awe, surprise, pleasure, and hope) and negative (e.g., fear, anger, anxiety, boredom, frustration, exclusion, and isolation), have had a central role in the production and consumption of both advertising (Poels and Dewitte, 2019) and science communication (Davies et al., 2019; Taddicken and Reif, 2020).

Previous studies of pandemic video communication have recommended a more interdisciplinary approach, combining trustworthy scientific content and expertise with creative contemporary visualisation and production techniques, for example through active collaboration between health experts and creative communicators to create high-quality content that will raise public awareness (Li et al., 2020, p. 5-6; Moon and Lee, 2020; Shortt et al., 2021). Health experts and professional communication creatives do however come from very different schools of thought, have different work processes, and may have different views on what constitutes a successful project. While collaboration between different professionals might be the key to increasing the reach of health science information to the general public, it is not obvious how such collaboration should proceed.

The construction of effective health communication videos aimed at the general public is a creative process. Creative processes have been studied for over a century, and models thereof have ranged from depicting a few distinguished stages, such as in Wallas' work in *The Art of Thought* from 1926 (Wallas, 2014) to encompassing complex and dynamic stages and sub-processes (Dewey, 1980; Glaveanu et al., 2013; Botella et al., 2018, 2019). While many models of the creative process focus on the cognitive perspective, Glaveanu et al. (2013) developed an action framework for analysing creative acts modelled from Dewey's work in *Art of Experience* from 1934 (Dewey, 1980), in which creativity is perceived as relational and inter-subjective (Glaveanu et al., 2013). The action framework has previously been used to visualise important actions and stages across various domains and to gain new insights into similarities and differences in creation approaches, such as regarding how much weight creators from different domains put on various stages in the creative process. Using this framework previous

studies have found that similarities and differences across impulsion (why someone is doing a certain action), obstacle (difficulties/limitations experienced), doing (stages, tools, and procedures), undergoing (material and social environment and interactions), and emotion (experienced at any stage of the activity) have deviated from presupposed ones across domains such as art and science (Glaveanu et al., 2013).

The present study aims to identify how the development of pandemic video communication could benefit from an interdisciplinary collaboration between health professionals and creative communicators. The following research questions guided our study:

1. What are the similarities and differences in how health experts and creative communicators approach pandemic video communication?
2. How can pandemic video communication benefit from the interdisciplinary collaboration of health experts and creative communicators?

Applying the action framework of Glaveanu et al. (2013), we explore the creative action of professionals from six different professional domains already involved in, related to, or considered relevant for creating effective pandemic video communication. Further, we explore their views on how pandemic video communication can be improved both in relation to content and creativity. Lastly, the study explores what recommendations for interdisciplinary approaches between health experts and creative communicators can be made based on participants' experiences and comparisons of their creative processes.

MATERIALS AND METHODS

Design

The present study is a qualitative study using interview data from semi-structured individual interviews with health experts and creative communication professionals.

Participants

To cover a wide range of disciplines involved in pandemic video communication, 12 participants were recruited from 6 professional domains across the health and creative communication and media sectors: health, public health, film/science communication, video journalism, advertising, and social media/YouTube. We purposively sampled the participants from the healthcare sector from both regional and national hospitals and public health levels to guarantee variation. For the communication professionals, we chose individuals from creative agencies and studios with national and international reach/portfolios to ensure they were accustomed to large-scale aspects of public communication. All participants were living and working in Norway, five of the participants were women, seven men, and the median (range) age was 44 (26–61) years. See **Table 1** for participant characteristics.

From the health sector, both health and public health professionals were included to gain important perspectives on communication at the patient/hospital level, as well as

TABLE 1 | Characteristics of the sample.

Informant no.	Informant code	Domain	Role	Gender
1	H1	Health	Director of research, regional hospital	m
2	H2		Leader, healthcare management	f
3	PH3	Public health	Director of research	m
4	PH4		Senior communications advisor	f
5	F5	Film/science communication	Camera/lighting/photography	m
6	F6		Producer/script writer	m
7	VJ7	Video journalism	Video journalist	m
8	VJ8		Video journalist	f
9	A9	Advertising/creative communication	Planner/strategy	f
10	A10		Creator	f
11	SM11	UGC/social media	YouTuber (with background in health)	m
12	SM12		Creative director	m

communication directed towards the general public. From the creative communications sector, professionals from four different domains were included to gain perspectives from experts working commercially across diverse mediums, platforms, and creative techniques, all with the aim to reach out to the public with contemporary, targeted communication: film and science communication professionals for their expertise in explaining scientific knowledge in understandable and educational ways; video journalists due to media outlets' central role in communicating about the pandemic to the general public; advertising professionals to gain insights into the creative techniques and strategies used in commercial and contemporary media to reach wide audiences; and social media/YouTube informants to understand specific approaches necessary to reach consumers on new and social media.

The sample size was considered to give enough information power (Malterud et al., 2016) due to the narrow study aim, the diverse experiences, and the knowledge of participants, and the study was informed by theory, as well as the interviewer's 15 years practical experience in the subject area of creativity and creative processes contributing to the quality of dialogue.

Participants were all recruited by MTS and were informed about the project and content of the interviews in advance. Written and volunteer consent was obtained and anonymity was guaranteed.

Interviews

Semi-structured individual interviews were conducted, and the same interview guide was used with all informants across the six domains. The interview guide (S1–S2) was organised with questions informed by Glaveanu combined with open questions related to participants' experiences, suggested improvements, and challenges faced when creating the pandemic video communication and when taking part in interdisciplinary collaboration. Interviews started with participants describing their experience with pandemic-related communication and then focused on three key areas of enquiry: (1) Reflections of their creative process (stages involved and challenges experienced); (2) what they consider important when it comes to pandemic video

communication to the general public (content, creativity, and improvements); (3) what they consider important to maximise the result of interdisciplinary collaboration, as well as main challenges. Interviews lasted ~30 min and were conducted online using the video conferencing software Zoom; interviews were video recorded and were later transcribed for the purpose of analysis. All interviews were conducted by MTS.

Analysis

All interview transcripts were read by the first author (MTS) and co-author SHB who discussed first impressions together with co-author SW. Transcripts were subjected to thematic analysis (Braun and Clarke, 2006), and MTS coded all the data. The data were grouped into three themes with two different approaches for analysis, deductive and inductive. The first part, relating to the creative process theme, was theory-driven and analysed deductively with predefined codes from the creative action framework of Glaveanu et al. (2013) (see **Table 2**). The themes and data were collated into tables. Data relating to the creative process was then extracted and represented in flow charts based on the schematic representations created by Glaveanu et al. (2013), but modified in their design to introduce colour-coding and graphic adjustments in how the content is presented. The flow charts present the creative process for each of the six domains separately to visualise how they emphasise different parts of and approaches to the creative process from impulsion, obstacle, doing, undergoing, to emotion.

Part two, relating to the pandemic video communication theme and the interdisciplinary collaboration theme, was data-driven and analysed inductively. Initial data was extracted into tables and was coded for interesting features and potential themes. Sub-themes were identified and organised thematically with data extracts. MTS organised the data graphically in tables and mind-maps to visualise relationships in the data material according to Braun and Clarke (2006). Whenever direct or indirect quotations are used, the respondent's professional domain is indicated by the following codes: H—health, PH—public health, F—film/science communication, VJ—video

TABLE 2 | Coding frame for comparison of creative action by Glaveanu et al. (2013).

Impulsion	The motivation for action: why the person is doing a certain action
Obstacle	Difficulties and/or limitations on the whole or at different stages
Doing—stages	The different stages or phases of creative work and how it advances
Doing—procedures	The different techniques creators use at different stages of their activity
Doing—tools	The material tools used
Doing—time/place	When and where creative work is done
Undergoing—material	The relation to the physical/material environment
Undergoing—social	The relation to the social environment and the nature of social interactions
Undergoing before doing	Everything that prepared the creator for the work
Undergoing final result	Perceiving and judging the final outcome
Emotion	Emotional experience at the beginning, during and at the end of activity

journalism, A—advertising, SM—social media/YouTube; followed by the respondent's number from 1 to 12.

The thematic analysis resulted in three themes: (1) different views of the creative process, (2) similarities and differences in pandemic video communication, and (3) interdisciplinary collaboration.

