### Getting to the Heart (and mind) of the Matter





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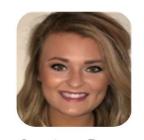
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WASHINGTON STATE UNIVERSITY EXTENSION



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Our Goal: To better equip and empower Extension professionals for vaccination education and to make an informed choice in their own best interest to participate as active agents in vaccination education in their communities.

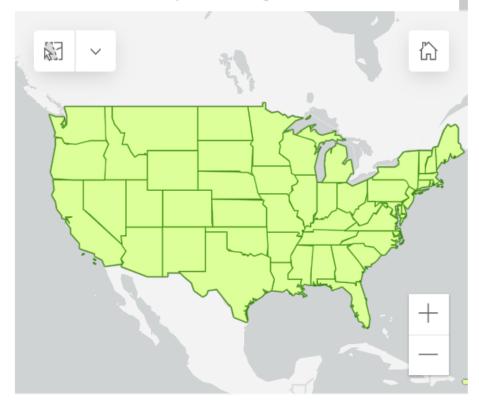


### The EXCITE dashboard <a href="https://excite.extension.org/">https://excite.extension.org/</a>

individuals reached by all progams

11,502,055
COVID Immunization Education

last updated August 2022



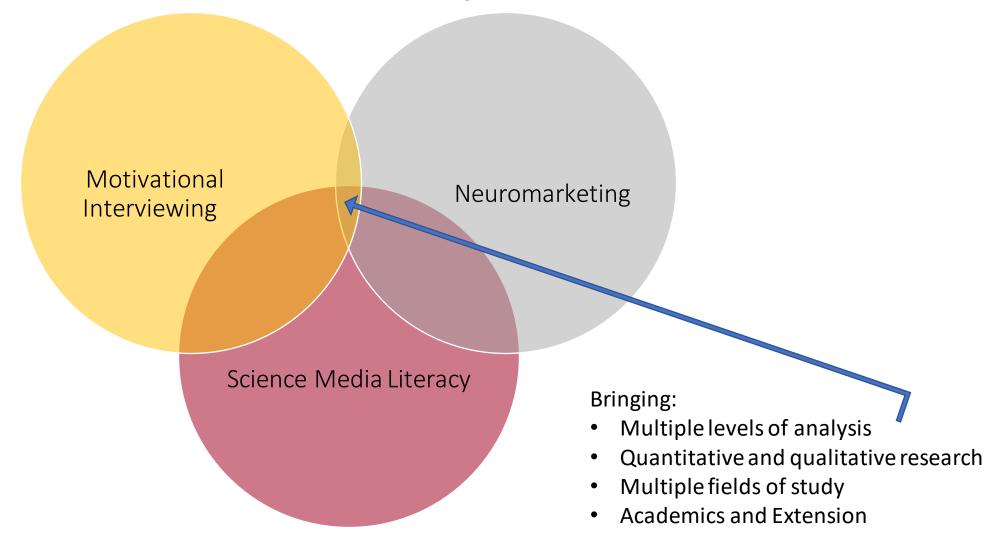
### **Activity One**



### **Activity Two**



Our approach combines the influence of emotions and reason on behavior-change communication.



Our inclusive approach ensures that voices from the entire Extension system provide insights to support vaccination



#### **FOCUS GROUPS**

31 "frontline" Extension
professionals across regions not
currently doing vaccine
education provided their
perspectives.



#### **INTERVIEWS**

10 directors/administrators from all five Extension regions provided their perspectives.



### TOOLKIT/TRAINING DEVELOPMENT

All Extension professionals' insights will inform the communication science-based toolkit.

March 22-April 5

**April 2022** 

July 1 – August 4

**August** 

October

**Oct-Dec** 

#### **SURVEY**

1009 Cooperative Extension professionals from all regions, institution types, program areas and position types across the System responded to an online survey.



#### **AEA 2022**

31 Extension professionals participated in on-site neuromarketing testing of messages in Orlando, FL.



#### NAE4-HYDP 2022

Extension

professionals can participate in
additional neuromarketing
message testing in Madison, WI.





