

New Approaches to Immunization Communication

The Immunization Infodemic – An Innovative BC Approach

Presenters

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Presenter Disclosure

- Craig Thompson, Lily Crist, & Takuto Shiota
- **Relationships with financial sponsors:**
 - None

About the Public Health Association of BC

- PHABC is a voluntary, non-profit, non-government, member driven organization that provides leadership to promote health, well-being and social equity.
- Vision Statement - A fair and healthy British Columbia for all.
- Mission Statement - PHABC promotes health, wellbeing and equity for all British Columbians through leadership in public health.
- Manages BC's Immunization Promotion Budget, in consultation with the Immunization Promotion WG, which reports to the BC Immunization Committee
- ImmunizeBC (brand) – ImmunizeBC, I Boost Immunity, Kids Boost Immunity, Club Boost Immunity
- PHABC holds the chair position with additional executive membership on the WHO's, Vaccine Safety Net.
- Visit us at PHABC.org for more information

Immunization Promotion WG (IPWG)

- **Membership - RHAs, including BCCDC, FNHA – and also includes reps from the BC MoH, Pharmacy Association, PHAC, and PHABC**
- **Recognised by the MoH as an integral component in all provincial health promotion and other related immunization activities**
- **Works with PHABC in funding directions**
- **Assists in planning and development**
- **Advises and recommends**
- **OUR EXPERTISE & FOCUS GROUP ALL IN ONE**

ImmunizeBC – The ORIGINAL Immunization Brand!

- Launched/branded in 2007**
- Originally composed of the IPWG**
- Has evolved from a single program to an umbrella of multiple programs, IBI, KBI-ENG, KBI-FR, Club Boost**
- employs 15 staff/contractors, including nursing, teachers, tech, social media experts, marketers, creative design, editors, fundraisers**

Definitions

- **Information** - knowledge obtained from investigation, study, or instruction
- **Misinformation** - incorrect or misleading information – AKA Fake News
- **Disinformation** - false information deliberately and often covertly spread (as by the planting of rumors) in order to influence public opinion or obscure the truth - AKA Fake News
- **Infodemic** - too much information including false or misleading information in digital and physical environments during a disease outbreak

Sources of Misinformation – Pre COVID

- Internet
- Video sharing, Social Media – YouTube, Twitter, Instagram, etc.
- Healthcare Professionals (less likely)
- Peer group – friends, family,
- Interest groups
- Public forums – reddit comment section
- Schools/academia (limited)
- Independent Media (varying)
- Industry (to market products)
- General media communication - one-off reports (very limited)

Sources of Misinformation – Pandemic Era

- Everything from Pre-Pandemic X100

+

- Foreign national PH agencies/governments
- Government/ Public Health - Politicians/officials
- Main Stream/Independent Media

=

INFODEMIC

Examples of Misinformation

Pfizer Trials: All Injected Mothers Lost Their Unborn Babies

Pfizer trial documents reveal attempts to cover up the death of 100% of unborn babies in outcomes actually reported

By [Dr. Mark Trozzi](#)

Global Research, January 28, 2022

[Dr. Trozzi](#)

Theme: Science and Medicine



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Please recall our November 23, 2021 post titled [“The FDA and Pfizer are a Match Made in Hell”](#).

There we described how the FDA took only 108 days to approve Pfizer’s injection, but wanted 55 years to produce the documents!

Thankfully [Public Health and Medical Professionals for Transparency](#) filed a lawsuit after the FDA denied their request to expedite the release of the records, and the records are being released, albeit still too slowly.

Among the first reports handed over by Pfizer was a ‘Cumulative Analysis of Post-authorization Adverse Event Reports’ describing events reported to Pfizer up until February 2021. You can download this entire report [here](#)

Examples of Misinformation



VACCINE IMPACT



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January 27, 2022

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Does Your Family Believe You are “Out of Your Mind”? You’re in Good Company Because Jesus Faced the Same Thing with His Family

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by **Brian Shilhavy**
Editor, Health Impact News



