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# DISINFORMATION IN DEMOCRACIES: IMPROVING SOCIETAL RESILIENCE TO DISINFORMATION

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# Introduction

The Covid-19 pandemic has resulted in an array of counter-disinformation communication challenges. In response to this, individuals, governments, civil society, and commercial actors have adapted and evolved their own communications to provide us with tools to fight this 'infodemic'. This report shares examples of innovative solutions, and hopes to encourage readers to think differently about their own communication challenges. Seven case studies have been selected and described as concisely as possible. Think inspirational coffee table book as opposed to a lengthy academic tome.

Case studies presented in this article are notable not only for the interventions themselves, but how their underlying policies and conceptual frameworks allowed them to come to fruition. For example, the Finnish case study, a collaborative social media campaign, demonstrates how government policy can enable a whole-of-society approach to psychological resilience. The Critica case study highlights how conventional public health campaigns can be complemented by innovative bottom-up targeting of smaller audience groups – groups that require more

tailored messaging approaches. The Funky Citizens case study shows us how media literacy and civic activism can be pursued in tandem, increasing the impact of both in the process.

In the interest of consistency, the UK's OASIS communication campaign model<sup>1</sup> was used to describe the interventions by their chosen **O**bjectives, their **A**udiences, the overarching **S**trategy, how the intervention was **I**mplemented, and **S**coring (in this instance, an evaluation of the intervention's impact and potential for use in other campaigns).



” Governments are communicating their Covid-19 messages through science and logic, but people respond to how they feel and the ‘bad guys’ are the ones using emotive tools.

Dr Tiffany Vora, Singularity University



## The Netherlands

# Moral Foundation Theory: Challenging the Emotive Advantage of Fake News

### Background

Good writers have known for some time that emotive content is crucial for impactful communication. Indeed, Aristotle's treatise *Rhetoric* suggested that for a message to be persuasive it must ensure three things: that the source is viewed as credible (*ethos*); it possesses a logical appeal (*logos*); and has an emotional impact (*pathos*).

Fake news is often highly emotive, using striking headlines or statements to grab one's attention. A recent study<sup>2</sup> discovered fake news headlines that elicited strong emotional responses were more likely to be believed by the reader, albeit with some caveats. Other studies show how highly emotive messages can spread faster than their emotionally neutral equivalents<sup>3</sup> and that fake news content tends more towards negative emotional sentiment than truthful

content. Some of these findings are still being debated, but data shows that emotive considerations can be key drivers for the success of fake news.

*'We found correlational evidence that overall emotional response at the headline level is associated with diminished truth discernment.'*

*Florian Heine & Ennie Wolters, Tilburg University*



So how can government communicators who tend towards logical (*logos*) messages from credible sources (*ethos*), ensure that they also consider the emotive aspect (*pathos*) when challenging fake news around Covid-19?

One approach worthy of consideration is Moral Foundations Theory (MFT). MFT was created by social and cultural psychologists seeking to understand how aspects of morality affect decision-making.<sup>4</sup> It is composed of six foundations that can be used to characterise a message's moralities and emotional appeal:

- **Care** vs. **harm**: virtues of kindness, gentleness, and nurturance.
- **Fairness** vs. **cheating**: notions of justice, rights, and autonomy.
- **Loyalty** vs. **betrayal**: virtues of patriotism and self-sacrifice for the group.
- **Authority** vs. **subversion**: virtues of leadership and followership, including deference to legitimate authority and respect for traditions.
- **Sanctity** vs. **degradation**: religious notions of striving to live in an elevated, less carnal, more noble way.
- **Liberty** vs. **oppression**: Feelings around personal and social liberties.

MFT has been used as part of post-campaign evaluations for some Covid-19 interventions but is not typically used as a tool in the planning stage of a campaign. Communication planners should reconsider this.

Using MFT criteria, a study in the Netherlands evaluated the effectiveness of a pro-vaccination communication campaign.<sup>5</sup> The campaign did not use MFT during its planning process, but this report uses the case study to explain how MFT *could* support communication planning on Covid-19 related topics.

### (O)bjective

The Government of the Netherlands sought to reduce vaccine hesitancy in parents whose children were eligible for voluntary vaccinations.

### (A)udience

Parents of children eligible for vaccinations. Note that all of the vaccinations relevant to this case study are voluntary.

### (S)trategy

The Dutch National Institute for Public Health and the Environment creates brochures that are passed to parents when their children attend mandatory health visits. The brochure is a supporting document to these visits and contains information on the child's vaccination schedule alongside







explanations of why the vaccines are required and how the child benefits.

## (I)mplementation

There are currently six different brochures, primarily tailored for children of different ages.<sup>6</sup> All of these are less than 10 pages long, written in clear language, and contain practical advice on *how* parents can get their children vaccinated and *why* they should choose to do so.

## (S)coring

The Moral Foundations Dictionary<sup>7</sup> categorises words into the six moral

foundations. For instance, the word 'protect' is categorised as a 'Care/Harm' foundation. Using this method, words within the vaccination brochures can be evaluated to give an assessment of the document's overall 'morality' characteristics and determine whether they tend towards Care/Harm or a different moral foundation.

Applying this approach to the Dutch brochures, researchers found the following on:

- Purity/Degradation and Harm/Care were the most frequently used moral foundations within the brochures, but had only a minor effect on parents' vaccine hesitancy.