Visualisation

Results from the analysis were visualised in a bubble chart. This novel chart was developed as a means to visualise qualitative interview data. The chart summarises main themes and inter-related sub-themes, with specific topics attached as bubbles colour-coded according to the professional domain. In the present study, exploring similarities and differences in pandemic video communication, health-related domains were colour-coded with cold colours (blues) and creative communication domains were colour-coded with contrasting warm colours (yellow/orange/reddish purple), allowing for easy visual comparison between all professional domains and the two broader professional groups. The chosen colours are from Okabe and Ito (2008) colourblind barrier-free colour pallet. The novel bubble chart summarises and brings forth key topics from the analysis of the interviews, as well as differences and similarities in participants' foci.

RESULTS

Different Views of the Creative Process

The theme *different views of the creative process* describes similarities and differences relating to the creative process of creating pandemic video communication identified across the six professional domains. The main differences were found in the areas of: *doing*—relating to stages and phases of creative work, the procedures, and tools that are used, and whether these

activities relate to specific times and places; in *undergoing*—relating to social interactions and before doing activities; and in *emotion*—whether emotions are experienced during any of the stages of the creative process, or spoken of at all. The most obvious differences in how participants relate to the creative process can be found between the two broad groups—health professionals and creative communicators (**Figure 1**). These two groups differ in their view on and understanding of the creative process as a whole, and similarities are found across domains within these two groups: creative communicators talked in-depth about the entire creative process, whereas health professionals talked mainly about obstacles and undergoing before doing.

Health Professionals

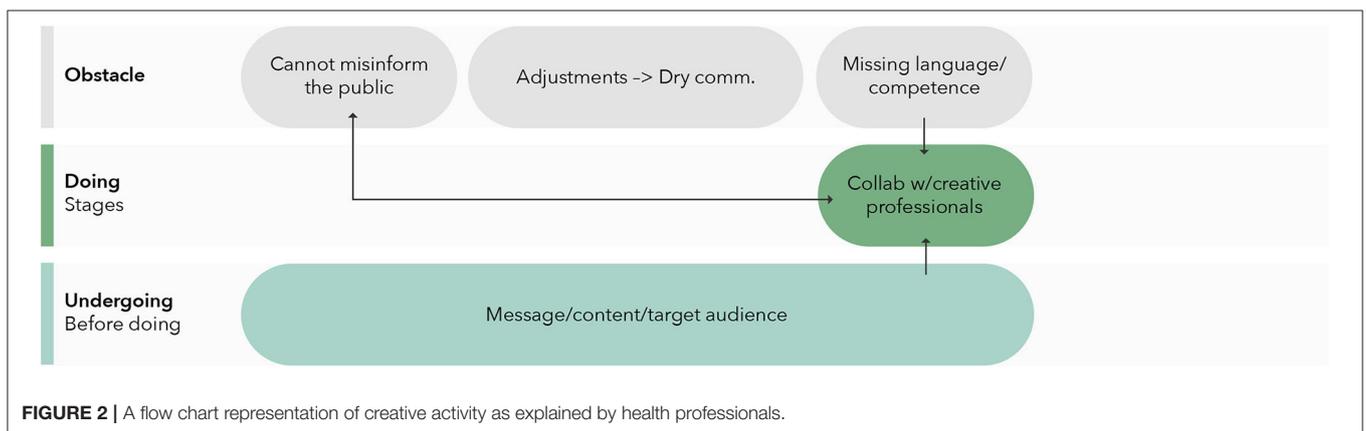
In the creative activity, as explained by health professionals (**Figure 2**), the *Obstacles* experienced include the constant adjustments needed to communicate correct and scientific information which often leads to “dry” communication (H1). Such adjustments include ensuring that wrong information is not given to the public, to patients, internally within the healthcare system, or that you say anything that implicates someone else in that context such as the management, other entities, clinics, employees, or anything else. Health professionals said they lack the competence necessary to know what to do and how to create pandemic video communication. They described lacking the right language to be precise in their orders to creative communicators which lead to “a lot of trial and error” in terms of getting communication right (H2). The research and preparation stages before doing involve clarifying what messages they want to communicate and defining the right target audiences. They expressed uncertainty towards how to approach the *doing* stages and that they depend on collaboration with creatives/external agencies to help them with these stages in the process.

Public Health Professionals

In the creative activity, as explained by Public Health professionals (**Figure 3**), the *Obstacles* experienced related to the time pressure of getting information out quickly and timely during a pandemic, and also the time-consuming process of creating videos that are encouraging yet hold scientific standards of accuracy. They also face challenges in getting the content validated by scientists and to get “science nerds” to some extent “turn a blind eye” without being unreasonable (PH4). The research and preparation stages before creativity take place involving defining truthful and understandable messages and gaining important knowledge about the target audiences including their capabilities and health competence. It is considered important to reflect uncertainty behind a message, yet exactly how much uncertainty to communicate was referred to as a “big dilemma” (PH3).

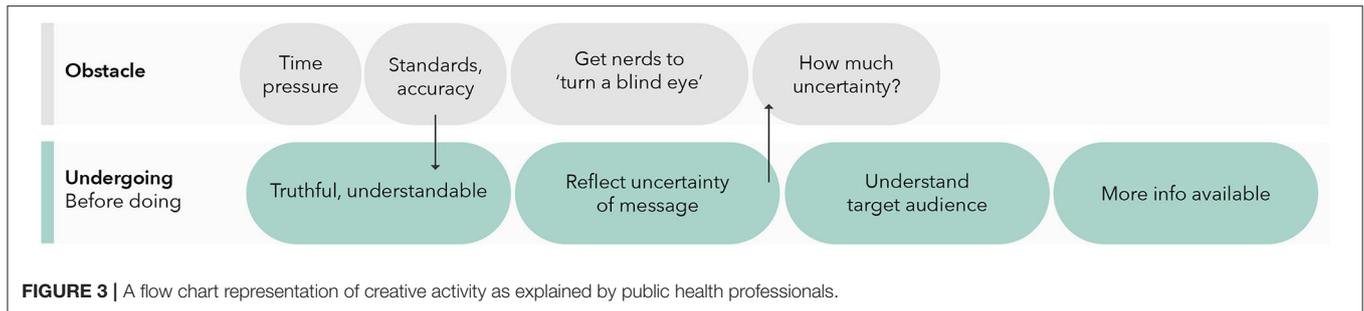
Film/Science Communicators

In the creative activity as explained by Film/science communicators (**Figure 4**), *doing* stages, procedures, and tools, were the main focus. Doing stages were described as fluid in terms of there being an openness on returning to early ideas when something does not work out as expected or



when obstacles occur. Openness to ideas and “madness” is also important because once you turn to objectivity and science, it is difficult to turn back to madness, but if the two meet, you can

have some interesting outcomes (F6). *Undergoing Social* concerns keeping close communication and a regular feedback loop with the client and collaboration with scientists/health professionals



to validate content. *Emotions* are experienced at various stages of creative activity and can include disappointment, and frustration, and sometimes feeling “heavy” when ideas are cut down (F6).

Video Journalists

In the creative activity, as explained by video journalists (Figure 5), *Impulsion* is presented as individual ideas by video journalists during morning meetings. *Undergoing before doing* involved attending press-conferences and then translating and simplifying this information during the doing stages. *Doing stages, procedures, and tools* involved choosing the format of the video, translating and simplifying the information, making creative choices relating to editing, graphics, images, and sound. *Obstacles* faced were the difficulties in reaching people during a pandemic, owing to communication being primarily electronic. Great emphasis is given to the doing stages and tools relating to choosing tone, video clips, and graphic elements.

Advertising Professionals

The creative activity as explained by advertising professionals (Figure 6) illustrates a clear process of research and activities *before doing* which leads to the development of an internal brief to the creative team. Multiple interconnections between *stages, social, emotions, and obstacles* follow when the creative teams work through the creative process and involve clients, third parties, and partners. The stages during which creatives are at work were referred to by the non-creative informant in this domain as when the “magic happens” and “the unexpected” (A9). However, the creative informant stressed that while to outsiders it might seem magical, yet to those who do it, it is a process. *Emotions* are related to difficulties in working virtually in teams due to COVID-19 restrictions, because important aspects of communication, such as body language, are lost.

SoMe/YouTube

The creative activity as explained by SoMe/YouTube professionals (Figure 7) shows clear interconnections between *impulsion* to create and the research, practical and creative procedures that are carried out as a result. One participant explained that impulsions are usually triggered by something in the media, or in the news, an inspiration or something that irritated them. Doing stages follow a clear process of scriptwriting, filming, editing and adding audio-visual means, and uploading the video to YouTube/social media. *Social and before doing* included interacting with target audiences

to understand their needs and their online habits (i.e., what platforms are they on) and, if relevant, understanding what kind of influencers or celebrities they trust. An *obstacle* mentioned in the context of YouTube was that of making changes to a video and reuploading it which meant the “losing all views” gained for that video (SM11).

