CO-OPERATOR

Developing a Country-Observatory for Sharing Best Practices for Vaccination Promotion

Investigating vaccination hesitancy: From the SAFEST project to co-OPERATOR

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Strengthening vaccination policies towards the 2024 European elections: from recommendations to concrete experiences

Wednesday, February 14th 2024

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Vaccination Hesitancy

- **Vaccination hesitancy:** delay in acceptance or refusal of vaccines despite their availability → one of the top 10 threats to global health[1,2]
- In order to reduce mortality rates → **COVID-19 vaccination hesitancy** should be reduced

→ Important to understand the mechanisms that drive people towards greater vaccination uptake so as to better design intervention programs

- Several factors may influence vaccine hesitancy:
  - socio-demographic characteristics
  - behavioral characteristics
  - attitudinal characteristics

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Profiling vaccination hesitancy

Profile of the COVID-19 hesitant

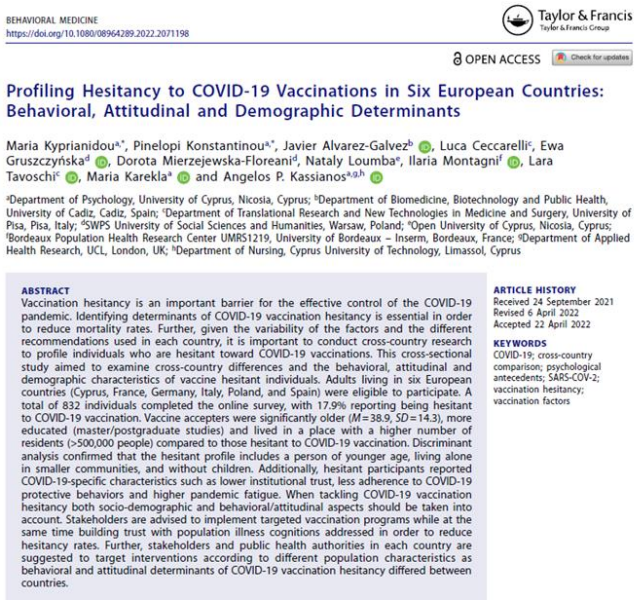
Less worrying about the severity of being infected (p<.01)

Lower institutional trust (p<.01)

Less adherence to protective behaviours (p<.01)

Higher pandemic fatigue (p<.01)

Discriminant analysis: Wilk's lambda=.96; p<.01



BEHAVIORAL MEDICINE
https://doi.org/10.1080/08964289.2022.2071198

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Profiling Hesitancy to COVID-19 Vaccinations in Six European Countries: Behavioral, Attitudinal and Demographic Determinants

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ABSTRACT

Vaccination hesitancy is an important barrier for the effective control of the COVID-19 pandemic. Identifying determinants of COVID-19 vaccination hesitancy is essential in order to reduce mortality rates. Further, given the variability of the factors and the different recommendations used in each country, it is important to conduct cross-country research to profile individuals who are hesitant toward COVID-19 vaccinations. This cross-sectional study aimed to examine cross-country differences and the behavioral, attitudinal and demographic characteristics of vaccine hesitant individuals. Adults living in six European countries (Cyprus, France, Germany, Italy, Poland, and Spain) were eligible to participate. A total of 832 individuals completed the online survey, with 17.9% reporting being hesitant to COVID-19 vaccination. Vaccine accepters were significantly older ($M = 38.9$, $SD = 14.3$), more educated (master/postgraduate studies) and lived in a place with a higher number of residents (>500,000 people) compared to those hesitant to COVID-19 vaccination. Discriminant analysis confirmed that the hesitant profile includes a person of younger age, living alone in smaller communities, and without children. Additionally, hesitant participants reported COVID-19-specific characteristics such as lower institutional trust, less adherence to COVID-19 protective behaviors and higher pandemic fatigue. When tackling COVID-19 vaccination hesitancy both socio-demographic and behavioral/attitudinal aspects should be taken into account. Stakeholders are advised to implement targeted vaccination programs while at the same time building trust with population illness cognitions addressed in order to reduce hesitancy rates. Further, stakeholders and public health authorities in each country are suggested to target interventions according to different population characteristics as behavioral and attitudinal determinants of COVID-19 vaccination hesitancy differed between countries.