- Brochures with the highest occurrences of Authority/Subversion and Liberty/Oppression had the largest positive effect on vaccine hesitancy.

Using the Moral Foundation Dictionary could allow communication planners to better appreciate the moral components of their messaging at the design stage.

This would help establish quantifiable measurements for a message's desired emotivity that could be used to estimate their likely effectiveness. This is not intended to counter fake news directly, but it could enable planners to shape truthful messaging so that it can better compete with the emotional appeal often seen in fake news content.





By offering a conspiracy information platform on Covid-19 we enabled others to raise awareness of the issue.

MSB, Operational Response Department



## Sweden

# Swedish Civil Contingencies Agency (MSB): Using Research 'Hooks' to Generate Media Engagement

### Background

As the Covid-19 pandemic swept through Sweden it was noted that the number of Swedes believing in Covid-19 conspiracy theories was increasing.<sup>8</sup> This came into focus in early 2021 during an upsurge in protests against the government's Covid-19 restrictions. Protest marches were attended by a surprisingly diverse collection of groups, whose membership spanned from the far right to leftward leaning anti-vaxxers. What brought these groups together? It became clear that many of the groups' grievances were aligned to at least one conspiracy theory – the fight against an unnamed 'globalist elite'<sup>9</sup> being particularly prevalent. That conspiracy theories can unify such a broad spectrum of the political landscape is worrying. Unfortunately, it appears to be a phenomenon across Europe.<sup>10</sup> What risks does this trend generate?

Research by the MSB<sup>11</sup> noted: *'Belief in one conspiracy theory also often leads to belief in another. Once a narrative has*

*become established that authorities and politicians cannot be relied on [it] opens the door to the notion of a 'deep state' that*







MSB's Report: 'Conspiracy theories offer people simple explanations for complex problems.'

*intentionally misleads'*. The consequence of low levels of trust in institutions can be dire, leading to reduced compliance for state-led Covid-19 interventions, such as lower public participation in Covid-19 vaccination programmes.

MSB's response to this challenge was to commission a report.<sup>12</sup>

## (O)bjective

The ultimate campaign goal was to reduce Swedish society's susceptibility to conspiracy theories which, in turn, would improve compliance with the Government's Covid-19 interventions. Two objectives were formulated to realise this goal:

- Raise awareness of the mechanisms behind Covid-19 conspiracies, increasing the public's understanding of how such theories are created and the conditions that allow them to thrive.
- Inform the media and the public how and when they should seek to act against a conspiracy theory.

## (A)udiences

The general public was the ultimate audience for the campaign, but the majority of the campaign's resources were directed towards journalists, media outlets, and other intermediary entities that would subsequently pass down MSB's messaging to their own audiences. Informing these 'go-between' bodies enabled access to groups who would not necessarily consume media directly from governmental sources. It also allowed the intermediaries to shape the tone of the messages to best suit their audiences.

*'If we want to effectively pre-bunk conspiracies then empowering non-government organisations, including the media, is absolutely vital'.*

*MSB, Operational Response Department*

## (S)trategy

All too often communication campaigns are planned after the details of the activity they promote have been finalised. However, in this



instance the MSB asked: what type of activity would best enable the communication campaigns we need? The suggested activity was a public report commissioned to examine Swedish conspiracy theories in a Covid-19 context – a hook that would intrigue most journalists. The report would also provide actionable recommendations as to how the media and the general public could both challenge *and* resist those theories. The report's accessibility was crucial; it had to balance academic rigour with simple language that could be consumed by the widest possible audience in addition to being suitable for dissemination in bitesize chunks across various mediums.



August 2021 Edition of Forskning & Framsteg

## (I)mplementation

The MSB's conspiracy theory report took two and a half months to be written – an impressively short time for such a comprehensive document. The document was launched with an integrated campaign that generated significant media engagement considering it is essentially a research report. The report made the front cover of *Forskning & Framsteg*,<sup>13</sup> a popular research publication whose readership includes, amongst others, a considerable contingent of journalists and influencers.

The Swedish Educational Broadcasting Company dedicated over an hour of TV coverage<sup>14/15</sup> to discussions around the report and Covid-19 conspiracy topics more generally, including a presentation by the report's author.

Throughout the campaign the MSB used the interest generated by the report to promote other relevant services it provided: weekly assessments on disinformation narrative trends that might affect the vaccine rollout programme, and counter disinformation training seminars for other government departments and civil society actors.

## (S)coring and Evaluation

Despite being an academic work, MSB's conspiracy theory report managed to penetrate mainstream media and become part of public discourse. Significant TV and social media coverage reveal the impressive reach of the campaign. However, the ultimate behavioural outcomes of the

campaign are hard to quantify. Has the public become more resilient to conspiracy theories? Is engagement of pro-vaccination groups with anti-vaxxers now better informed and, therefore, more effective? Without further study, these questions are difficult to answer. Nevertheless, a crude assessment of the campaign's success would be the surge in demand for MSB's support on conspiracy issues and the continued demand for the report's author to discuss his work.

The MSB has a background in delivering practical guidance to communication challenges, the Countering Information Influence Activities Handbook for Communicators<sup>16</sup> being a widely known example. The MSB's conspiracy theory report appears to successfully follow that precedent, demonstrating how research can be shaped to deliver positive outcomes beyond merely an improved understanding of the problem at hand, and move towards becoming part of the solution.