Pandemic Video Communication

Two sub-themes emerged for the theme *pandemic video communication: content and form*. Several topics relating to content and form further emerged when participants spoke of creating pandemic communication for the general public. While health and public health professionals primarily discussed topics relating to content, such as quality control and important considerations when translating scientific content into video, creative communication professionals emphasised form, including audio-visual means, choice of presenter, and how to make the message stick. The bubble chart in Figure 8 shows the summary of sub-themes and topics according to professional domains. An interactive version of this graph can be found at https://covcom.org/interactive-charts/covcom_bubblechart1.html. This will be further outlined in the preceding subsections.

Content

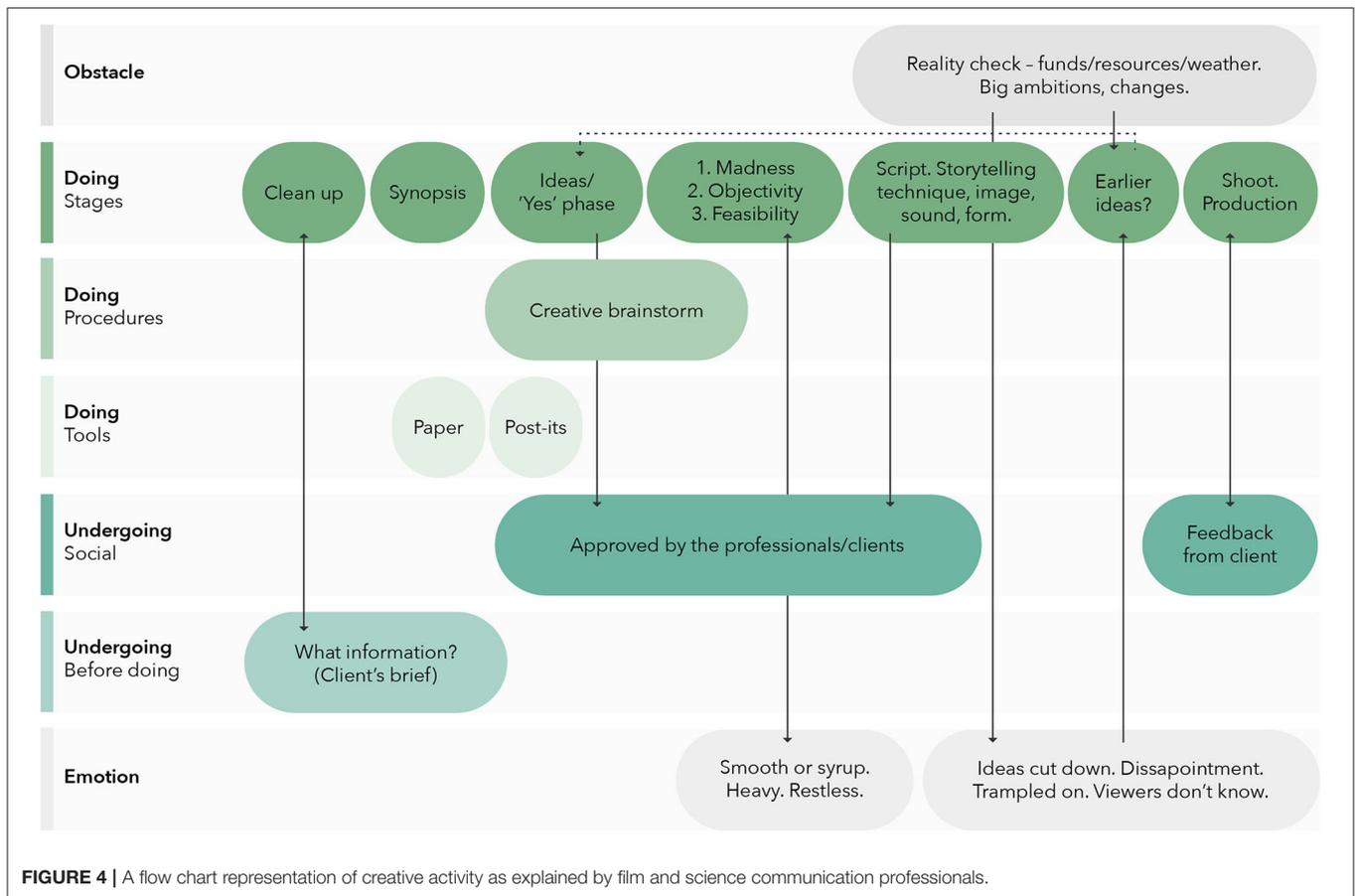
Four topics relating to content were identified: quality control, translation, timing, and framing/expression.

Quality Control

Health and public health professionals emphasised the importance of providing the general public with truthful, correct, and evidence-based information. They stressed that content should not be misleading, wrong, or include mistakes, but should hold a professional quality and be based on expert knowledge.

“...you need a quality control on it because there are many creators of these [videos] that are published... so both ensure good quality on the actual video, and professional quality control of the content that is published.” (H2)

Film and science communication participants also emphasised the importance of high-quality content, and that they rely on this content and quality to be provided to them by the scientists/clients. Likewise, SoMe participants emphasised the importance of high-quality and evidence-based content to create trust and fight misinformation on social media.



Health and public health professionals suggested showing the source of the information/content in the videos, either by including them directly in the videos or having this information easily available, for example in the textual video description (i.e., on YouTube) or as a URL at the end of the video or in the description.

Translation

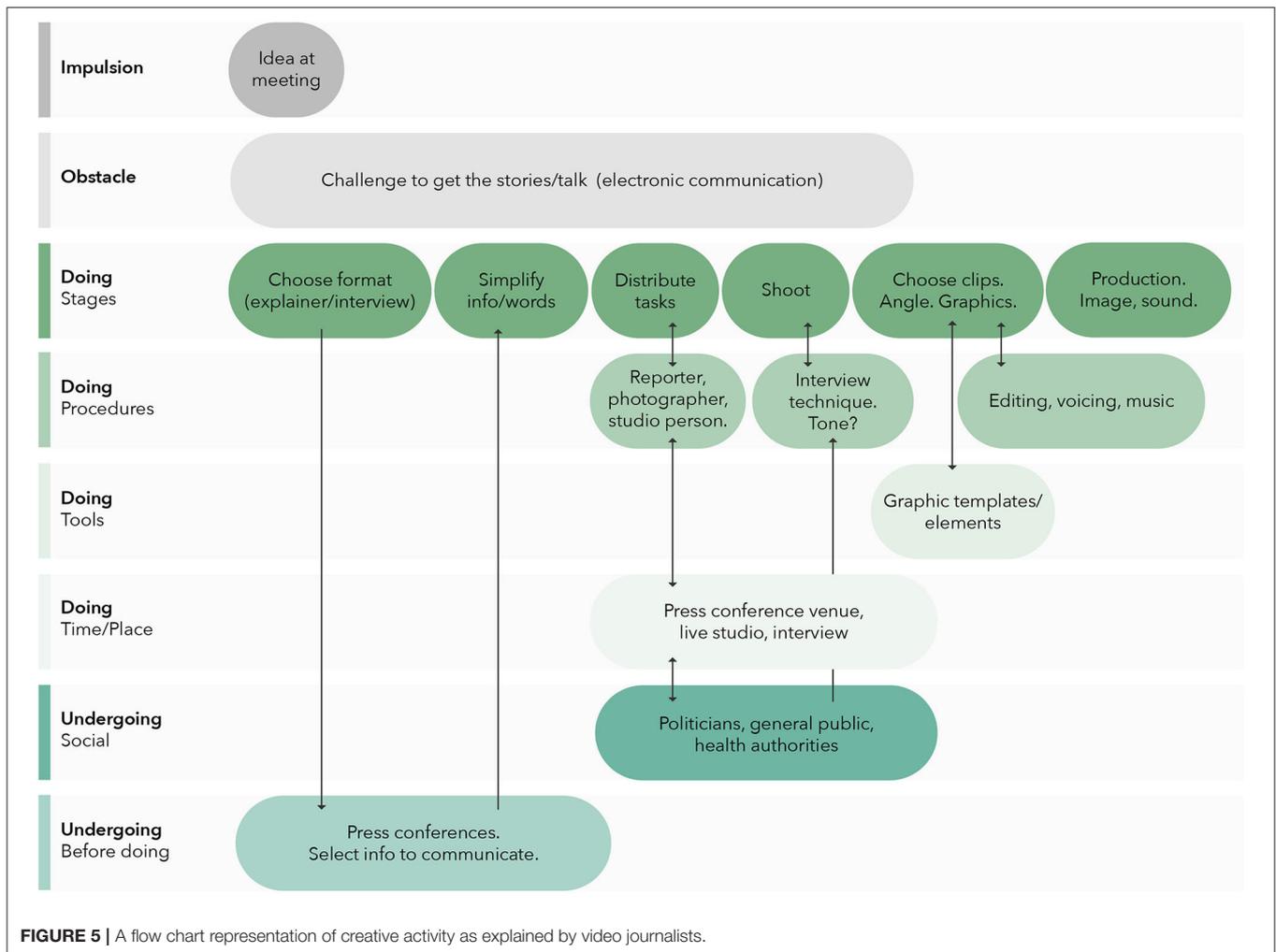
The creative communicators all emphasised the need to simplify complex scientific information when communicating to the general public. Participants spoke of the large amounts of information to take in during a pandemic, and that it can be difficult to distinguish important messages from the less important ones. Film/science communicators explained that at the start of a pandemic, in particular, people are unsure about what they are supposed to do, and it is as if they have come to a new place with completely different rules, so they need clear information. They suggested focusing on one topic per video so that they can communicate that topic a little more in-depth. Video journalists stressed the need for pointed, clear information:

“...sometimes we deliver pointed information rather than nuanced information... this is to give people answers to questions they are wondering about and not answers to everything they are not wondering about in a video...” (VJ8)

Health experts expressed that they did find this process, to simplify information without it becoming “corny”, difficult (H2). Participants from health, public health, and video journalism all discussed the importance of understanding who the target audiences are. A video journalist talked of the importance of having “ears on the ground” to understand what people care about (V7). Health and public health participants suggested involving people from the target audience and using many formats to reach more people since audiences’ needs are very different.

Timing

A social media professional explained how videos that work the best on YouTube are either *timely*, videos that are published as something new is happening/has just happened, or *timeless*, videos that concern topics that will not go out of date or lose interest in the general public straight away. Similarly, video journalists emphasised the need to be timely with releasing new information, as the different stages of a pandemic calls for different types of information and news points. A public health participant mentioned timing as an important factor when working with external creative video communication companies because the content must still be of interest or valid when the video is published.



“... good example of having a very good idea, both content-wise and visually... the vaccine was going to be spread to all parts of the country, and now we were going to start, and we were going to take back everyday life. That was the reality between Christmas and New Year’s. And then January arrives. Sky high infection rates... So we had to put it [the video] on hold.” (PH4)

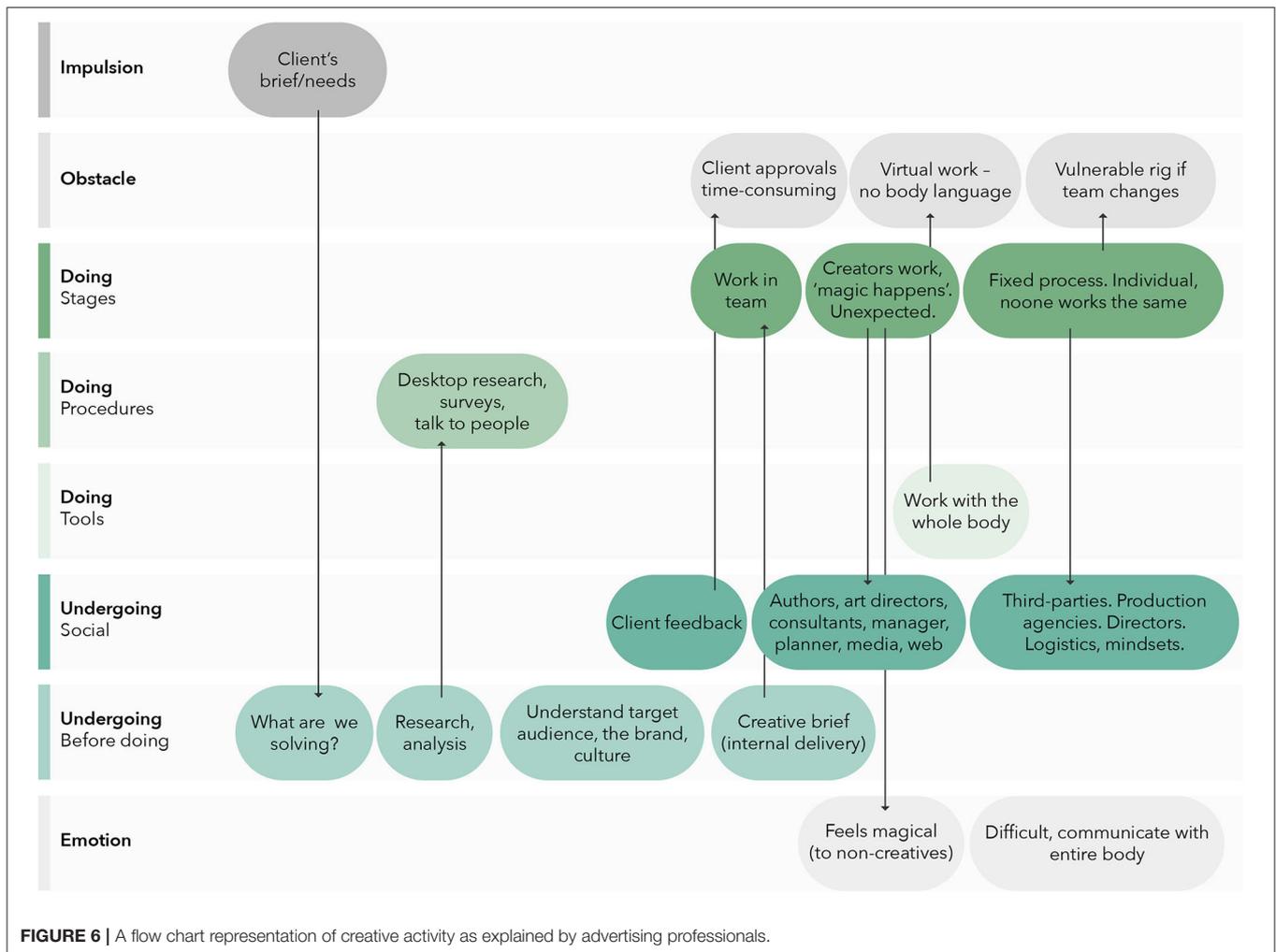
Framing/Expression

The importance of *how* a message is framed and communicated was a topic raised by many creative communicators. Film/science communicators spoke of the initial choice they would make between creating either a science-based or a metaphor-based video. Further, if the video is from the authorities, they suggested it be “sober”, and that top-down communication should be avoided as it tends to exclude and irritate certain groups, potentially feeding into scepticism and misinformation. An advertising participant too felt there had been too much of the authorities’ perspective, and not enough of the general public perspective, and spoke of using social influencing principles to influence peoples’ behaviour. For example, focusing on the large number of people who *do* get vaccinated might influence others

to get vaccinated too. They were of the view that pandemic-related videos should be “human” and not “clinical”, and had chosen to focus on solutions rather than on the pandemic itself in their advertising campaigns, due to a sense of corona fatigue in the general public.

“I want to throw up when I see all those ads that start with ‘now that we are in this situation’... we do not need that first reference because we are there. Mentally we are in this situation so you do not need to say that we are here, just give me the solution... some weeks it was really, oh God we really have to talk about the pandemic...and then...no we definitely should not talk about the pandemic.” (A10)

Social media professionals too spoke of corona fatigue among young people, which had led them to focus on young people’s mental health, on unity, activities, positive movements in society, and on creating a sense of community online, rather than on the disease itself. Once the initial urgent need for pandemic-related information was over, they had decided to take an edutainment (educational entertainment) approach to pandemic video communication.



“...a lot of what we do is what we call edutainment, so it is attitude-forming content, wrapped in in a way that makes kids and young people think it is engaging and actually take it in... in the places they actually spend time which is social media during their spare time, and it is actually at school...” (SM12)

Form

Four topics relating to form were defined: narrative/style, audio/visual means, feelings/emotions, and presenter.

Narrative/Style

Video journalists found that instructional/explainer videos had a good reach when something new, for instance face masks or COVID tests, was introduced. However, once this information need had been filled, videos with news points attracted the most traffic. To make sure their viewers watch the videos through, they use specific storytelling methods to guide the viewers through the information.