ARTICLE HISTORY
Received 24 September 2021
Revised 6 April 2022
Accepted 22 April 2022

KEYWORDS
COVID-19; cross-country comparison; psychological antecedents; SARS-COV-2; vaccination hesitancy; vaccination factors

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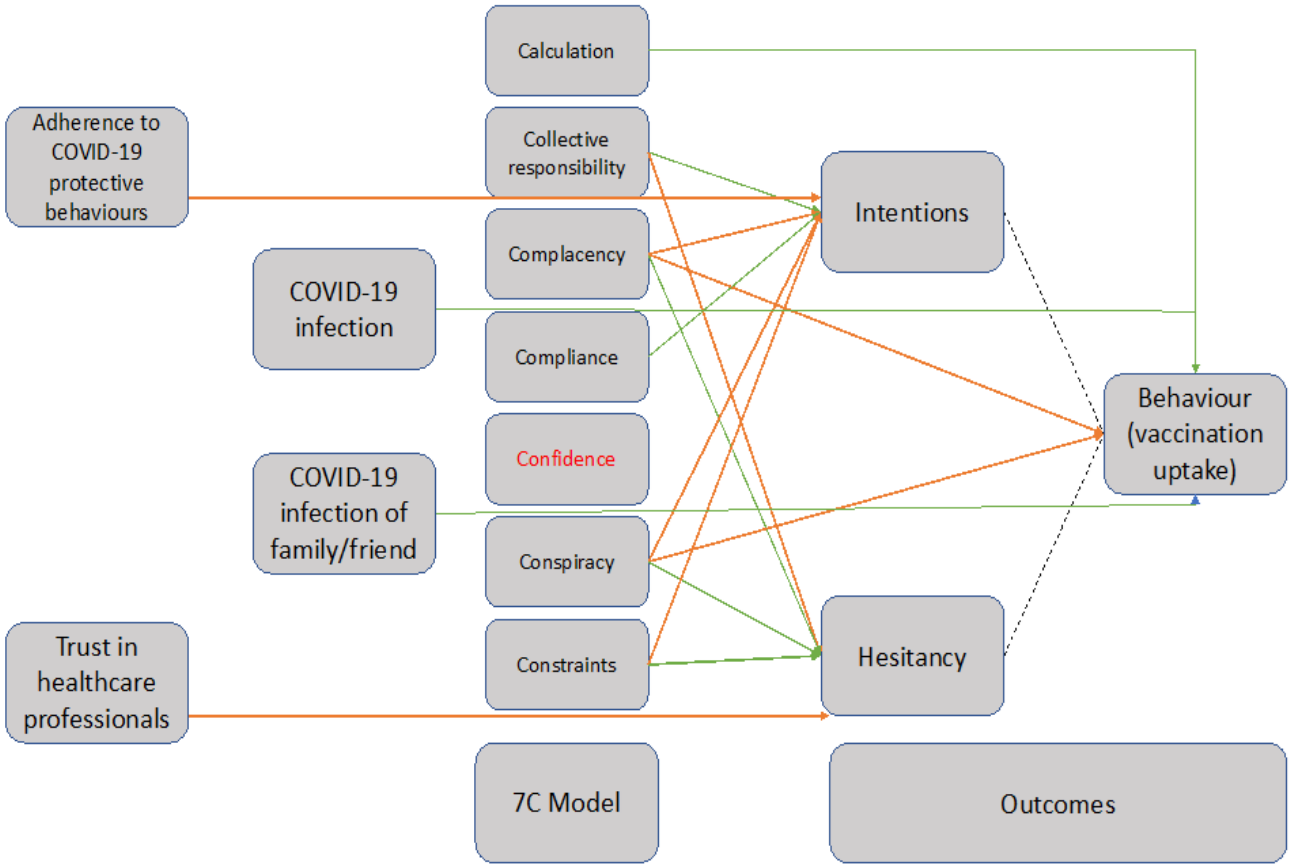
Profiling vaccination hesitancy

Intentions to vaccinate and uptake

- As complacency (OR=0.32, 95% CI: 0.14, 0.72, p<.01) and conspiracy (OR=0.42, 95% CI: 0.22, 0.82, p=.01) increased, the probability of accepting COVID-19 vaccine decreased.
- As calculation (OR=2.12, 95% CI: 1.20, 3.72, p<.01) increased, the probability of accepting COVID-19 vaccine increased.