Trust in society and trust between citizens are central to ensuring resilience.

Finnish Security Strategy 2017



**Finland**

## **Finnish Prime Minister's Office, Communication Department: Societal Resilience to Disinformation**

### **Background**

The 'Finland Forward' communications campaign, which spans government departments and civil society groups, aims to increase societal resilience during the pandemic. The campaign demonstrates the Finnish whole-of-society and long-term perspective on resilience, an approach that was defined in the 2017 Finnish Security Strategy for Society.<sup>17</sup> The strategy defines 'Psychological Resilience' as a vital security function, putting it on equal terms with more conventional security considerations, such as defence capability. This in turn facilitates cross-government collaboration and creates a shared purpose.

Disinformation can increase division within societies.<sup>18</sup> Therefore, one way in which the Finnish Government achieves disinformation resilience is by improving societal cohesion through lower levels of political polarisation, higher levels of trust

between citizens, and increased levels of trust in institutions. It has been argued<sup>19</sup> that improving these cohesion factors will reduce the generation, propagation, and impact of disinformation.





Finland Forward branding

The EU's Challenges and Prospects in the EU report<sup>20</sup> reinforces this argument, stating: *'The empirical evidence suggests that participation in civic and social life is associated with higher levels of trust in institutions'*. The Finland Forward campaign tests this rationale by exploring the intersection of social cohesion, psychological resilience, and a society's ability to resist disinformation.

### (O)bjectives

Psychological resilience is a more expansive topic than a society's resistance to disinformation. This is reflected by the wide scope of the campaign objectives:

- Strengthen psychological resilience through communication.<sup>21</sup>

- Build trust and strengthen people's sense of belonging and belief in the future.
- Provide reliable information and tools for dealing with the emotions and uncertainty caused by the crisis.
- Demonstrate the importance and value of joint action and assistance.

### (A)udience

The Campaign sought to reach as many people in Finnish society as possible. The campaign partnered with 70 civil society groups, enabling messaging to filter into diverse communities: from the Association of the Visually Impaired<sup>22</sup> to computer gaming groups.<sup>23</sup> This impressive reach was, in part, achieved by the campaign's understanding of psychological resilience being politically agnostic, enabling a wide spectrum of participants.

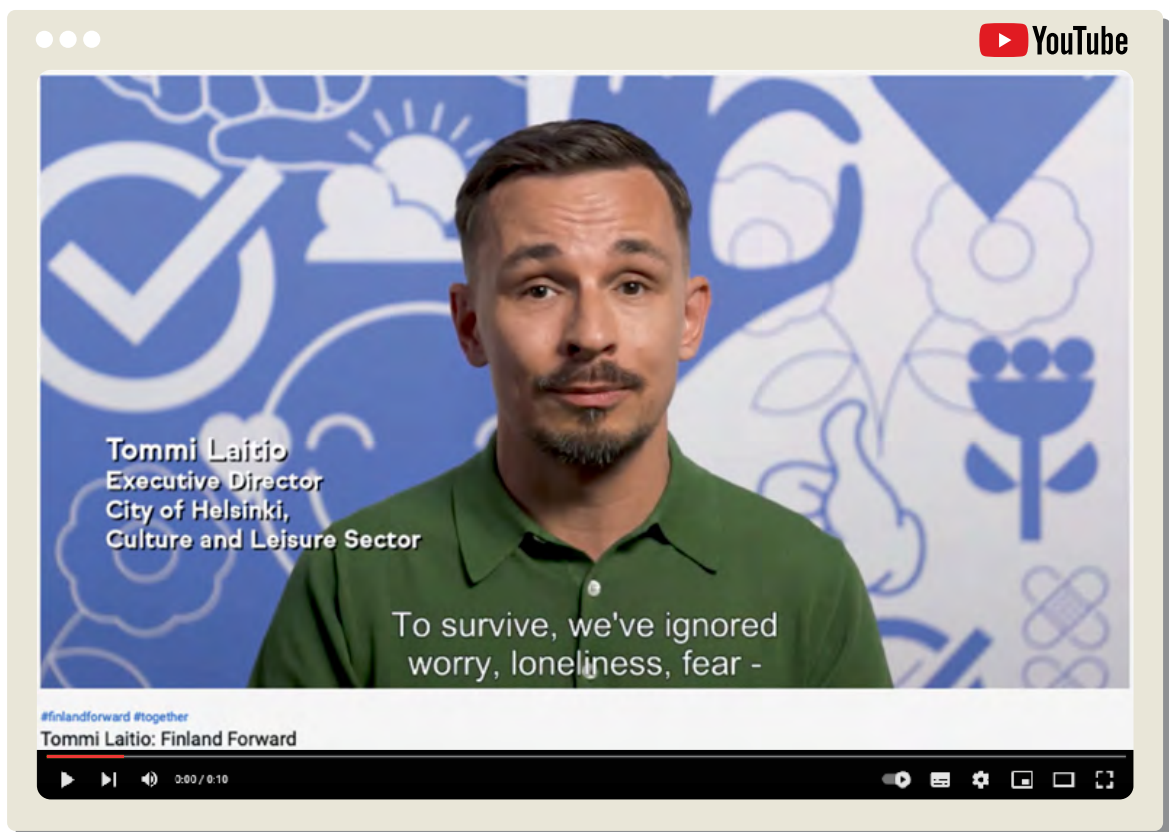
### (S)trategy

The campaign is decentralised, and initially utilised the Government's convening power to bring together a varied group of civil society actors, businesses, and academia. This network was then used to deliver a variety of initiatives to encourage civic activism and volunteer work to support others during the pandemic.