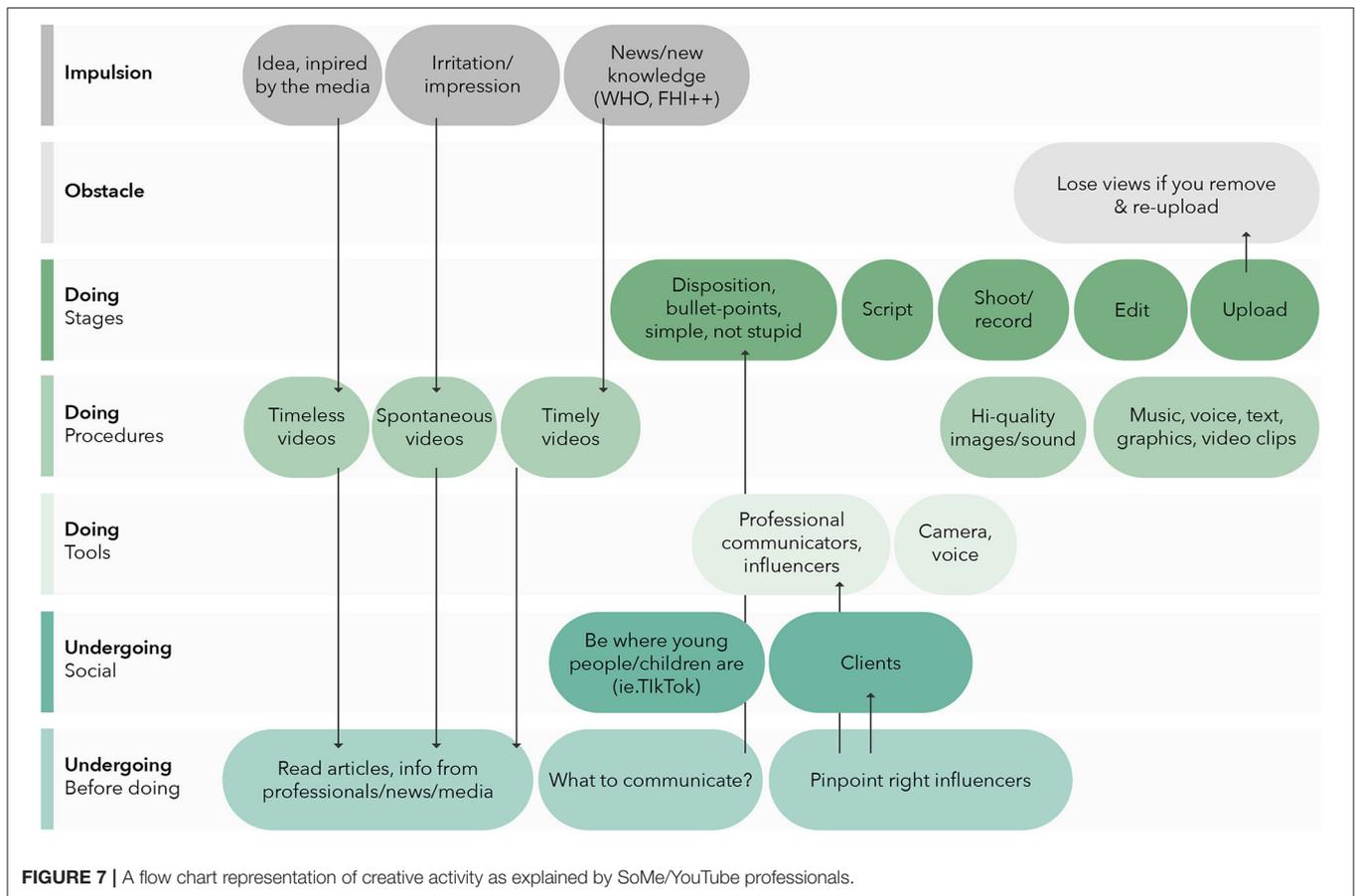
“Trim away as much fat as possible, do not be scared of removing things that can be partly significant, but that still might not contribute to bring out the story and get to the main point

which is at the end... Reversed pyramid... the answer comes at the end of the story... We see that then our viewers have 70-80-90% complete rate on the videos instead of 20-30% if you give the answer at the beginning and then it fades out to something uninteresting.” (VJ7)

An advertising professional said that at the start of the pandemic they had created commercial campaigns using “looking forward to seeing you again” type narratives. However, only a few weeks into the pandemic this type of narrative was no longer appropriate due to corona fatigue.

Audio/Visual Means

Most participants mentioned that videos should not be boring, as they will not reach out, and thus hinder learning, recall of information, and comprehension. Since image material for the pandemic has been quite “boring” and undramatic, usually photos of health authorities or the prime minister, syringes, and the virus, video journalists said the heading and the text/image combination must be interesting so that viewers choose to click on the video. A social media participant highlighted that a video should be “spectacular”: it is a visual medium and if it is simply a



person talking to the camera, “one might as well create a podcast” (SM11). On social media and YouTube, they said there is a need for new things to happen on the screen throughout the video to keep the viewers’ attention to prevent them from getting bored. Creative communicators said viewers’ attention can be held by using graphics, images, animation, sound, and humour that help build on what a person is saying, and for the viewer to be able to “hook” information.

“To show how Corona transmits, not just talk and say—like the talking heads—as we call it. Then you lose viewers. If we have something to look at while we get the information, and we can hook things, then I think it is easier to pay attention... Add images.... It can be general images. That is the minimum we can do... make graphics in which we explain... I have the impression that this what makes people understand more easily and want to watch the whole video.” (VJ8)

“Wrapping” the information was a term mentioned by the creative communicators. They all emphasised how audio-visual means can help explain and communicate the information more effectively and help people remember it.

Both film/science communicators and video journalists mentioned duration as an important factor—and the need for short, to-the-point videos. A video journalist commented

that videos by health authorities tended to be “unbelievably long” (VJ8).

Health and public health participants expressed scepticism towards creating videos that were “too creative” or “too fancy or glossy”, particularly if the videos are by the health authorities. Having collaborated with external creative agencies during COVID-19, they found that while the video created was aesthetically beautiful, it did not seem to reach people, perhaps owing to viewers’ “advertising-blinds” coming down for such high-quality productions (PH2).

Advertising and film/science communication participants shared the view that there are limits to how creative pandemic videos from health authorities should be. However, as the public has heard variations of the same information repeatedly, a video must add something new or stand out. Film/science communicators emphasised that videos should be of good quality, highlighting the importance of finding a balance between content and creativity.

Feelings/Emotions

Advertising professionals spoke at length about their approach to making communication that appeals to and triggers people’s emotions and creates empathy. They work according to marketing principles, aiming to create something distinct and