Kassianos et al (in preparation). Investigating vaccine hesitancy and the intention-behavior gap in the context of COVID-19: A multi-country, prospective, longitudinal study

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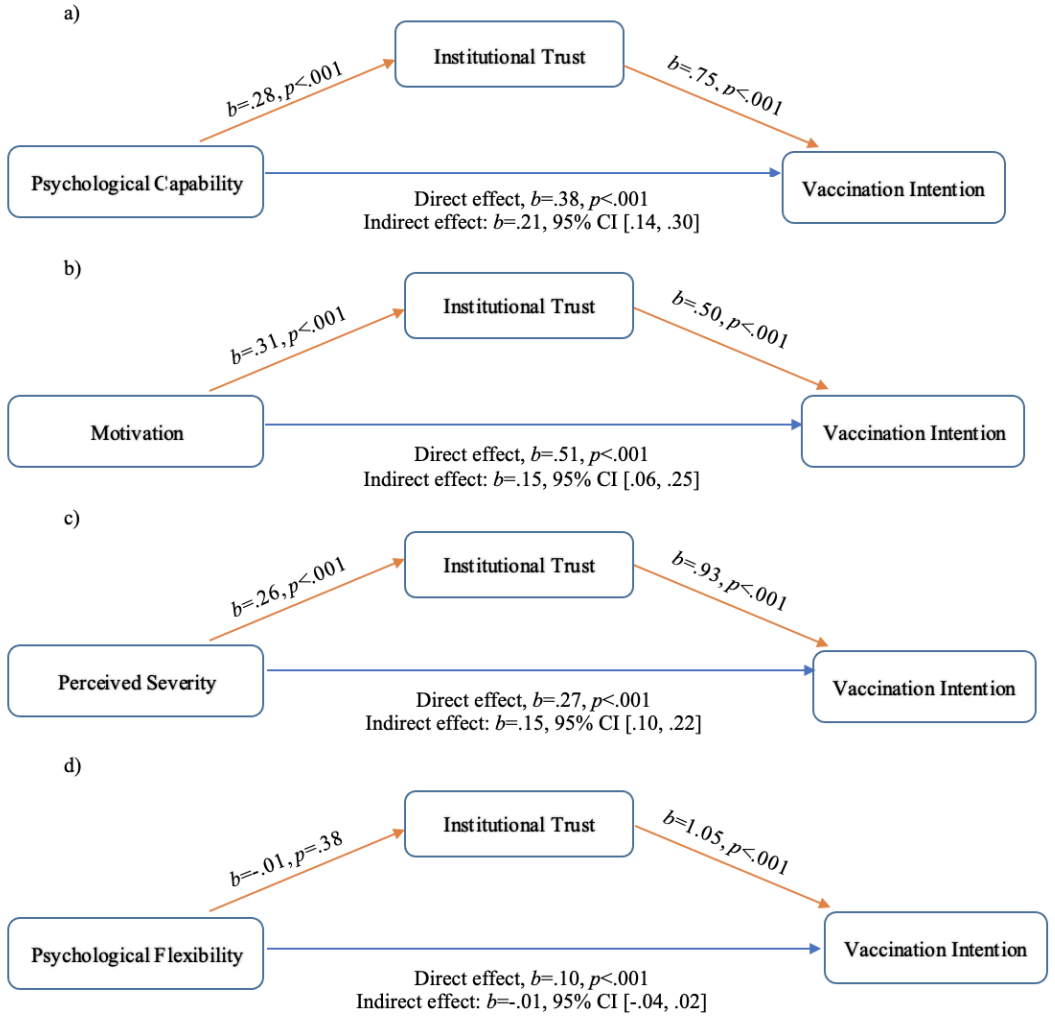
Profiling vaccination hesitancy

Young adults

Main determinants

- ***Trust in state authorities***,
- ***Perceptions on COVID-19 severity***,
- ***Motivation***,
- ***Physical and psychological capability*** were the strongest predictors of vaccination intentions.
- Significant indirect effects of psychological capability and perceived severity on vaccination intention were found to be ***mediated by institutional trust***.