"I would be uncomfortable doing vaccine education programs considering my area of expertise (and would also question if I was stepping into someone else's 'space' in Extension) -- but if asked would certainly do what I could to support it."



# Need 2: Prioritize preserving community trust and professional credibility

"I would like honest information that takes the emotional appeal out of this. People have picked sides and don't seem willing to discuss holes in the message. **Personal experiences of people around me DO NOT match mainstream messaging**. That **creates fear** and makes me slow to tell others what they should do."



# Need 3: Establish connections with medical experts

"It is important for Extension to be responsive to needs in our communities and vaccine education fits great within our Health Equity and Well Being framework. **Great opportunity for new partnerships** within the institution and with external partners particularly state health department."

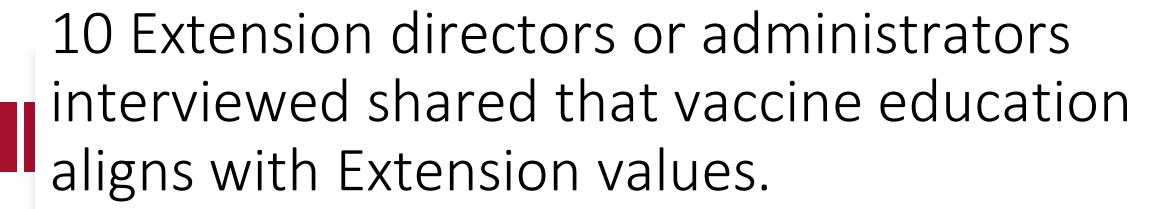
~ Extension Professional

"...we should leave COVID-19 Vaccine education to certified health professionals..."



## 4. Strengthen science media literacy skills to counter misinformation and communicate emerging science

"We as a society **need to become less gullible** with our consumption of news and consumption of media and consumption of information, and I think **Extension can play a big role** in getting that. Once again, **if there's a need in this world for research-based information, it is now**, and I think it's time for everybody who doesn't know too much about vaccines and who is not in the medical field and who is not understanding of virus and biology to you know, let the information come out that comes from research."





"We can't change who we are. We are still a science-based education organization."

~ Extension Director

Your Extension community-based educators and agents may have more concerns than you about stakeholder disapproval and less willingness and confidence for implementing vaccine education.

## Applied Neuromarketing Message Testing Actionable Insights into the Brain "on" Messaging

Media use is a dynamic across time interaction between embodied 'mind' and 'media' Media use engages 'intervening processes' in cognitive / emotional form, observable though psychophysiological measures (e.g. EEG, cardiac activity)

Media content 'the stimulus'



Content Delivered over any form of Media Technology Intervening process embodied in the brain <u>lead</u> to..

Emerging effects 'the response'

Applied Neuromarketing Message Testing assesses conscious and less conscious "real time" responses to content producing actionable insights for producing "effective" messaging

# Neuromarketing-based message testing methodology

Objective: Identify visual and text content elements that are likely to effectively engage Extension Professionals in favorably responding to "Extension AND Covid-19 Vaccine Messaging

#### **Vaccine Message Content Tested**

- Photos depicting "vaccination"
  - Emotional tone (unpleasant) and Dominance of Vaccine Cue
- Textual framing that ties Extension to Covid-19 Vaccine education through emotional appeal and Extension values





"Covid-19 Vaccine education fits with the mission of Extension Professionals because we believe in intellectual freedom to search for and present the truth without bias and with courteous tolerance toward the views of others."

