E-com@eu WP 8

Testing effective behavioral intervention and communication strategies

Logic Intervention Model Report
Deliverable D8.1

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Approach:

We have reviewed material presented by WP 1-6, as well as the overall report produced by WP7 and identified the key areas to expand upon. These key areas we have focused this report on are:

1) To create a trustworthy and responsible source of information.
2) To engage users in accessing information and recommendations, especially after the initial peak of information.
3) To develop strategies for audience segmentation and tailoring to specific groups.
4) To develop communication strategies to reach people's emotions.
5) To develop models to visualize risk and the spread of flu.
6) To develop strategies and tools to engage healthcare workers.

Focusing on these six key areas, we have developed logic intervention models to address each form of recommendation from the video produced in WP7. We will use the logic intervention models as guidance in planning our studies. It is our overall goal to test effective communication strategies (i.e. gist communication, testimonials, metaphors, visualization of risk) and gather data that will inform the development of an effective outbreak management tool.

We have assembled a team of risk communication experts to utilize this material to design studies to test how health professionals may counter problematic media messages, manipulate uncertainties in outbreak communication, and develop strategies to counter dramatization of risk, while appropriately engage the public in outbreak information. Our team has extensive experience in health communication, risk communication, risk perceptions, risk communication graphics, omission/action tendencies self-other differences, social cognition.

Our goal:

We plan to use the logic intervention models we have a developed as a road map to the studies we will conduct in WP8. It is our goal to test these communication strategies so that they can be incorporated into tools that will be developed by Elastique and utilized by health communication experts to convey messages during an outbreak situation. We aim to test these strategies to gain an understanding of communication strategies that are effective in outbreak situation, as well as those communication strategies that are not effective in an outbreak situation. It is especially important that we can gain an understanding of how to keep the public engaged throughout the life course of a pandemic, how to tap into people's emotions, and how to influence the public's sense of vulnerability by assessing strategies that impact perceived susceptibility and perceived severity of an illness.

Suggestion 1: Create a trustworthy and responsible source of information.
Details: Using feedback from WP1-6, we will aim to test communication strategies and components of trustworthiness to communicate pandemic information.

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
-Feedback from WP 1-6, to inform development of communication strategies -Behavioral and communication theories -Marketing and communication strategies -Study personnel -SSI Survey participants	-Determine ways to manipulate the source of information throughout studies conducted in WP8 -Develop outcome measures to analyze preference of source of information (i.e. television, newspaper, a nationally or EU supported flu website, a flu app, other social media venues), and integrate into appropriate studies in WP8	-Study personnel will develop studies and integrate manipulations of sources of information -Study personnel will adapt outcome measures to test trustworthiness of sources, which will be included in questionnaires for studies conducted in WP8 --Study personnel will distribute questionnaires and study materials electronically to SSI survey participants	-Test different types of sources to understand what kind of pandemic information people find useful and trustworthy, amongst SSI participants in EU countries -Gain an understanding of the best channels for communicating information -Assess most effective types of communication (i.e. gist communication vs. numbers/proportions) and the source of the communication	-Analyze findings of preferred sources of information to understand the kind of information people find useful, as well as gain an understanding of trustworthy sources of information.	-Develop a report of our findings. -Work with Elastique to integrate findings into the development a communication tool (e.g. flu app) integrating marketing strategies (e.g. branding)

Assumptions: The media channels we test will be relevant during the next major pandemic.	**External Factors: Expeneses, personnel, time, representative SSI samples.**

Suggestion 2: Engage users in accessing information and recommendations after the initial peak of information.
Details: Using feedback from WP 1-6, we will aim to test levels of engagement across the outbreak timeline.