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Therefore…

Vaccination hesitancy can be **associated** with aspects of

- ✓ Socio-demographics
- ✓ Trust
- ✓ Related protective behaviours
- ✓ Cognitions of severity
- ✓ Feelings of tiredness

Vaccination hesitancy can be **improved when**

- ✓ Trust in healthcare professionals is increased
- ✓ Belief in collective responsibility, necessity of vaccinations increased
- ✓ Ability to weigh pros and cons increase in those who do not intend
- ✓ Constraints to vaccinate decrease

… and can be **worsened when**

- ✓ Beliefs in conspiracy increase

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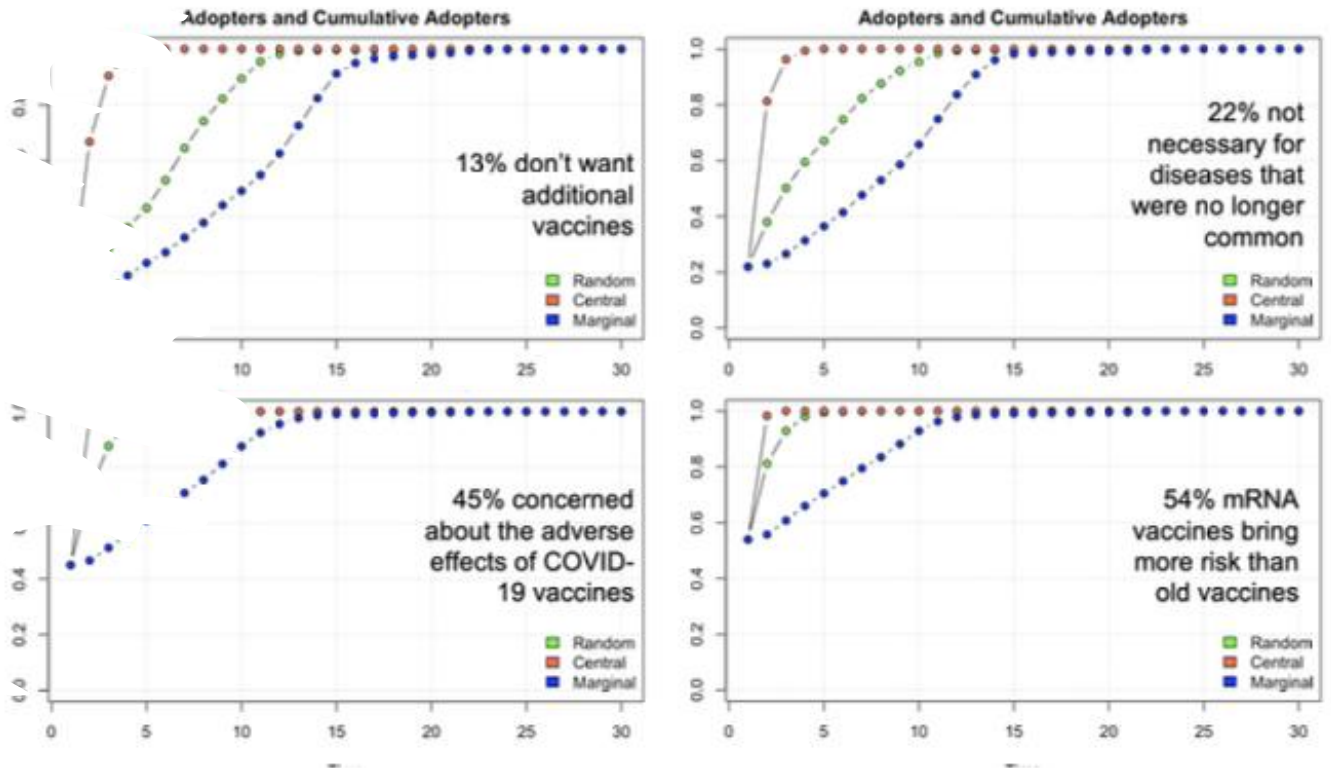
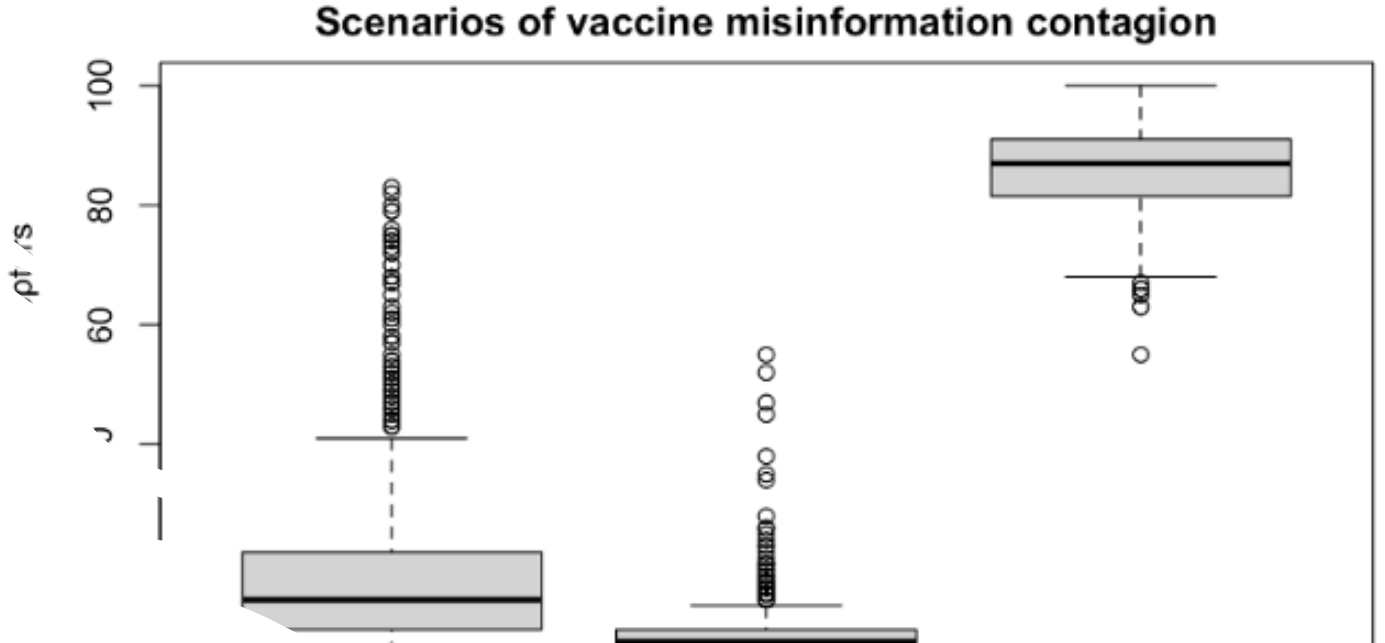
Characterisation of network properties and complex vaccination behaviours

Our results show that the **centrality** of the person spreading vaccine hesitancy is even **more relevant than the level of hesitancy** that vaccines may generate among the population, indicating that **even low levels of hesitancy (less than 10%) can easily spread if certain opinion leaders favor the spread of vaccine hesitancy**.