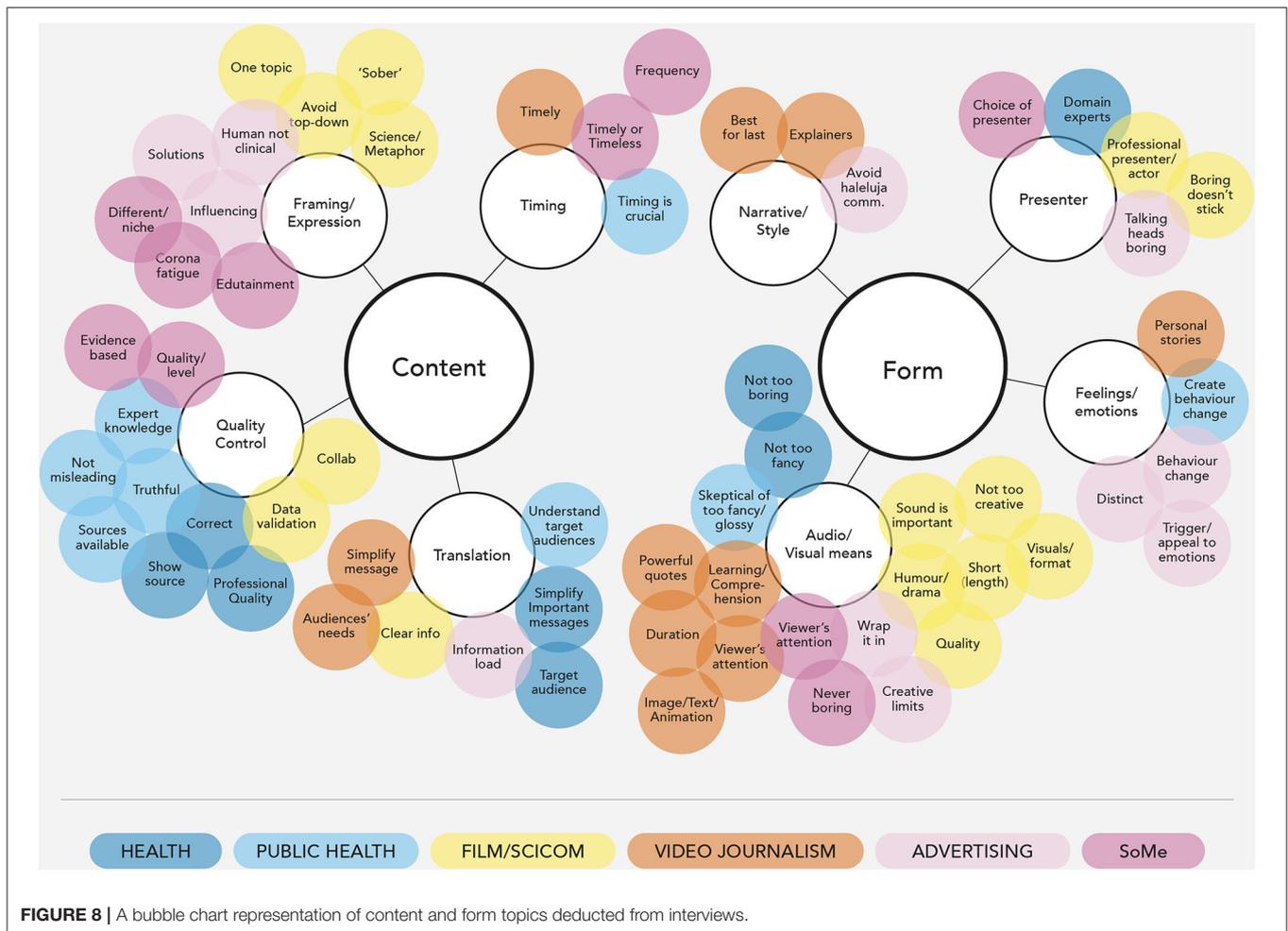


FIGURE 8 | A bubble chart representation of content and form topics deduced from interviews.

recognisable for the brand. Emotions are key, and in their view, videos should not just be rational and clinical.

“... these are often the things... that together makes something stand out. It is not made to stand out, but it is something that captures the viewers' attention... makes you start laughing, crying, gives you the chills... smile or chuckle... always something which will...stand out.” (A9)

Video journalists, too, spoke of feelings and emotions in relation to what videos work best in terms of reporting and editing, such as personal storeys about long-lasting effects from Corona, and tend to have better reach than pure fact-based videos.

Presenter

Healthy participants said they tended to use scientists/health professionals to present content in videos because it is their field of expertise. They experience them as credible because they understand the medical information behind the message. However, one participant did note that health personnel or scientists sometimes find it tricky to connect this medical information to a current situation. Film/science communicators, on the other hand, noted that professional presenters are trained

and usually better at delivering information to the camera. A SoMe participant spoke on the importance of considering who you are communicating to when choosing a communicator for your videos, and of the importance of combining both the style and language of the communicator with the message that is communicated because viewers value credibility in a presenter.

Film/science communicators, video journalists, and advertising professionals found “talking head” videos, e.g., an expert talking directly to the camera without any other visual means, “boring” and circumstantial. In their experience, such videos are likely to appeal only to those that are particularly interested.

“... It is dead boring. No one wants to sit and watch an expert sitting dryly talking into the camera. No one bothers, it does not stick.” (F5)

Interdisciplinary Collaboration

Two sub-themes relating to the theme *interdisciplinary collaboration* were defined: *balance between creativity and science* and *close dialogue*.

Balance Between Creativity and Science

A key challenge raised by creative communicators was that of taking the “extreme” amounts of information scientists consider equally important, and translating it into something watchable, without removing anything crucial or changing the meaning of the message. Sometimes simplifying it to such a degree that to scientists may seem “too simple” or “stupid”.

“...we sort of work in the simplification business or the translation business. We take a complicated issue or a complex or difficult topic and make it both understandable for people who know nothing about the topic, but not only understandable, but also digestible.... we have to wrap it in in a way that it works emotionally... laugh...touched...sad...very strong... Researchers, people with very academic backgrounds, can think that what we do is too simple...” (A10)

The film/science communicators stressed that not all information is suitable for film because film gets boring to watch very quickly. A film/science communicator also spoke of the risk of clarifying the message so much that no one wants to listen, emphasising that without the scientific information behind it you say nothing. Creative communicators highlighted how they depend on scientists' competence for quality and verification of content, as their expertise is on target audiences, platforms, storytelling, and audio–visual techniques, and how these creative choices change emotions and engage viewers to ensure the video will be seen at all. Health professionals spoke of the high economic costs involved in working with external agencies and experienced it both as a challenge and a necessity that creative communicators tend to push further creatively than they would themselves.

“... it is a meeting point between two professional environments... we actually have to work together there... it is scary for us to have to contact professionals working creatively with communication in case it turns into something completely different to what we think it should be... but then we also need this input to make it into something different than we would have made ourselves...” (H2)

Close Dialogue

Film/science communicators expressed difficulties in collaborating with someone who is very set in their scheme or protectionist of their subject. Similarly, a SoMe professional explained that clients are sometimes scared of making mistakes, of getting into trouble with their superiors, or very protectionist of their competence, and these are obstacles for successful collaboration. They had also experienced surprisingly low competence and interest in SoMe platforms, influencers, and what profiles to use as presenters from their clients.

Participants across all domains emphasised the importance of dialogue and close conversations across disciplines throughout the creative process. This can be challenging because the other party often “think differently” (PH4). Both film/science communicators and video journalists recommended that scientists and creative communicators should take each other seriously, be respectful of each others' expertise, and meet in the middle regarding how much information to include. To gain

better communication and to avoid “Chinese whispers” type situations, film/science communicators recommended cutting out the middlemen or advertising agencies and having a direct conversation between the scientists and the video producing team, if possible (FC5). SoMe professionals emphasised the importance of establishing understanding and security of the different roles the various disciplines have. Advertising and SoMe professionals commonly involve the client once some creative directions have been set, so that they can give feedback and input, yet said it varies to what extent clients wish to be involved.

“...for all sales and collaboration it is about making the others safe, to create trust, and there is usually a bit of scepticism at the start, but then you just have to prove yourself. Perhaps particularly in relation to the authorities that individuals are perhaps particularly scared of making the wrong moves, for good reasons.” (SM12)

DISCUSSION

This study has highlighted multiple similarities and differences between health professionals and creative communicators relating to the creative process and their approaches to pandemic video communication. Creative processes are dynamic and non-linear, often with interconnections between stages and the various actors involved in the process. This study has shown how this constitutes a challenge for public health professionals to know when to give their input or how to take part in the process of creating public health communication. The creative communication professionals, on the other hand, have their expertise in creativity, storytelling, audience reach, and communication strategies, and rely on the inputs of public health experts to deliver high-quality content. Creating communication that appeals to and triggers people's emotions and creates empathy, was highlighted as important among the creative communicators, yet was not mentioned by health experts in this study. This lack of focus on the emotional appeal in science communication has been highlighted numerous times before (Mooney, 2010; Davies and Horst, 2016). The way the two professional groups, the health and communication professionals, view the creation of public health communication is fundamentally different (Figure 1). A recent literature review on how science health video communication outcomes are shaped by recipients' characteristics also found that, and there has been limited focus on emotional outcomes in health video communication research (Lungu et al., 2021).

According to Moirano et al. (2020) diversity in expertise is beneficial to interdisciplinary collaboration because diverse perspectives can help with problem-solving, creativity, and innovation. Visually communicating risk information and concepts is deemed important in making risk information more accessible and understandable to the public, to attract more and longer attention, and is believed to be remembered better than text or diagrams (Eppler and Aeschmann, 2009). However, risk management often lacks the time, tools, or space needed to *create*, something which was also expressed by health professionals in this study. This present study found that

participants from health domains assigned great importance to and efforts on content, but were unsure or lacked experience in how content is translated through form and creative choices such as presenters, narratives, and audio–visual means. A similar creative gap was identified also in a previous study on COVID-19 videos by health authorities (Shortt et al., 2021). Creative communicators, on the other hand, emphasise and specialise in form, yet depend on health professionals, experts, and scientists to provide and validate the content. In combination, these different approaches to communication cover a lot more ground than do the individual professional domains (**Figure 8**), and could potentially achieve a better balance between scientific rigour and high-quality evidence-based content on the one hand, and creative choices relating to large-scale reach and optimised communication on the other.