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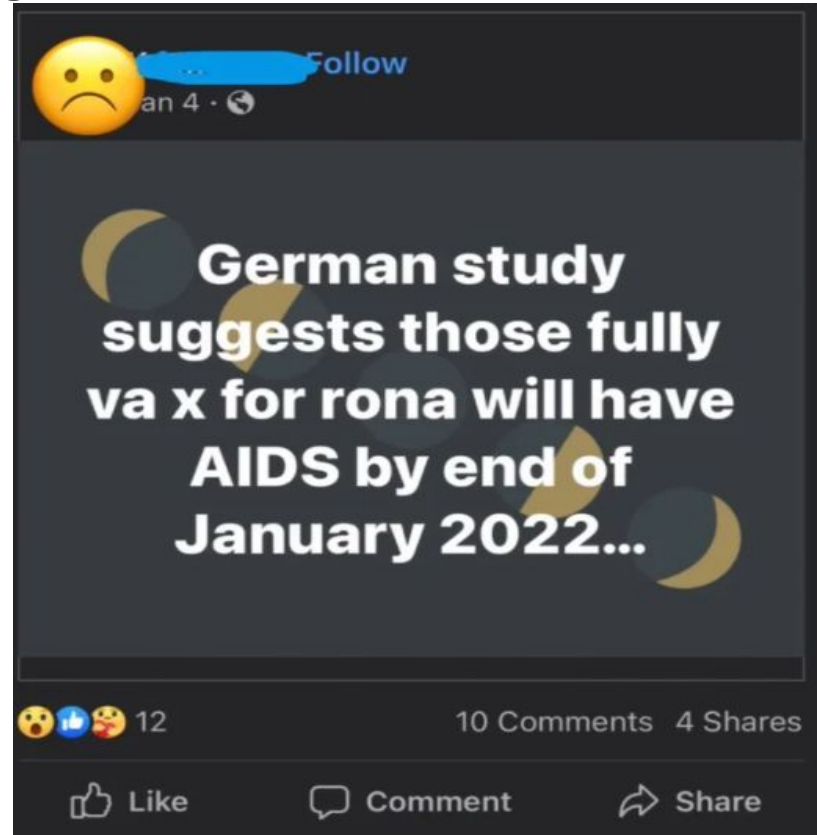


Examples of Misinformation

Just pulled this from the lung of a fully vaccinated, Covid +, intubated patient. Still think those jabs are harmless?



Examples of Misinformation



Examples of Misinformation



I
@c

...

Replying to @r... ny @BurgerLab12 and 45

Look at Israel, it does not work, it is experimental , people are being permanently harmed or are dying, and **urine is a natural vaccine**, I have not had anything and I know it works, I have had over 10,000 glasses and I know the benefits of natural health ,diet and urine.

20:26 · 05/02/2022 · [Twitter Web App](#)

Examples of Misinformation



Nicki Minaj 

@NICKIMINAJ



My cousin in Trinidad won't get the vaccine cuz his friend got it & became impotent. His testicles became swollen. His friend was weeks away from getting married, now the girl called off the wedding. So just pray on it & make sure you're comfortable with ur decision, not bullied

2:44 PM · Sep 13, 2021 · Twitter for iPhone

25.1K Retweets **94.4K** Quote Tweets **148.6K** Likes

What is the root of misinformation

- Historically abundant – “History is written by the victors”
- ‘Fishing tales’ – EXAGGERATION
- Time
- In the absence of gov’t/public health transparency, the People, will seek answers, find truth, look...
- ...and if left without correction can cause serious societal harm
- Misinformation is born from bad communication
- Conscious and subconscious
- Are we guilty?

OUR INFRASTRUCTURE CHALLENGE

Canada has no infrastructure, policy or plan to address misinformation in the health sector

- Nationally
 - Coordinated strategy and related activities in response to the COVID-19 infodemic is spread across multiple government departments and agencies (Health Canada, Public Health Agency of Canada)
 - Provide resources on COVID-19 disease, track misinformation and its impact on vulnerable populations, monitor attitudes and behaviours as well as trust factors in government, fund interventions at the P/T level
- Provincial and Territorial Jurisdictions
 - Jurisdictions have coordinated their own responses to the infodemic
- Stakeholders (NGOS, academic institutions etc.)
 - Professional health and patient-centered organizations have addressed COVID-19 misinformation through communication strategies and coordinated responses

CANADA'S PUBLIC HEALTH COMMUNICATION CHALLENGE

- **Public health does what it knows best – “Let’s talk about the facts”**
- **Approach based on the knowledge deficit mode**
 - **Repeatedly present the most rigorous scientific evidence available until the science wins over the intended audience**
 - **Faced with a problem use rational solution and presented as the best science**

Infodemic – What does the future hold?