Co-Operator Project

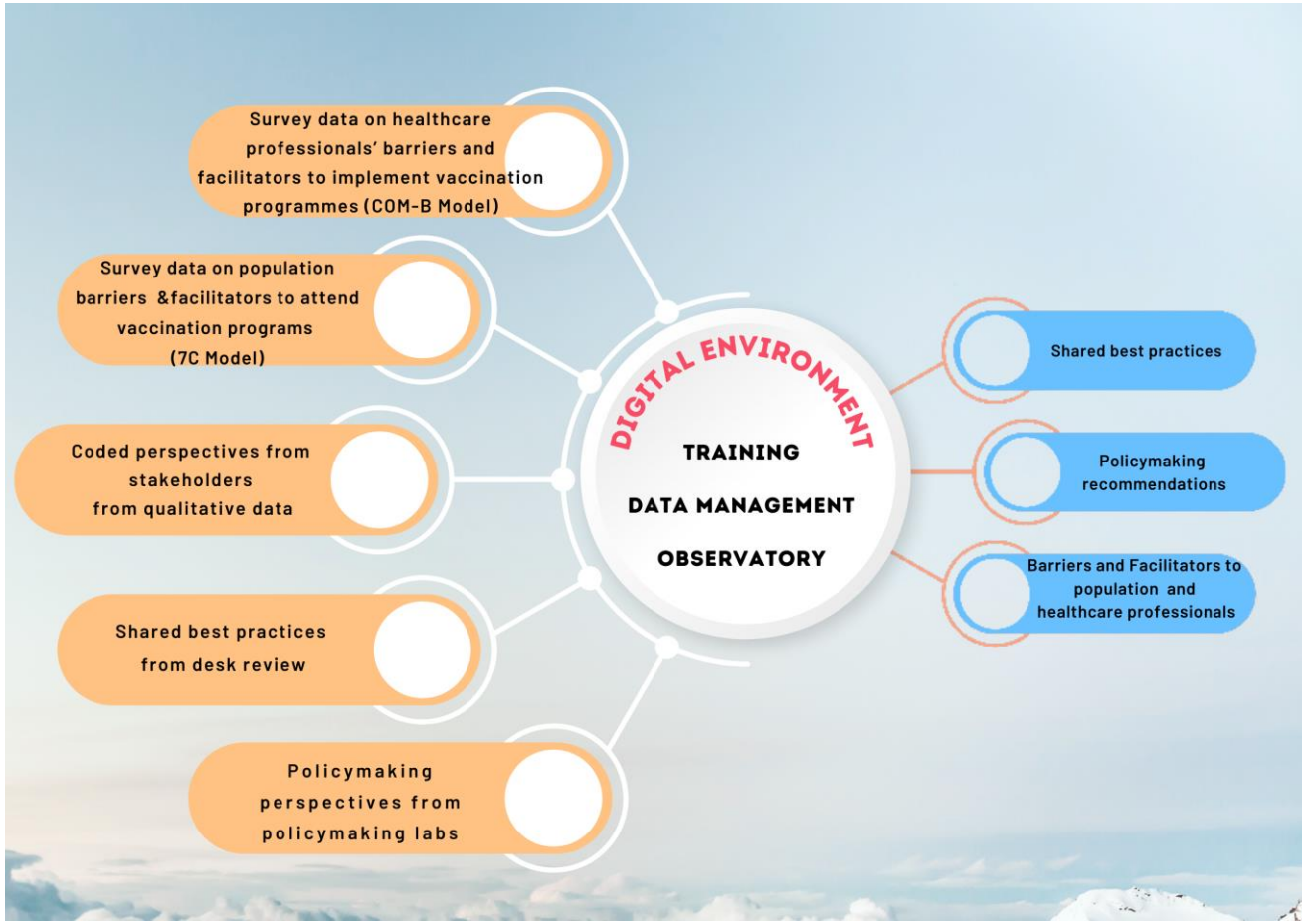
The co-OPERATOR will develop an **innovative** and **citizen-centered** digital solution with an evidence-based **virtual observatory** to increase vaccine uptake and vaccine literacy among participating countries and will support decision-makers, experts, and EU citizens to understand the determinants of vaccine uptake and healthcare professionals' barriers and facilitators of promoting vaccine information.