While diversity in expertise is considered positive for interdisciplinary collaboration, diverse thinking styles and perspectives can also lead to challenges, lack of consensus, us-vs.-them mentalities, misunderstanding, and conflict (Moirano et al., 2020). The fusion model of global team collaboration (Janssens and Brett, 2006) was developed for use in culturally diverse teams and focuses on coexistence of different cultural precepts of teamwork and values the distinct perspectives of all team members. It serves as a useful guide to interdisciplinary collaboration for pandemic video communication. In the present study, participants come from different professional cultures with different professional languages. In Janssen and Brett's model, native language and the power of team members' units within the organisation contribute to unequal power. In our study, professional language and media experience are identified as factors potentially contributing to unequal power when health experts and creative communicators engage in collaborative creative work (**Figure 9**). Public health professionals often lack the language and experience needed to place the best order for creative communication, resulting in a lot of trial and error when attempting to create communication. This lack of a common language could influence team members' contribution and how the information they do contribute with is integrated in the final decisions – represented here by the final video. Overcoming language differences is important for meaningful participation from individuals involved in interdisciplinary collaboration, and it could be useful to develop rules for clarification when something is not understood, repeating information using different vocabulary, or checking comprehension (Janssens and Brett, 2006).

There is a need for a shared common ground for talking about communication and creation processes. To outsiders, creative activity can seem “magical” or mystical, and creative communicators should thus also take an active role in demystifying the creative process by involving the client in creative workshops and feedback loops throughout the process.

Visualisations may also help to achieve shared common ground (Yusoff and Salim, 2015) by bringing forth critical themes related to content and form in creating video communication. This study has introduced the bubble chart, a novel graphical presentation of qualitative data. The bubble chart visualising the interview data in this study demonstrates how professionals

highlight the overarching themes stemming from the interviews differently. The interactive version of the bubble chart for the study (https://covcom.org/interactive-charts/covcom_bubblechart1.html) also allows for bringing forth what, for example, two and two professional domains focus on, further emphasising differences and similarities which are useful to be aware of for participants from each domain. Seeing this clearly might aid the creation of the much-needed common ground for creating public health communication that is trustworthy, scientifically correct, and with the necessary simplification and creativity needed for large-scale public outreach. In relation to the fusion model applied to interdisciplinary collaboration, the bubble chart could be a useful tool to help illustrate important cultural precepts relating to the expertise and experience of participants' various professional domains involved in the collaboration.

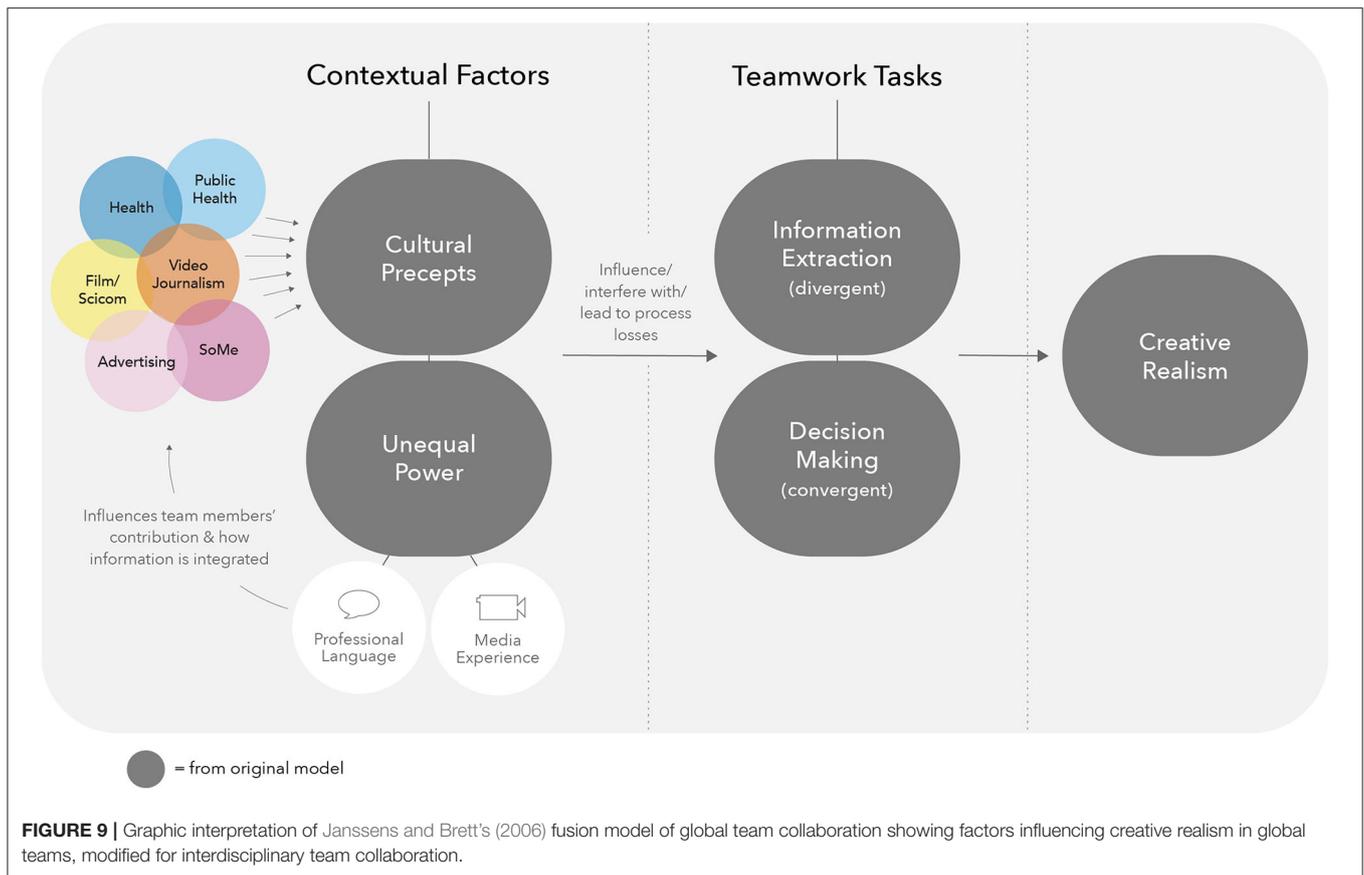
Creative communication professionals often meet clients with a lack of knowledge of, or interest in, creativity and digital communication, hence spend considerable time educating their clients and trying to fill this knowledge gap. However, due to the time pressure during a pandemic, and the limited budgets generally available in the public sector, the clients, i.e., public health professionals, would benefit from knowing more about how creative communication processes work, and thereby how they can best get involved and be a valuable resource. This could potentially help save both time and money, as well as give the health professionals a stronger ownership of the creation process and the end communication result.

This research contributes to academic work related to creative processes, pandemic and public health communication, and interdisciplinary collaboration. The study informs public health communication theory by identifying factors related to content and form that are important when creating audio–visual pandemic public health communication, and identifies gaps between views and foci of health experts on the one hand, and professional creative communicators on the other. The study has theoretical and practical implications for both researchers of creative processes and experts/practitioners in health communication who wish to develop better health communication for future large-scale health challenges such as pandemics, even for better science communication more broadly. The study develops a new visualisation method for visually comparing and presenting qualitative interview data which has potential uses for researchers within and beyond the fields of health and pandemic-related communication.

We suggest future research carries out testing of creative factors in pandemic video communication to pinpoint what kind of balance between content and creativity works best. We also recommend studies that observe interdisciplinary creative processes and contribute to more in-depth understanding of what constitutes successful interdisciplinary collaboration, as well as to further develop the fusion model, specifically for interdisciplinary creative collaboration.

Limitations

The study consists of qualitative data that produce culturally situated knowledge which cannot be generalised to all



professional domains included in the study, or across other contexts (Tracy, 2010). For instance, views and experiences of health experts and creative communicators in this study are from a Norwegian context, and may differ from other professionals in similar roles both nationally and internationally. Findings and visualisations presented aim to provide insights rather than generalisations, yet transferability to other contexts may be achieved (Tracy, 2010). As the study was conducted during the COVID-19 pandemic, reflections on what type of communication works best may change through the various stages of a pandemic. Future, post-pandemic, research should replicate this research with larger and international sample-sizes to identify how and whether views on communication practises change according to the various pandemic stages and depending on the country.