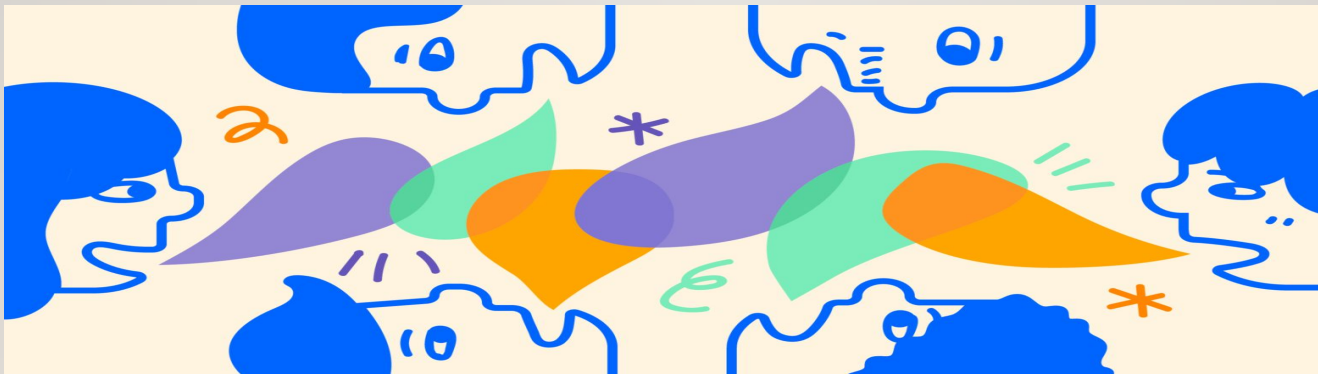
WHAT HAS BEEN DONE BEFORE? HOW WE DEVELOPED POLICIES AROUND IMMUNIZATIONS?



- Our research was based on a review of past and recent health policies around immunization in Canada, North America ,Europe and Australia/NZ.
- Some of the conclusions around vaccination refusal or hesitation put the emphasis on the lack of dialogue and communications to allow patients to express their opinions or concerns.
- A continuum, from a compulsory model to a Canadian model that provides information and encourages immunization.

SOME QUESTIONS

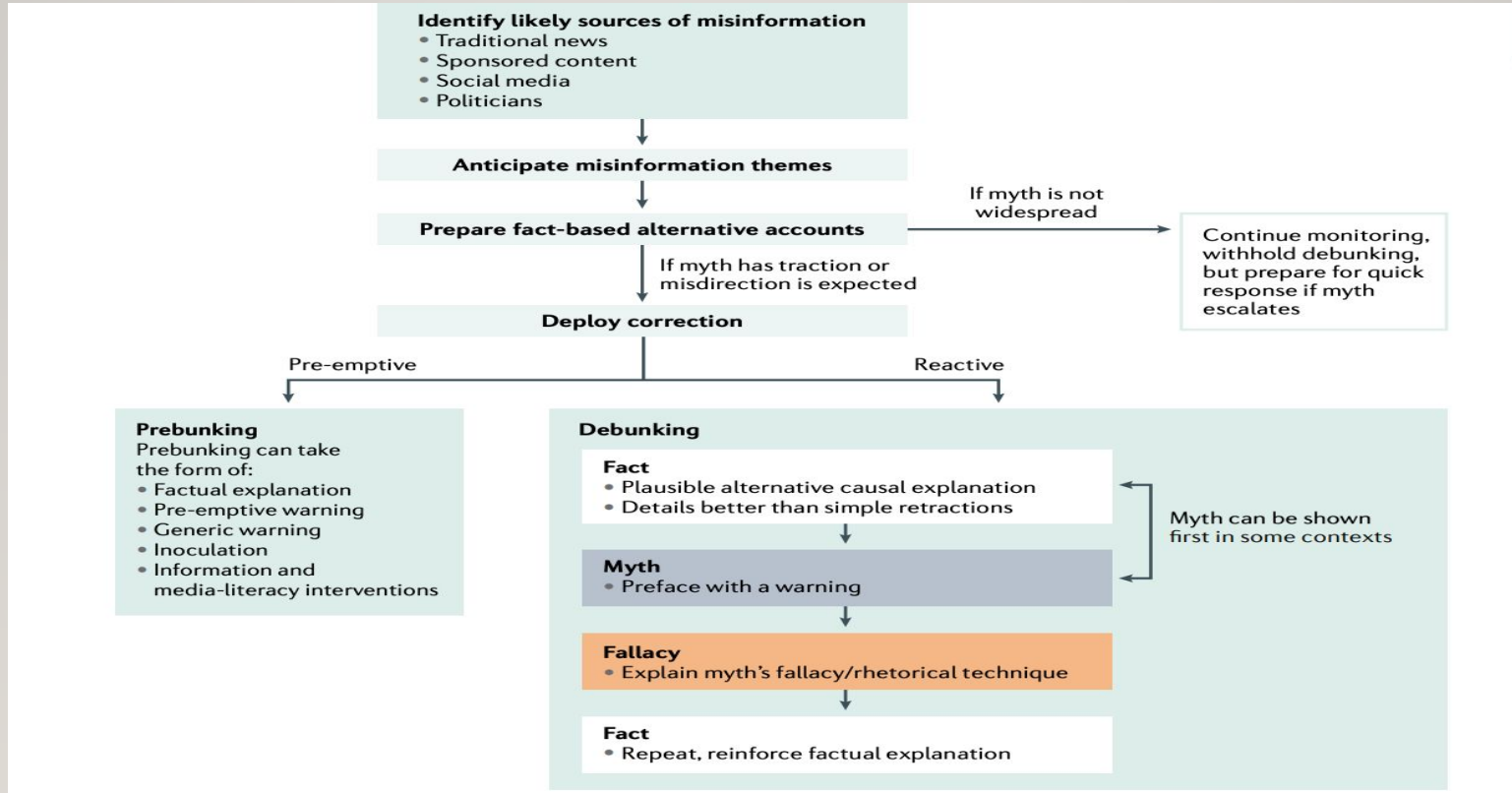
- Telling someone what to do is not enough
- How do we communicate?
- What is the way to convey important information?