Linking communities together in this manner created new communication channels and







YouTube video promoting mental health awareness

increased the quantity of socially cohesive messaging beyond anything the government could achieve on its own. It also helped to integrate previously isolated groups under the unifying purpose of the #FinlandForward banner. It was believed that this feeling of shared purpose would help improve trust between communities and improve social cohesion.

### (I)mplementation

The Finland Forward communications campaign launched in spring 2020 and will continue through 2022. The project remains

flexible and agile in the face of the unfolding Covid-19 pandemic, integrating the latest research to refine its approach.

The campaign was decentralised and although style and branding toolkits were provided to the network of communicators, they were not overly prescriptive, allowing each organisation to tailor the content and tone of their messages to their specific audiences.

Campaign products were extremely varied, including: government-created content that promoted Finland Forward<sup>24</sup>, YouTube



Prime Minister Marin Launching Finland's Resilience Campaign

### (S)coring and Evaluation

Social cohesion and trust indicators in Finland's institutions – and consequently the ability of those institutions to challenge Covid-19 disinformation effectively – reached pre-pandemic levels, and remain some of the highest within Europe.<sup>27</sup> As a result, during the pandemic Finland has maintained relatively high vaccination

rates: 81.1%<sup>28</sup> of the eligible population had received two vaccine doses by November 2021.

Of course, Finland Forward is not solely responsible for these positive statistics. The campaign cannot be evaluated in isolation as it is representative of an approach that has been at the core of Finnish policy since at least the 2017 Security Strategy for Society. However, that fact is itself a key lessons for other states: communication campaigns that have a basis in long-term cross-government policy can unify actions across departments. This allows communication campaigns to focus on their chosen topic, while still contributing towards a larger mutually supportive goal. In this instance: the Psychological Resilience security function.



” ‘By exposing people to the tactics behind fake news we can help create a general ‘inoculation’, rather than trying to counter each specific falsehood.’

Melisa Basol, Cambridge Gates Scholar



## Government Communication Service International, DROG, and Cambridge University: The Gamification of Disinformation Prebutter

### Background

Falsehoods are difficult to correct once they have manifested themselves in memory,<sup>29</sup> and previous exposure to mis/disinformation increases the perceived accuracy of fake news.<sup>30</sup> In response to this challenge, the University of Cambridge began exploring the possibility of ‘pre-bunking’, i.e. using preventative strategies to make audiences less susceptible to the spread of false information.

Pre-bunking has its origins in inoculation theory, an approach developed by the U.S. Government in the 1960s to protect their soldiers from foreign propaganda. By preemptively exposing soldiers to a ‘weakened dose’ of the propaganda they

were likely to encounter, it would confer some psychological resilience when faced with the ‘full strength’ propaganda,<sup>31</sup> similar to how a medical vaccine enhances one’s immune system.





Go Viral gamifies the learning experience by using likes and credibility metrics, providing the user with feedback on the effectiveness of their fake news.

The Go Viral! game ([www.goviralgame.com](http://www.goviralgame.com)) is part of the mis/disinformation resilience programme of the Government Communication Service (International), which seeks to reduce the impact of false information on societies. In this instance, the campaign supported the UK's efforts to reduce vaccine hesitancy rates<sup>32</sup> and improve online sharing behaviours.

Go Viral! was developed by the University of Cambridge's Social Decision-Making Lab in collaboration with Project DROG (a think tank focussing on counter-disinformation) and the British Government's Cabinet Office. It builds on research by Cambridge psychologists which found that exposing people to the techniques used to spread fake news on social media increased their ability to identify and disregard false information in the future.

### (O)bjectives

Reduce sharing and engagement of false online material on Covid-19 topics.  
Reduce vaccine hesitancy rates.

### (A)udience

The game primarily targeted 25- to 40-year-olds who were identified as having higher vaccine hesitancy rates than older demographics.

### (S)trategy

Preemptively debunking, or pre-bunking,



vaccine falsehoods by exposing people to a mild dose of the methods used to disseminate those falsehoods. The premise is that exposing people to the techniques and tactics behind fake news can help create a general inoculation, rather than requiring an inoculation tailored for each vaccine-related topic.

### **(I)mplementation**

The 5-to-7-minute game introduces players to the basics of online manipulation in the era of coronavirus. It acts as a simple guide to common techniques: using emotionally-charged language to stoke outrage and fear, deploying fake experts to sow doubt, and mining conspiracies for social media 'likes'.

Go Viral's irreverent language and mobile optimisation meant the tone and medium was well-suited to the appetites of its target audience (25- to 40-year-olds).

The game was promoted via a social media campaign on UK Government channels that quickly spread to non-governmental pages. The hashtag #goviralgame was used to track campaign progress and channels.