## Neuromarketing-based message testing methodology

- Applied Neuromarketing Message Testing Measures used in this test
  - Heart Rate (Attention)
  - Galvanic Skin Response (Intensity of Emotional Response)
  - Facial EMG (Negative Emotional Response)
  - Eye Tracking (Visual Perceptual Attention)
  - Self-report measures of attitudes and message perception
- Applied Neuromarketing Message Testing Procedure
  - Participants are welcomed and complete written informed consent
  - Participants prepped for the collection of Neuromarketing measures
  - Participants viewed/read the test content (pictures and short text)
    - The order of viewing pictures or reading text is randomized for participants
    - Self-report questions assessed general attitudes and content perceptions

#### Common Neuromarketing Measures



#### Facial Electromyography

- •fEMG (emotional valence)
- Measuring facial muscle activity



#### **Heart Rate Variability**

- •HRV (attention; approach/withdrawal)
- •Measuring heart rate changes



#### **Galvanic Skin Response**

- •GSR (arousal)
- •Measuring skin conductance changes



#### Electroencephalogram

- •EEG (motivational response)
- Measuring electrical changes across scalp



#### **Behavior Coding**

- Eye tracking (visual attention)
- Behavior Analysis

# Neuromarketing-based message testing insights - photos

#### PRELIMINARY TOP LINE INSIGHTS!

Photos that effectively engage Extension Professionals

Low level of unpleasantness and low vaccine cue



High level of unpleasantness and low vaccine cue



# Neuromarketing-based message testing insights - text

#### PRELIMINARY TOP LINE INSIGHTS!

Text framing that effectively engages Extension Professionals

#### • Emotional Framing... PRIDE!

"Extension Professionals who are willing to engage in Covid-19 Vaccine education with their clients/constituents have the opportunity to feel pride in their expertise used to educate their community. Extension Professionals have tremendous ability to understand vaccines and the science behind them. Extension has a history of providing vaccine education to Livestock producers, youth and adults. Extension has a history of providing evidence-based education. We can be proud to engage in programs that lead to more thoughtful decision making."

#### • Extension Value Framing

"Covid-19 Vaccine education fits with the mission of Extension Professionals because we believe that Extension is a link between the people and the ever-changing discoveries produced by expert scientists."

The goal: To produce adaptable materials that optimize audience responses based on Extension values and communication science

Motivational
Interviewing = Help
people to make an
informed choice
best for themselves

Neuromarketing =
Encourage use
these strategies and
discourage using
these other
strategies

Science Media Literacy =
Boost skills to address
misinformation and to
help people to access
accurate information

### General Toolkit and Training Goal:

Practical communication tools and techniques to present the information about adult vaccines that reduces "psychological reactance" and increases openness to using science media literacy skills.

Up next: A toolkit and training to boost skills in motivational interviewing and science media literacy; and neuromarketing-tested messages.



Pilot Testing

Formal Roll-Out and Evaluation

Fall/Winter 2022

Early 2023

Spring 2023



## The toolkit and training objectives connect to the four main areas of need:

- 1.1 Specific examples of "brain friendly" vaccine education messages
- 1.2 Build Motivational Interviewing skills focused on autonomy, values, and validating concerns to build community trust in Extension and enhance professional credibility.
- 1.3 Time and activities for identifying trusted local medical experts and resources; planning for branding, local adaptation, how to build on what has already being done for vaccine education.
- 1.4 Combine science media literacy skills with Motivational Interviewing approaches to correct misinformation in a way that reduces psychological reactance.



Toolkit and training on how to communicate with anyone about adult vaccinations to avoid unpleasant psychological reactance and address misinformation.



## Science-Media Literacy

Help the people you serve critically assess how vaccine-related topics are presented in the media so they can make an informed decision in their own best interest.



The training and toolkit build on your unique background and knowledge about vaccine information education as well as the community you serve.



## The training and toolkit will be designed for application and action



Actively participate in the learning process



Engage in activities for immediate application of the new information for your context



Opportunities to practice new skills and tests new knowledge

The training will stimulate your "multiple intelligences" and use multiple means to share the learning content.

- Mini-lecture
- Video/audio clips
- Brainstorms
- Reflection
- Problem-solving
- Snowballing

- Training games
- Think-pair-share
- Small group conversations
- Role playing
- Case studies
- Mind mapping

Dedicated time for you to work with your local or state team.



For more information contact our team



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