SOME INSIGHT FROM RESEARCH ON” THE PSYCHOLOGICAL DRIVERS OF MISINFORMATION”

- *From :The psychological drivers of misinformation belief and its resistance to correction*
- “Misinformation has been identified as a major contributor to various contentious contemporary events ranging from elections and referendums to the response to the COVID-19 pandemic.
- Not only can belief in misinformation lead to poor judgements and decision-making, it also exerts a lingering influence on people’s reasoning after it has been corrected — an effect known as the continued influence effect.

MISINFORMATION FLOW CHART



**Embrace the complexity
of misinformation!**

What are some of the reasons out there...

Historical influences

Vaccines are used to control population

Vaccine ingredients are dangerous

Authorities are lying, we're not at risk

Eating well is all you need to do to prevent diseases

Lack of information

Alternative Health

Vaccines contain mercury

Vaccines cause diseases

Science Deniers

Infringement on freedom

Vaccines cause cancer

Big pharma gains

Against my religion

Vaccines cause infertility

Conspiracies

Vaccines cause autism

Diseases are not real

Cause developmental delay

Vaccines don't work

Homeopathy

Distrust in health care system

Vaccines caused AIDS

Vaccine safety/risks

HPV vaccine promotes sex

Immune system gets weaker

Political agenda

New vaccine

Government spying

Personal choice

Vaccines contain 5G brain chips

Distrust in government

Vaccines shed viruses

Too many vaccines in schedule

Guillain Barre Syndrome

Negative personal, family, community experiences

Rushed. Not tested properly

Monetary profit

Contain aborted fetuses

Against my culture

What are the responses to our current solutions?

- We can analyze online debates to see how people will think through and incorporate pro-vaccine arguments
- Findings:
 - Two kinds of misinformation
 - We aren't doing enough to combat both types

Two kinds of vaccine misinformation...

1

Factually incorrect misinformation

- “Ivermectin cures COVID”