### **(S)coring**

Go Viral! is based on a pre-Covid iteration, Bad News (<http://www.getbadnews.com/>), which has been played over a million times since its 2018 launch. Cambridge researchers developed and tested Bad News, finding that just one play reduced perceived

reliability of fake news by an average of 21% compared to a control group. These initial results were recently confirmed in a more rigorous replication study.<sup>33</sup> The approach has proven to be successful in a variety of countries with requests for translations resulting in 10 different language versions of the game. Post-campaign evaluation suggested that the gamification element of Go Viral – the competitive approach – makes it highly engaging and entertaining content.

## **LANGUAGE**

ENGLISH

DEUTSCH

FRANÇAIS

ITALIANO

ESPAÑOL

УКРАЇНСЬКА

PORTUGUÊS BRASILEIRO

HRVATSKI

EESTI KEEL

РУССКИЙ







The NATO Strategic Communications Centre of Excellence paper 'Inoculation Theory and Misinformation'<sup>34</sup> covers this subject in more detail and raises some interesting points for further work:

- If we are seeking psychological herd immunity, what percentage of an online community needs to be 'vaccinated'?
- How effective is an inoculation approach compared to more conventional media literacy interventions?
- How long does this psychological resistance last and will it require 'booster shots'?



” We promote the participation of Funky Citizens (those who want to be civically fit) through projects that make clever use of technology (mainly online) to increase responsibility and accountability in the public space.’

Funky Citizens



Romania

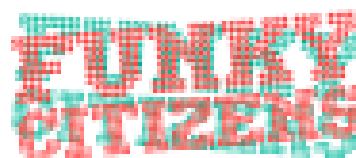
## Funky Citizens Civil Society Organisation: Improving behaviours in online spaces through active citizenship

### Background

Funky Citizens launched in 2012 as a small volunteer-based organisation with anticorruption objectives. By 2014 it had already begun to diversify into broader civic empowerment activities and subsequently created Romania’s first political fact checking organisation: [www.factual.ro](http://www.factual.ro). Funky Citizens has continued to evolve and expand, while remaining true to its core mission: to support and nurture ‘civically fit citizens’ by increasing individuals’ ability to hold authorities, media, and one another to account in the public space, especially online.

*‘We believe that we can develop the understanding and human capital necessary to influence a more participant, responsible, and transparent democracy in Romania.’*

*Funky Citizens*



Funky Citizens places critical thinking, media literacy, and citizens’ ability to recognise



dis/misinformation within a much broader programme of enabling civic activism and protecting democracy. Funky Citizens' own fact checking activity, alongside its training programmes are some of the approaches complemented by a portfolio of participation, advocacy, and analysis initiatives. These initiatives are aligned to human rights, the environment, justice, public administration, and educational themes – including Covid-19 related issues.

What is interesting about Funky Citizens' counter-dis/misinformation approach is that it is rooted in the broader goal of increasing civic activism. By equipping citizens with the ability to recognise false information in addition to advocacy and engagement skills, it empowers active citizens to hold the authors of those falsehoods to account. This deters the proliferation of disinformation by raising the cost imposed upon those that create and disseminate it. Citizens not only have the power to recognise disinformation but also the civically active mindset to challenge disinformation themselves. Put simply, most media literacy initiatives seek to protect democracy by allowing citizens to recognise false information and simply disregard it or not share it further – essentially a 'defensive' stance. Funky Citizens goes further by also ensuring those citizens have the confidence and skills to represent themselves – turning passive 'audiences' into proactive civil society 'actors'.

In 2020 Funky Citizens was concerned about the increasingly polarised nature of

Covid-19 discourse within Romania and the abundance of incorrect information spreading through the online environment. There was polarisation of narratives between communities with increasingly opposing views on Covid-19 topics and a lack of open-minded engagement between those groups.

### (O)bjectives

- Raise public awareness of the need to use critical thinking when consuming online media.
- To give a voice to information sources which may not be involved in conventional media talk shows.
- Educate and invite to action by encouraging people (especially youth) to participate in accountability initiatives in the public space.