Funded by EU4Health

Three-year project: 2023-2026

Budget: 2,173,341 euros

Coordinator: Cyprus University of Technology, Department of Nursing



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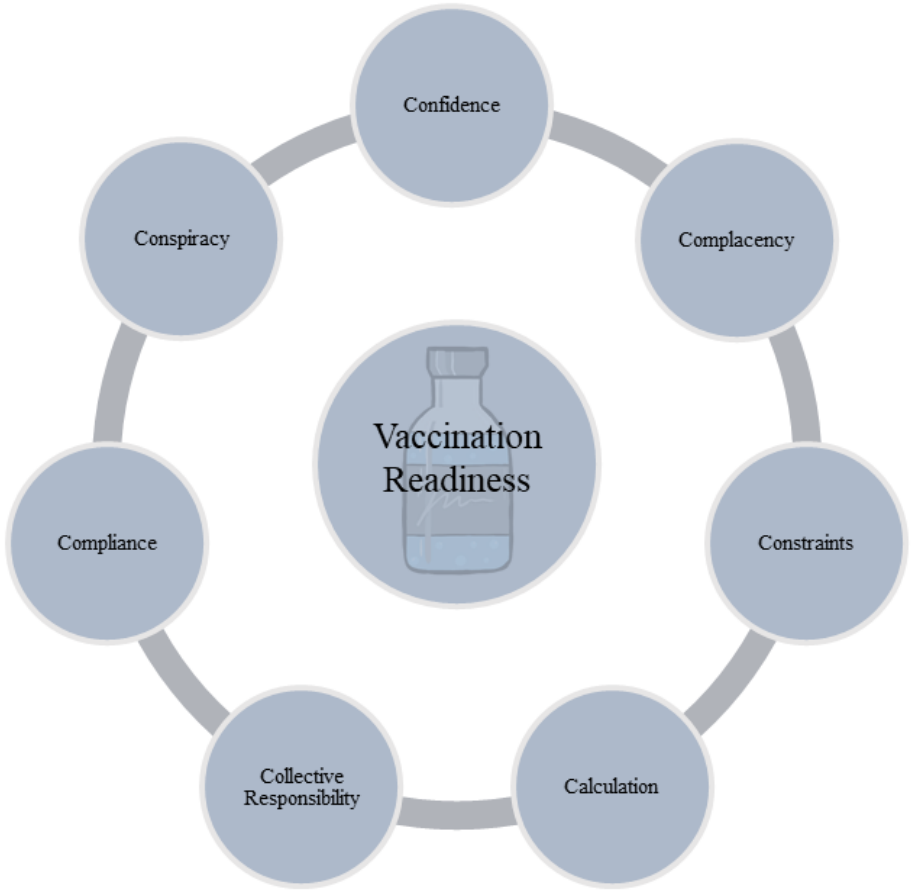
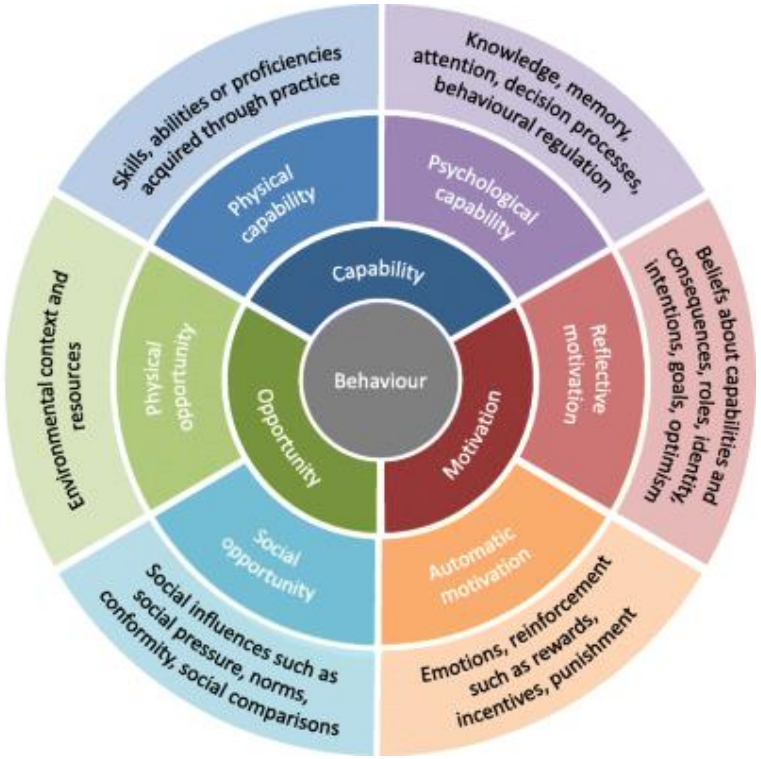
Models used