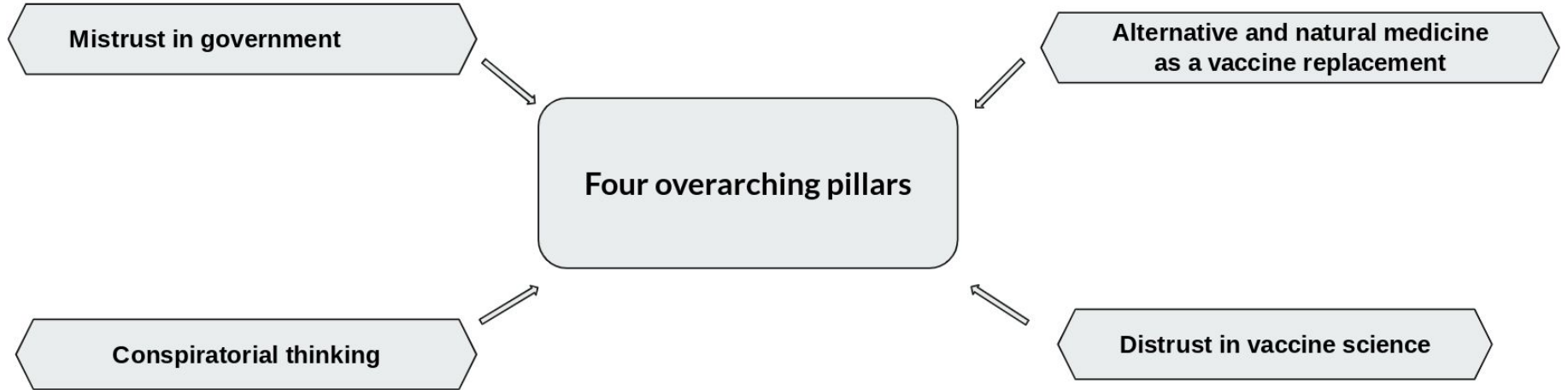
2

Misinformation that erodes trust

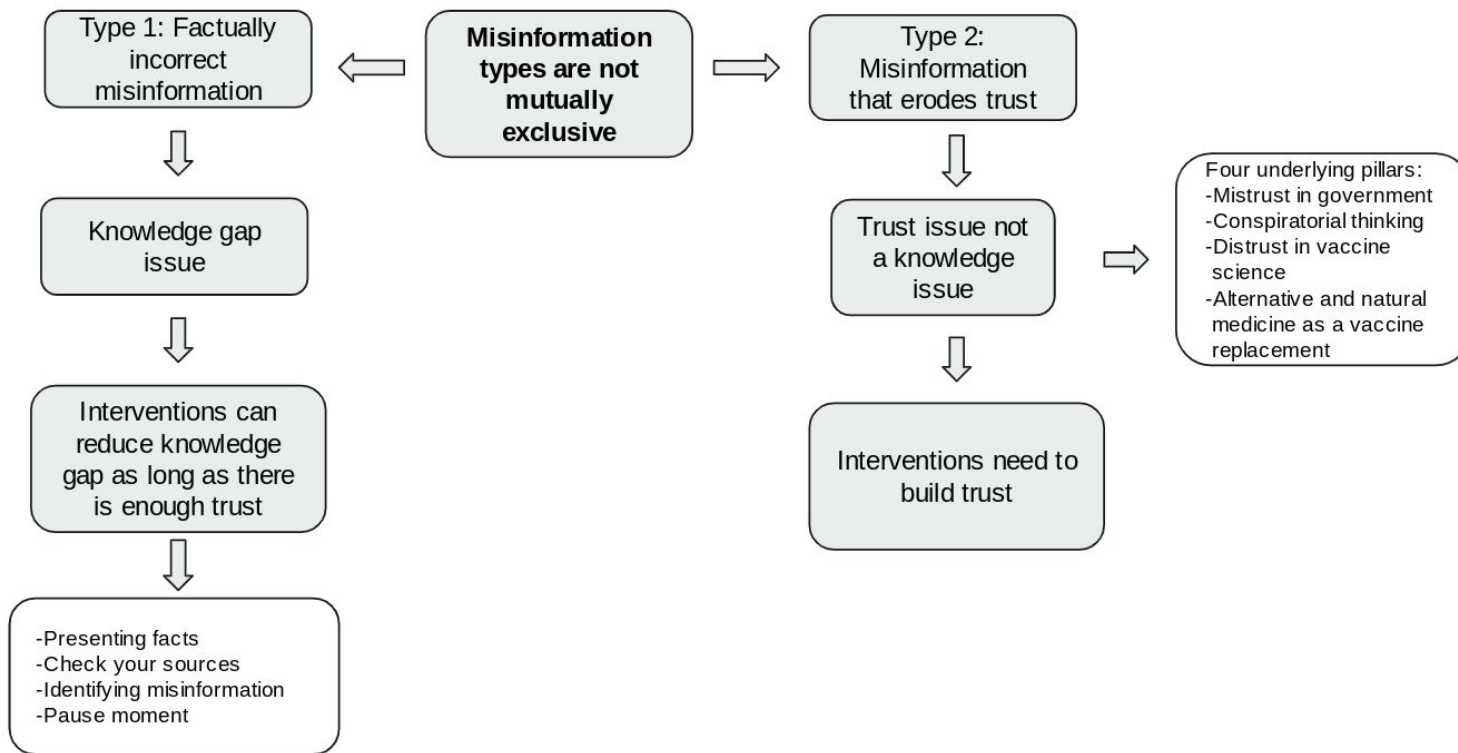
- “The CDC is hiding the real efficacy results of ivermectin”
- Can’t fact check, distorts facts themselves
- The deeper you go, the more the first type of information also erodes trust
- We identified 4 pillars of trust

Four pillars of vaccine hesitancy

4 categories (+ religion)



What can we do?



Different Audiences, Different Needs

- 8 different types of vaccine deniers (extreme vaccine hesitancy)
 - Unique motivations and beliefs
 - Requires unique interventions and messages
- A solution came from embracing the complexity.