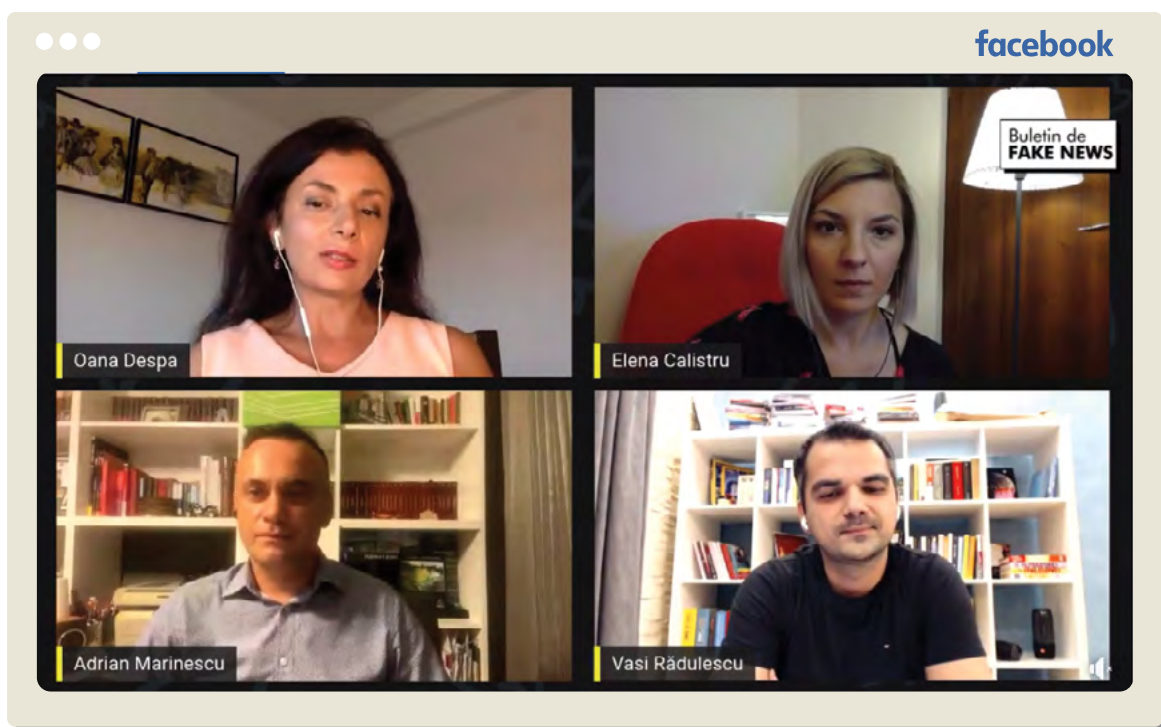
### (A)udience

Students, young adults, entrepreneurs, politicians, corporates, public servants, journalists, diplomats. A broad audience grouping, but with a focus on those who –as a requirement of their profession –have an interest in online information sources and are likely to benefit from improved critical thinking skills.

### (S)trategy

Encouraging people to critically reflect on their Covid-19 views as well as how they can establish the truth of information they have





A Facebook Live session discussing Covid-19 mis/disinformation.

sourced online. Achieved through training, engagement, and debate *with* the audience as opposed to one-way communication *at* the audience.

### (I)mplementation

Funky Citizens used a variety of approaches to encourage critical thinking and transparency around Covid-19 topics.

- Facebook Live: With the support of the Embassy of the Kingdom of the Netherlands in Romania, Funky Citizens established a series of 'Fake News Bulletins' to discuss stances on dis/misinformation, which included

Covid-19 topics.<sup>35</sup> The sessions brought together multidisciplinary speakers: communication, advocacy, and medical experts, including Vasi Radulescu, a 'pop-scientist' with 100,000 Facebook followers.

- Transparency in times of crisis: when information on a subject, such as Covid-19, is not readily available it helps create an environment where distrust and disinformation can thrive. Funky Citizens' anti-corruption approach contributed to countering disinformation by making the authorities' response to the crisis more transparent. Topics covered ranged





### **The vaccine against COVID-19 versus "anti-vax" disinformation: Three questions you need to ask**

Example article from the Media Literacy Accelerator.

from how public money was spent during the pandemic<sup>36</sup> to publishing open source data on hospital tenders.<sup>37</sup>

- Train the Trainer: A media literacy accelerator financed by the EU Commission with partners in Poland. A collection of webinars,<sup>38</sup> media, and educational resources that allow people to train others on media literacy and which included Covid-19 content.

## **(S)coring and Evaluation**

Funky Citizens' overarching goal of increased civic activism is extremely difficult to measure. The organisation's rapid and continued expansion is proof of, at least, an increasing demand for their services and provides some degree of validation of its effectiveness. The 'Fake News Bulletins' hosted on Facebook were relatively successful with 14,000 views. Their 'Train the Trainer' packages remain extremely popular to this day.

Others could learn from Funky Citizens' approach, specifically how they frame media literacy as a way to protect democracy, and support larger advocacy and transparency initiatives. Many NGOs or governmental organisations look at media literacy as a stand-alone activity, but are they missing an opportunity? Should they consider creating a more holistic intervention that not only reduces a citizen's susceptibility to fake news but also makes them positive contributors ('civically fit') to the democracy that those organisations are ultimately trying to protect?



” Critica’s mission is to improve the public acceptance of scientific consensus, counteract misstatements about health and science, and promote the use of scientific evidence in public policymaking.

Critica’s Mission Statement



## Critica Science: Using Infodemiology in a Covid-19 Context

Critica is an NGO that was established to implement the recommendations made in *Denying to the Grave*, a book authored by Jack and Sara Gorman, a father and daughter team, who are also Critica’s President and CEO respectively. The book explores the motivational drivers behind decisions that frequently have negative health consequences. For example: Why do some parents refuse to vaccinate their children? Why do some people keep guns at home despite the proven risk to their family?

Critica’s team is multidisciplinary, with expertise in medicine, sociology, psychology, public health, and neuroscience. The team researches and implements new methods of countering public health related dis/misinformation, in addition to advocating for evidence-driven policymaking.

*‘Critica believes that everyone, everywhere is capable of making rational decisions about health and safety if provided with sufficient information in an understandable format.’*

*Critica*



Think Deeply, Think Well.



Infodemiology is the basis of Critica's methodology and can be defined as the science of distribution of information in an electronic medium, specifically the Internet, or in a population.<sup>39</sup> Essentially, taking an 'infodemic' approach is about improving public health through science-driven communication. The 'science' element is not just about robust information within the message itself, but also the format and mechanism chosen to assess the ailment (the misinformation that needs to be addressed) and to ensure that truthful messages have the required impact.