CONCLUSION

Lack of creativity and reach in health authorities' pandemic-related health videos call for more integrated interdisciplinary collaboration between health professionals and creative communicators. Similarities and differences relating to both the creative process – namely health experts' lack of experience across most stages of the process – and to content and form in pandemic video communication – particularly health experts'

focus on quality control and translation of content, and creative communicators' focus on form, including audio-visual means, framing, and emotions – have been charted out. The key to improving pandemic-related video communication appears to lie in striking the right balance between high-quality and evidence-based content and creativity, creating content that is not uninteresting or too complicated, yet not too fancy or glossy so that it reminds viewers of advertisements or distracts from the core message. This study found that both health professionals and creative communicators play crucial roles in reaching a solid end result, and we suggest a fusion model approach to interdisciplinary collaboration.

DATA AVAILABILITY STATEMENT

The datasets presented in this study can be found in online repositories. The names of the repository/repositories and accession number(s) can be found in the article/**Supplementary Material**.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Norwegian Centre for Research Data (Ref

Number 703372). The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

This study was conducted by an interdisciplinary team of researchers spanning the fields of health, science communication, risk communication, creative communication, and digital media. MTS and JR had the idea for the study. MTS and SHB read and discussed all the transcripts. MTS, SHB, and SW discussed the transcripts and initial coding and methodology approach. MTS analysed the data, developed the visualisations, and drafted the initial manuscript. SHB, JR, SW, DAL, IS, and HT provided critical feedback on the manuscript and approved the final manuscript. All authors contributed to the article and approved the submitted version.

REFERENCES

- Berg, S. H., O'Hara, J. K., Shortt, M. T., Thune, H., Brønnick, K. K., Lungu, D. A., et al. (2021). Health authorities' health risk communication with the public during pandemics: a rapid scoping review. *BMC Public Health* 21, 1401. doi: 10.1186/s12889-021-11468-3
- Botella, M., Nelson, J., and Zenasni, F. (2019). It is time to observe the creative process: how to use a creative process report diary (CRD). *J. Creat. Behav.* 53, 211–221. doi: 10.1002/jocb.172
- Botella, M., Zenasni, F., and Lubart, T. (2018). What are the stages of the creative process? What visual art students are saying. *Front. Psychol.* 9, 2266–2266. doi: 10.3389/fpsyg.2018.02266
- Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qualit. Res. Psychol.* 3, 77–101. doi: 10.1191/1478088706qp0630a
- Davies, S. R., Halpern, M., Horst, M., Kirby, D. A., and Lewenstein, B. (2019). Science stories as culture: experience, identity, narrative and emotion in public communication of science. *JCOM.* 18, 1–17. doi: 10.22323/2.18050201
- Davies, S. R., and Horst, M. (2016). "Images, spaces, and emotions: Non-discursive aspects of science communication," in *Science Communication* (London: Palgrave Macmillan).
- Davis, L. S., León, B., Bourk, M. J., and Finkler, W. (2020). Transformation of the media landscape: infotainment versus expository narrations for communicating science in online videos. *Public Understand. Sci.* 29, 688–701. doi: 10.1177/0963662520945136
- Dewey, J. (1980). *Art as Experience. A Perigee Book.* New York, NY: Berkley Publ. Group.
- Eppler, M. J., and Aeschmann, M. (2009). A systematic framework for risk visualization in risk management and communication. *Risk Manag.* 11, 67–89. doi: 10.1057/rm.2009.4
- Erviti, M. C. (2018). *Producing Science Online Video. In Communicating Science and Technology Through Online Video, edited by Bienvenido León and Michael Bourk.* Milton Park: Routledge, 28–40.
- García-Avilés, J. A., and de Lara, A. (2018). "An overview of science online video: designing a classification of formats," in *Communicating Science and Technology Through Online Video*, eds B. León and M. Bourk (Milton Park: Routledge), 15–27.
- Glaveanu, V., Lubart, T., Bonnardel, N., Botella, M., de Biais, P., Desainte-Catherine, M., et al. (2013). Creativity as action: findings from five creative domains. *Front. Psychol.* 4, 176. doi: 10.3389/fpsyg.2013.00176
- Heffner, J., Vives, M., and FeldmanHall, O.riel. (2021). Emotional responses to prosocial messages increase willingness to self-isolate during the COVID-19 pandemic. *Pers. Individ. Dif.* 170, 110420. doi: 10.1016/j.paid.2020.110420

FUNDING

The COVID Communication: Fighting a Pandemic Through Translating Science (COVCOM) Project has received funding from the Trond Mohn Foundation, under Grant Agreement Number TMS2020TMT10 and the University of Stavanger.

ACKNOWLEDGMENTS

We wish to acknowledge the COVCOM user panel for providing feedback on our work in progress.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: <https://www.frontiersin.org/articles/10.3389/fcomm.2022.886768/full#supplementary-material>

- Hut, R. W., Land-Zandstra, A. M., Smeets, I., and Stoof, C. R. (2016). Geoscience on television: a review of science communication literature in the context of geosciences. *Hydrol. Earth Syst. Sci.* 20, 2507–2518. doi: 10.5194/hess-20-2507-2016
- Janssens, M., and Brett, J. M. (2006). Cultural intelligence in global teams: a fusion model of collaboration. *Group Org. Manag.* 31, 124–153. doi: 10.1177/1059601105275268
- León, B., and Bourk, M. (2018). "Investigating science-related online video," in *Communicating Science and Technology Through Online Video*, eds B. León and M. Bourk (Milton Park: Routledge), 1–14.
- Li, H. O., Bailey, A., Huynh, D., and Chan, J. (2020). YouTube as a source of information on COVID-19: a pandemic of misinformation? *BMJ Glob Health.* 5, e002604. doi: 10.1136/bmjgh-2020-002604
- Lungu, D. A., Roislien, J., Wiig, S., Shortt, M. T., Ferré, F., Berg, S. H., et al. (2021). The role of recipient characteristics in health video communication outcomes: scoping review. *J. Med. Internet Res.* 23, e30962. doi: 10.2196/30962
- Malterud, K., Siersma, V. D., and Guassora, A. D. (2016). Sample size in qualitative interview studies: guided by information power. *Qual. Health Res.* 26, 1753–1760. doi: 10.1177/1049732315617444
- Moirano, R., Sánchez, M. A., and Štěpánek, L. (2020). Creative interdisciplinary collaboration: a systematic literature review. *Think. Skills Creat.* 35, 100626. doi: 10.1016/j.tsc.2019.100626
- Moon, H., and Lee, G. H. (2020). Evaluation of Korean-language COVID-19-related medical information on youtube: cross-sectional infodemiology study. *J. Med. Internet Res.* 22, e20775. doi: 10.2196/20775
- Mooney, C. (2010). Do scientists understand the public? *Bull. Am. Acad. Arts Sci.* 63, 5–14. Available online at: www.sciencedaily.com/releases/2010/06/100629122954.htm (accessed January 10, 2022).
- Okabe, M., and Ito, K. (2008). *Color Universal Design (CUD) - How to Make Figures and Presentations that are Friendly to Colorblind People.* Available online at: <https://jfly.uni-koeln.de/color/> (accessed February 10, 2022).
- Oxman, A. D., Fretheim, A., Lewint, S., Flottorp, S., Glenton, C., Helleve, A., et al. (2022). Health communication in and out of public health emergencies: to persuade or to inform? *Health Res Policy Syst.* 20, 28. doi: 10.1186/s12961-022-00828-z
- Poels, K., and Dewitte, S. (2019). The role of emotions in advertising: a call to action. *J. Advert.* 48, 81–90. doi: 10.1080/00913367.2019.1579688
- Shortt, M. T., Smeets, I., Wiig, S., Berg, S. H., Lungu, D. A., Thune, H., et al. (2021). Shortcomings in public health authorities' videos on COVID-19: limited reach and a creative gap. *Front. Commun.* 6, 764220. doi: 10.3389/fcomm.2021.764220

- Taddicken, M., and Reif, A. (2020). Between evidence and emotions: emotional appeals in science communication. *Media Commun.* 8, 101–106. doi: 10.17645/mac.v8i1.2934
- Tracy, S. J. (2010). Qualitative quality: eight “big-tent” criteria for excellent qualitative research. *Qualit. Inquiry* 16, 837–851. doi: 10.1177/1077800410383121
- Wallas, G. (2014). *The Art of Thought*. Kent: Solis Press, 1926.
- Yusoff, N. M., and Salim, S. S. (2015). A systematic review of shared visualisation to achieve common ground. *J. Visual Lang. Comput.* 28, 83–99. doi: 10.1016/j.jvlc.2014.12.003

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Shortt, Berg, Wiig, Lungu, Smeets, Thune and Roislien. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.