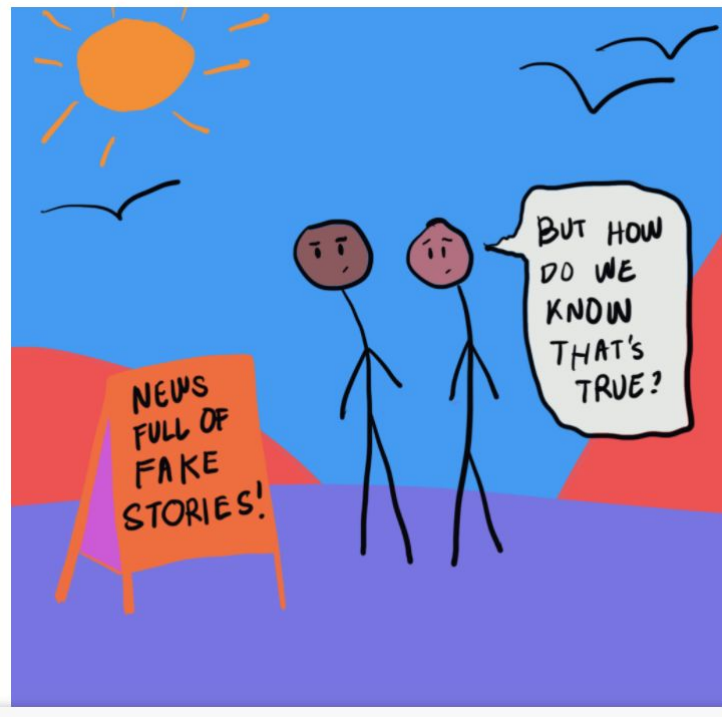
Preventative focus

How can we prevent individuals from being deceived by the second type of misinformation? How can we prevent people from developing a worldview that is supported by the four pillars?

- Everyone is vulnerable. This has been made clear through the pandemic.
- The causes of vulnerability to misinformation vary from individual to individual, are often complex and multi-factored¹
- Individual differences impact how we reason with information and evidence, and how we evaluate - accept or reject scientific consensus²

Current solutions are not enough

- Presenting facts
- Teach how to check your sources
- How to identify misinformation
- Pause before you share