Critica began their work by detailing the basic principles of why people are susceptible to misinformation – fear of complexity, confirmation bias, fear of corporate and government conspiracies, charismatic spokespeople, ignorance gaps – and how individuals can (inaccurately) calculate risk. They then built an intervention model based on motivational interviewing, a method originally used to help people with addiction problems. Drug

users know their habit will harm but often continue regardless, so how can they be persuaded to adopt healthier behaviours? This approach presents similar persuasion challenges to those encountered when engaging with more conventional 'science deniers' who use illogical reasoning, cherry-pick evidence, believe unqualified 'experts', and promote conspiracy theories.<sup>40</sup>

### (O)bjective

Improve public health outcomes by increasing the role of science in an individual's health-related decision making.

### (A)udience

Online audiences, especially Twitter and Facebook users who are publicly engaging with, sharing, or promoting health information that is not scientifically valid. Latinx and Black communities were given particular attention based on their lower levels of trust in public health institutions when compared to white counterparts.<sup>41</sup>



” By establishing an open-ended discussion, you can better engage people and show them alternatives to what they currently believe.

Jack Gorman, President, Critica

### **(S)trategy**

Through funding from private donors and the Robert Wood Johnson Foundation, Critica trains ‘infodemiologists’ to seek out online public discourse on health issues that would benefit from more scientific insight, and then apply motivational interview techniques. The premise is that bottom-up public health communication is required to engage with those audience groups who cannot be reached by top-down public health institutions due to a perceived lack of credibility.

### **(I)mplementation**

Critica hires people that have communication or psychology backgrounds, trains them on motivational interview techniques and then pays them to seek out and engage individuals who would benefit and be amenable to their insight. The motivational interview approach is not about telling an individual directly how they should think about a health topic, but instead adopts four general principles:<sup>42</sup>

- **R** - resist the urge to change the individual's course of action through didactic means.
- **U** - understand it's the individual's reasons for change, not those of the practitioner, that will elicit a change in behaviour.
- **L** - listening is important; the solutions lie within the individual, not the practitioner.
- **E** - empower the individual to understand that they have the ability to change their behaviour.

Additionally, Critica trains health-related organisations to use motivational interviews on their own topics. The American Physical Society, an organisation with a Physics specialism, received several days of training to counteract misinformation using motivational interview methods – especially on the subject of climate change. Much of their work was tailored for use on the



Nextdoor platform, an online community limited to those living in the same community and one that turned out to be a haven for Covid-19 misinformation.<sup>43</sup>

### (S)coring

There are several studies demonstrating how motivational interview techniques can improve vaccine uptake.<sup>44</sup> Therefore, Critica's intervention methodology is likely to deliver positive health outcomes and is scientifically sound – not surprising for an NGO seeking to promote science in

public health decision-making. That being said, motivational interviews are resource intensive. They require 'infodemiologists' to engage with individuals or small groups, and so this approach will always be limited in scale. However, it is evident how such an approach can complement a top-down, or conventional, health communication campaign if it can be targeted towards those reluctant but persuadable audiences whom such campaigns can't reach. Is deliberate coordination between these approaches the next logical step in creating truly integrated communication campaigns?



” In information verification, our approach is based on design thinking methodology to keep the innovation user-centred.

Denis Teyssou, Innovation Manager, WeVerify Project



France

## Agence France-Presse, Medialab: Enabling ‘Human-In-The-Loop’ Information Verification

### Background

Agence France-Presse (AFP) is a French state-owned news agency and one of the top three providers of news content in the world. Medialab is a department within AFP consisting of journalists, computer scientists and engineers who participate in R&D projects with an emphasis on developing information verification tools. AFP<sup>45</sup> describes itself as providing ‘fast, comprehensive and verified coverage of the events shaping our world’, while Medialab is an organisation that seeks to help with the verification element of that mission statement.

Medialab’s work is varied but generally seeks to empower users so they can examine online content themselves, thereby decentralising the verification process. Additionally, their work seeks to address the issue of users wasting time reverifying content that has already been checked.

How? By creating a browser extension that brings together a verification toolkit.

The InVID WeVerify browser extension is an amalgamation of two discrete projects, both of which were funded by the European Union under the Horizon 2020 financial





instrument. InVID was initially created to allow journalists to verify the reliability and accuracy of video files. WeVerify is a broader toolkit that uses cross-modal content verification, social network analysis, micro-targeted debunking, and a blockchain-based public database of known fakes.<sup>46</sup> Some of these tools were generated during the 2021 EUvsVirus Hackathon.



### **(O)bjective**

Enable users to save time and be more efficient in their fact-checking and debunking tasks on social networks, especially when verifying videos and images.

Although the initial objective was not specific to Covid-19 topics, the browser extension was still used extensively to examine the veracity of online material regarding Covid-19.

### **(A)udience**

The InVID WeVerify browser extension was initially intended for journalists, but after a few months the Medialabs team noticed that there was significant demand

coming from generalist researchers, media literacy activists, and the human rights community – essentially anyone that required content verification. There has also been interest from law enforcement agencies.

### **(S)trategy**

The overarching strategy was to decentralise verification of online content, providing individual users with the ability to interrogate the veracity of online content by themselves without having to rely on external fact checkers or disinformation experts.