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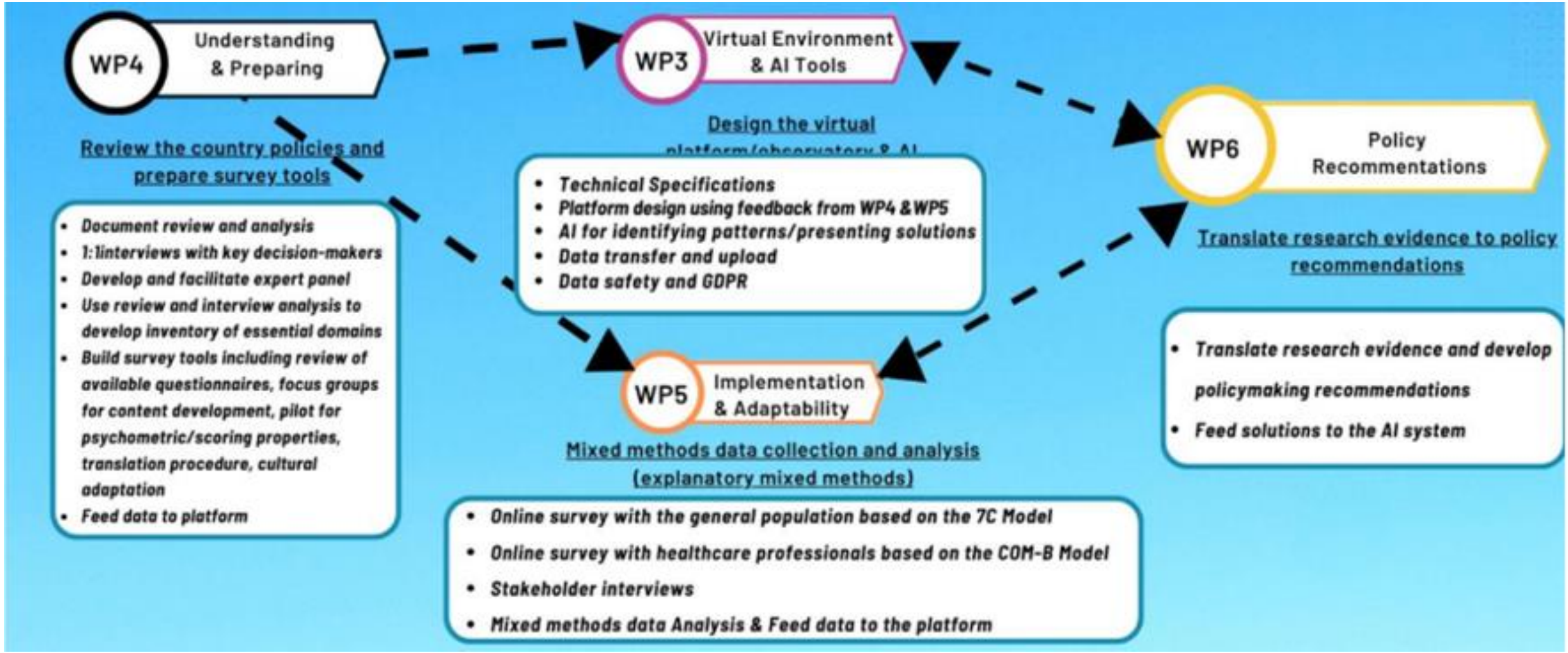
Co-OPERATOR synergies



Co-OPERATOR policymaking

Example

As an example, mapping may suggest that country A have citizens who have high rates of complacency or confidence issues (7C Model) that can drive policymakers towards specific targeted interventions whilst healthcare professionals may struggle with opportunities to communicate efficiently about vaccines due to training (capabilities aspect of model) or time-restrictions (opportunities aspect of model) due to fragmented healthcare systems. This can also drive policymakers' efforts to equip healthcare professionals in a targeted manner.

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