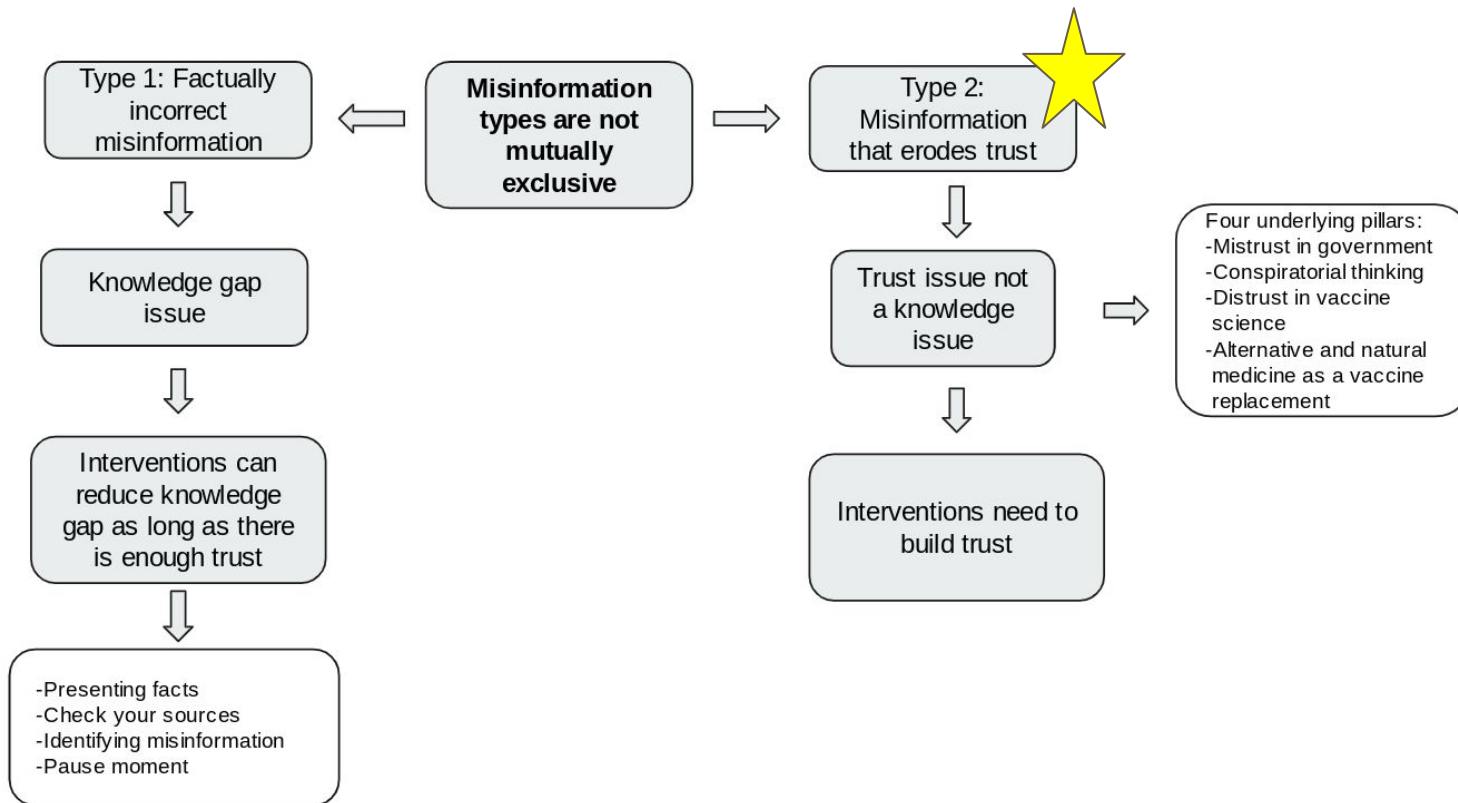
A possible idea

- Solutions need to be reasonable, ideally adopting something that can be a simple habit
- Target people when they are most vulnerable to misinformation which erodes trust
- Focus on the four pillars
- Provide information that tailor's to the individual's needs

Ideal:

- Relatively short
- Easy to learn
- Fun
- Interesting enough to share

What can we do?



Proposed approach

- **Emotion** drives misinformation which erodes trust
 - What if we recognize our emotional reaction (contrary to suppressing or regulating emotion)?
- There is significant value in focusing on emotion when it comes to science related misinformation⁵
 - Hypothesize that noticing our emotions and taking them into account, is one possible way to improve our judgment as a preventative strategy
- Supporting evidence
 - Emotion can influence attitudes and how individuals process scientific issues and information¹⁰
 - Emotions have a tendency to activate our cognitive biases¹⁰
 - Previous research on information persuasiveness commonly suggests emotion as the origin to decision-making, judgement, and actions¹¹
 - Emotion is a strong driving force for believing and sharing information of any kind⁵

The
concept

Emotional Appraisal Approach (EAA)



STEP 1

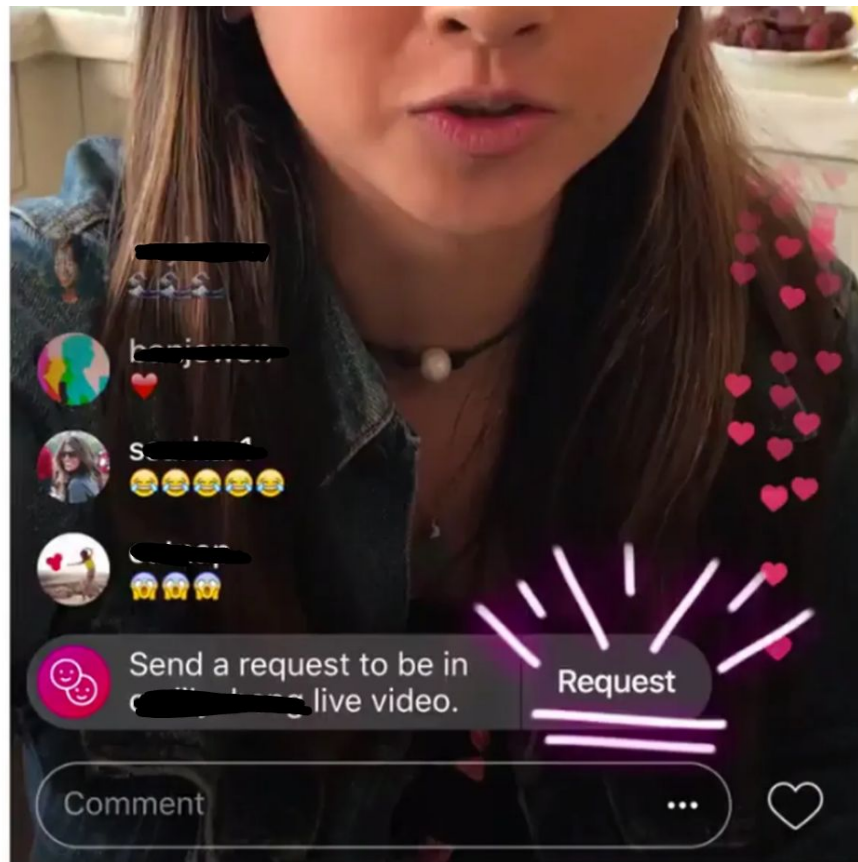
Participants will go through a chosen set of various social media posts, headlines, stories, images etc. Each question will be based on each of the categories (4 overarching pillars) with some questions being a combination of the four together as well (eg. distrust in government plus conspiracy theory sentiment)