Additionally, Medialab sought to collate insight from a variety of sources so users would know if verification work had already been carried out on a specific piece of online content.

### **(I)mplementation**

The browser extension was released on Chrome-compatible browsers, which makes up 66% of the global desktop internet browser market share, with a view to creating a Firefox browser version in the near future. To ensure the greatest level of accessibility for those without verification experience or computer science expertise, the extension's toolkit aimed to be as simple and intuitive as possible. This simplicity needed to be balanced against the requirement to include a variety of verification capabilities. Here are some examples of the extension's capabilities:





It provides a customised search engine of Factchecks.

### Factchecks search

Covid-19 disinformation

Web Image

All results First Draft AFP FactCheck.org BoomLive AfricaCheck France 24 Fullfact AltNews

About 2,620 results (0.51 seconds)

Sort by: Relevance

First Draft 26%  
FactCheck.org 26%  
AfricaCheck 10%

Who is behind the fake news campaign around Covid-19 in DR ...

The Observers - France 24 › 20200509-fake-news-covid-19-coronavirus-drc...  
9 May 2020 ... Since the start of the Covid-19 pandemic, about 30 different quotes attributed to public figures including French infectious disease expert ...

Labeled France 24

Search results from the Factchecks tool.

- Factcheck – A simple vertical search of prominent fact checking websites that can be used to interrogate images or specific search terms. The search establishes whether other prominent fact checkers (AfricaCheck, FactCheck.org, etc) have already assessed a piece of online content and provides links to their findings.
- Video fragmentation – Uses a video URL (from YouTube, Twitter, Facebook, Daily Motion or Dropbox) in order to segment it in keyframes, a format that allows snapshots of the video's content to be searched for in Google, Yandex, TinEye, Bing, Karma Decay (for Reddit), and Baidu images.
- Forensic – Allows the user to detect image forgeries or adjustments through



A repurposed video suggesting that a Chinese man was refused aid as people were concerned he had coronavirus.

a variety of analytical techniques: the compression function establishes if an element has been removed or added to the image; the cloning function detects elements that have been copied and moved within that image to create a fake. There are several additional functions, but all are created within a user interface that requires minimal computer science understanding.





The text on the train was altered to suggest it was transporting Covid-19.

- Twitter SNA – Social Network Analysis tools that enable the user to examine the interaction between accounts and narratives, highlight anomalies worthy of further interrogation.<sup>47</sup>

## (S)coring

The InVID WeVerify browser extension has 57,000 active users per week, with 42% of those users based in Europe – the highest concentration specifically within France. It has also won the 2021 U.S. Paris Technology Awards.<sup>48</sup> A Google News search of 'WeVerify' brings up a wealth of fact checking articles that state they used the extension during their research – it is clearly having a practical benefit to the counter-dis/misinformation communities.

A key driver of the project's success is its capacity to reduce barriers for journalists, fact checkers, or interested members of the public to access and utilise powerful tools that are capable of interrogating online content.



# Lessons & Observations

Here are some of the key lessons and observations made during the research phase of this article:

- **Counter disinformation interventions**

- **need not be passive.**

- Counter-disinformation and media literacy interventions are often framed by defensive terminology such as ‘inoculate’, ‘resistance’, or ‘resilience’. It reflects an approach that is often focussed on preventing disinformation or fake news from achieving its chosen objectives rather than ensuring an organisation realises its own communication objectives.

- **Multi-disciplinary collaborations are the future of effective interventions.**

- Creating the Medialab browser extension required a hybrid team of computer scientists, journalists, and academics. Designing and building the UK’s Go Viral! game required government communicators, a disinformation think tank, academics, and creative agencies. It is clear that countering fake news cannot be best achieved by ‘conventional’ communicators alone. Organisations must learn how to seek out new disciplines and integrate them with established capabilities in order to augment their interventions.

- **Whole-of-society solutions are required.**

- Covid-19 highlighted that governments are not seen as a credible source of information for some audience groups. Bottom-up interventions such as Critica’s online engagement with anti-establishment/science deniers are part of the solution, but they are still relatively small in scale compared to the fake news challenges that societies face. We need to explore how governments can support civil society and the private sector, without further undermining their ability to engage with groups that are distrustful of political actors.

- **Clear policy is a counter-disinformation force multiplier.**

- Finland’s psychological resilience policy is cross-governmental, encouraging collective action between departments. Additionally, it is given prominence by its status as one of seven factors in Finland’s Security Strategy for Society, and frames resilience in a manner that enables whole-of-society solutions. Other governments should consider which elements of Finland’s policy could be replicated to suit their own needs.

- **The counter-disinformation community must proactively connect**



**with others.** Funky Citizens' media literacy work is complemented by interconnected strands of public advocacy, fact-checking, PR, research, citizenship, and public policy (amongst many others). Bringing together these communities made them mutually supportive, enriching the outcomes of all of them.

- **Evaluate (properly) to learn the correct lessons.** Campaign evaluation is not a new concept, but this review of

case studies showed how challenging communication practitioners found it to measure the outcome of their counter-disinformation interventions. Measurements of activity and engagement were commonplace, but viable measurements of campaign impact with consideration of behaviour and/or attitudinal change were extremely rare. The communication practitioner community needs to develop its monitoring and evaluation expertise.





# Endnotes

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