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
-Feedback from WP 1-6 to inform development of communication strategies - Behavioral and communication theories -Marketing and communication strategies -Study personnel -SSI Survey participants	-Determine ways to test information seeking and engagement during a hypothetical outbreak timeline in a study aimed at visualizing risk, which will be conducted under WP8 -Develop outcome measures to test levels of engagement and information seeking into studies in WP8	-Study personnel will develop strategies to test engagement and information seeking and integrate in studies in WP8 -Study personnel will develop and adapt outcome measures to test levels of engagement and information seeking, which will be included in the questionnaire for our visualization of risk study and other relevant studies in WP8 -Study personnel will distribute questionnaires electronically to SSI participants	-Test levels of engagement and information seeking throughout the hypothetical outbreak timeline amongst SSI participants in EU countries	-Analyze findings of levels of engagement and information seeking throughout the hypothetical outbreak timeline	-Develop a report of our findings. -Work with Elastique to integrate findings into the development a communication tool (e.g. flu app)

Assumptions: Level of engagement and information seeking during hypothetical outbreak timeline will reflect a live pandemic in real time.

External Factors: This may depend on the source and trustworthiness of information. Expeneses, personnel, time, representative SSI samples.

Suggestion 3: Develop strategies for audience segmentation and tailoring to groups.
Details: Using feedback from WP1-6, we will aim to test communication strategies targeted at segmented risk groups.

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
-Feedback from WP 1-6 to inform development of communication strategies -Behavioral and communication theories -Marketing and communication strategies -Study personnel -SSI Survey participants	-Develop ways to use testimonials to target segments of the population, including marginalized groups, focusing on vaccine barriers to influence uptake -Develop ways to use metaphors to target segments of the population, including marginalized groups, focusing on vaccine barriers to influence uptake -Develop outcome measures to test the effectiveness of testimonials to target segments of the population -Develop outcome measures to test the effectiveness of metaphors to target segments of the population.	-Study personnel will develop targeted testimonials -Study personnel will develop targeted metaphors -Study personnel will develop a questionnaire to test the effectiveness of testimonials as a method of communicating pandemic information -Study personnel will develop a questionnaire to test the effectiveness of metaphors as a method of communicating pandemic information -Study personnel will distribute study materials and questionnaires electronically to SSI participants	-Test the effectiveness of testimonials in targeting segments of the population to increase prevention behaviors (i.e. vaccination) amongst SSI participants in EU countries -Test the effectiveness of metaphors in targeting segments of the population to increase prevention behaviors (i.e. vaccination) amongst SSI participants in EU countries -Gain an understanding of barriers to vaccine uptake in segmented audiences amongst SSI participants in EU countries	- Analyze findings of effective communication strategies (i.e. testimonials, metaphors) in targeting segments of the population (healthworkers, uninfected who haven't gotten vaccinated, UVGs) to increase prevention behaviors (i.e. vaccination)	-Develop a report of our findings -Work with Elastique to integrate novel forms of communication targeted at segments of the population (healthcare workers, uninfected, UVGs) into the development a communication tool (e.g. flu app)

Assumptions: Participants are representative of the segmented populations we aim to reach. The behavioral intentions of participants imagining a hypothetical outbreak will be reflective of behavior in an actual pandemic.

External Factors: Expeneses, personnel, time, representative SSI samples. Access to a representative sample of healthcare workers.

Suggestion 4: Develop communication strategies to tap into people's emotions.

Details: Using feedback from WP1-6, we will use communication strategies through the use of gist communication, testimonials, and metaphors to understand emotional triggers and reactions to pandemic information.

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
-Feedback from WP 1-6 to inform development of communication strategies -Behavioral and communication theories -Study personnel -SSI survey participants	-Develop ways to test emotionality in communications in studies conducted in WP8 -Develop outcome measures to assess the emotional impact of gist communication -Develop outcome measures to assess the emotional impact of testimonials -Develop outcome measures to assess the emotional impact of metaphors	-Study personnel will develop studies incorporating emotionality using testimonials, metaphors and gist communication -Study personnel will develop outcome measures to test emotionality of testimonials, metaphors and gist communication which will be integrated into study questionnaires -Study personnel will distribute study materials and questionnaires electronically to SSI participants	-Test the effectiveness of testimonials, metaphors and gist communication to gain an understanding of the impact of emotionality, amongst SSI participants in EU countries -Gain an understanding of emotional triggers and reactions to pandemic information communicated in unconventional ways	-Analyze findings of effectiveness of testimonials, metaphors and gist communication as strategies to trigger people's emotions about pandemic information	-Develop a report of our findings -Strategize with Elastique on how to incorporate emotionality by incorporating testimonials, metaphors,and gist communication into the development a communication tool (e.g. flu app)

Assumptions: The studies we design will have emotional compenents that will be impactful in the decision making process.