Ivermectin does not prevent severe COVID-19, study finds



STEP 2

Individual chooses one or more
emotional reactions experienced
AND level of emotion (eg. strong -> low)



STEP 3

Participants will be placed under a vulnerability stream(s). This will be accomplished by adding the number of any given emotional reactions to a specific category (type of emotion does not matter). There can be multiple vulnerability streams a participant shows emotional reactions to (not limited to just one).

Your personality type is:

Defender



Pillar 1

This trait determines how we interact with our environment.



Pillar 2

This trait shows where we direct our mental energy.



Pillar 3

This trait determines how we make decisions and cope with emotions.



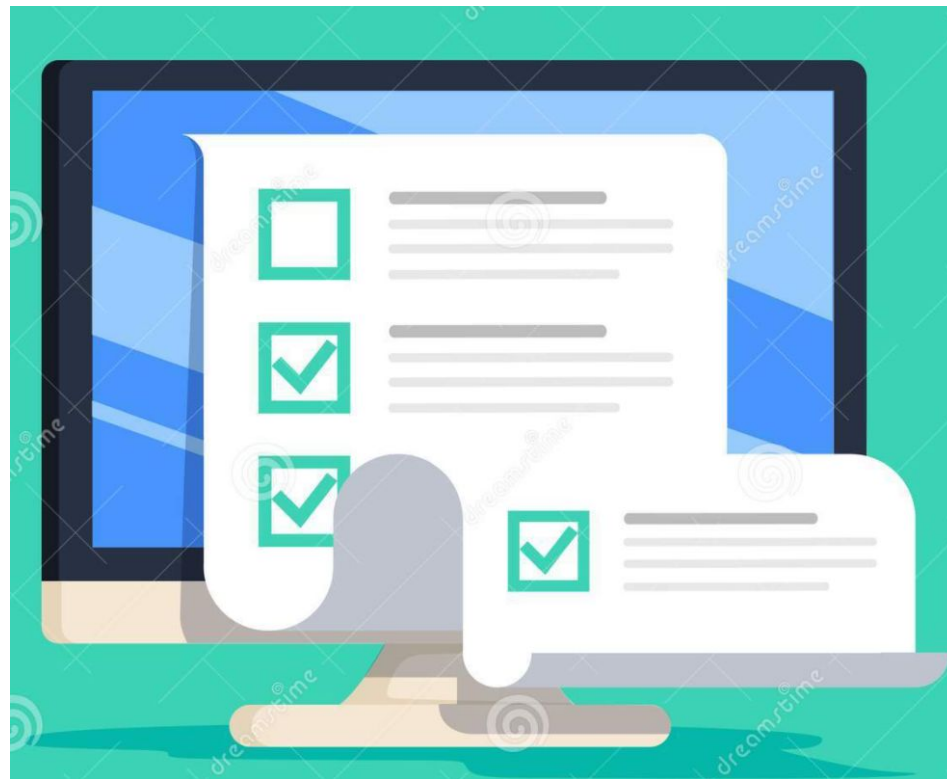
Pillar 4

STEP 4

Lastly, participants will be given further details regarding the results, explaining the particular vulnerability stream(s), and emphasizing EAA as a prevention opportunity for individuals to recognize emotions when reading and hearing information from any source or origin (eg. headlines, face-to-face interactions, news outlets, social media, etc.)

EAA is an approach to be used in concert with other established interventions

- Presenting facts
- Teach how to check your sources
- How to identify misinformation
- Pause before you share



Limitations

- For a certain audience this may not work (eg. those with strong opposing beliefs)
- Still at hypothesis stage
- Focuses on one aspect (emotion) that impacts individual's susceptibility to misinformation (thus recommended to be used in conjunction with other interventions)

Embracing opportunity



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PHABC's on-going projects:

- Craig Thompson, PHABC - craig.thompson@phabc.org

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