External Factors: Expeneses, personnel, time, representative SSI samples.

Suggestion 5: **Visualization of risk and the spread of flu.**
Details: Using feedback from WP1-6, we will aim to gain an understanding of most effective ways to visualize risk and the spread of flu.

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
-Feedback from WP 1-6 to inform development of communication strategies -Behavioral and communication theories -Study personnel -SSI survey participants	-Develop ways to visualize risk and the spread of flu as a main study of WP8 -Design pictographs, color-coded alert systems, a time series map, and a mock app (similar to Outbreaks Near Me) as ways to visualize risk of the spread of flu -Develop outcome measures to test the most impactful visualizations of risk of the spread of flu	-Study personnel will use existing visualization techniques (e.g. pictographs, color coding alert system) to communicate risk of spread of flu over time -Study personnel will work with Elastique to create a mock app, time series map, and any other new visualizations to communicate risk of spread of flu over time -Study personnel will develop outcome measures to test the impact of visualization on risk perceptions	-Test various visualizations (i.e. pictographs, color coded alert system, time series map, mock app) of the spread of flu and their impact on risk perceptions amongst SSI survey participants -Gain an understanding of visualization of risk as a method to impact perceived vulnerability	-Analyze findings of the impact of different types of visualization of the spread of flu on risk perceptions and perceived vulnerability.	-Develop a report of our findings. -Work with Elastique to incorporate effective visualizations of the spread of flu into the development of a communication tool (e.g. flu app)

Assumptions: The risk perceptions of participants imagining a hypothetical outbreak will be representative of risk perceptions in an actual pandemic.

External Factors: Expeneses, personnel, time, representative SSI samples.

Suggestion 6: Development of strategies and tools to engage healthcare workers.

Details: Using feedback from WP1-6, we will aim to develop strategies to influence and engage HCWs.

Inputs	Outputs		Outcomes -- Impact		
	Activities	*Participation*	*Short*	*Medium*	*Long*
-Feedback from WP 1-6 to inform development of communication strategies -Behavioral and communication theories -Study personnel -SSI survey participants	-Develop ways to utilize findings from gist and verbatim (e.g., visualization studies) communication, testimonials, and metaphors to improve engagement of healthcare workers in preventive strategies (i.e. hand hygiene, vaccine uptake) during a flu outbreak -Develop outcome measures to understand barriers to vaccine uptake, especially focusing on vaccine efficacy concerns, as well as factors to increase response efficacy	-Study personnel will incorporate findings from previous studies in a study to assess factors to improve engagement of healthcare workers in preventive strategies (i.e. hand hygiene, vaccine uptake) during a flu outbreak -Study personnel will develop measures to understand barriers to vaccine uptake and incorporate into recommendations for engaging healthcare workers in preventive strategies	-Use previous findings to develop recommendations for engaging healthcare workers, especially focusing on barriers to vaccine uptake -Gain an understanding of what factors improve response efficacy -Develop recommendations for engaging healthcare workers in preventive strategies	-Analyze findings of communication strategies to improve engagement of healthcare workers in preventive strategies during a flu outbreak	-Develop a report of findings. -Work with Elastique to integrate findings into development of an app/point-of-care tool targeted at healthcare workers.

Assumptions: We will have access to a representative sample of healthcare workers through SSI or another survey distribution channel. Communication strategies addressing barriers of vaccine uptake for SSI participants will be effective for healthcare workers.

External Factors: Expeneses, personnel, time, representative SSI samples.