

Measuring the impact of a Digital HIV/ITS intervention on risk and social behavior of University of Santiago students

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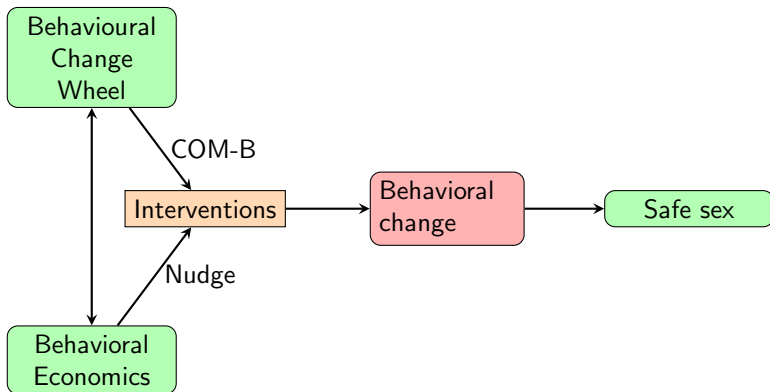
THE GLOBAL IMPACT OF HIV & AIDS



38 million people
worldwide are currently
living with HIV or AIDS.



Theoretical background



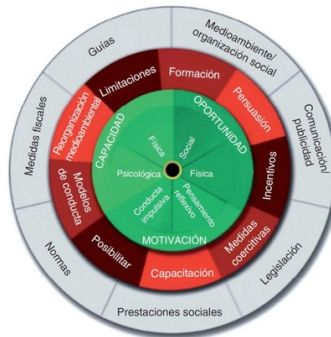
1. Theoretical Design 2. Experimental Conditions 3. Experimental measure

Behaviour Change Wheel

The COM-B model of behaviour



Michie et al (2011) Implementation Science



Fuentes del comportamiento

Fines de la intervención

Tipos de política

Our research Proposal

- Longitudinal online experiment comparing exposure to an HIV/STI risk prevention intervention (video) designed using the Behaviour Wheel Change perspective against a placebo
- Placebo = Another campaign aimed at USACH students (possibly 'staying active')

Dependent variables

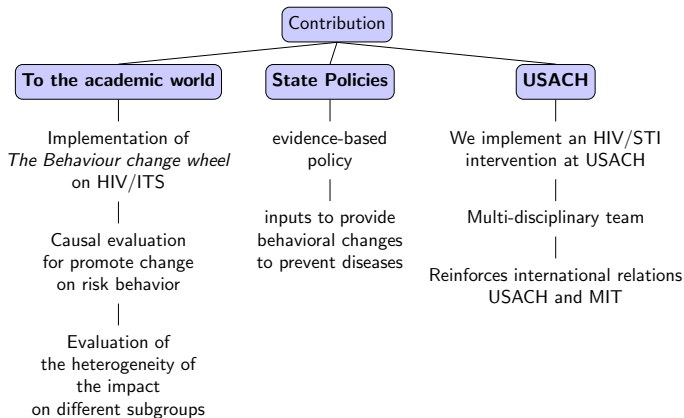
- Self-reported changes in risk taking behavior
- Self-reported changes in risk taking behavior using List Experiments
- Willingness to 'like' a video
- Willingness to 'share' a video
- Spatial Contagion – a.k.a Potential for organic (non-funded) dissemination of the intervention.

Previous research

This research builds

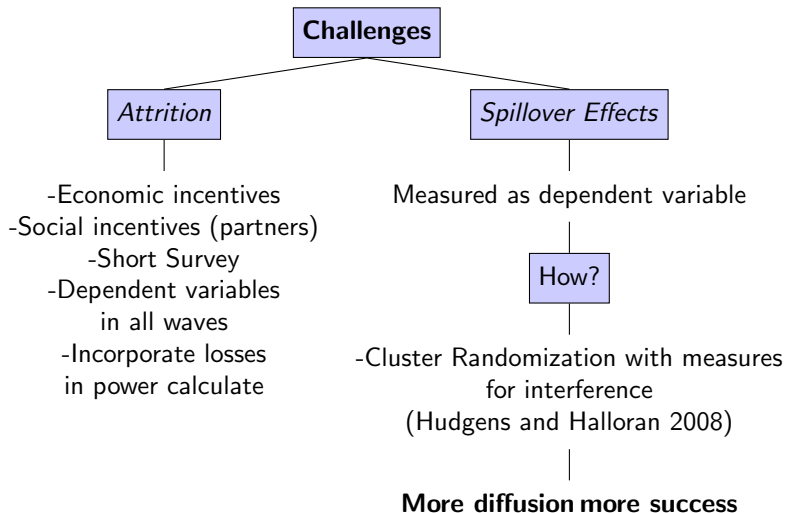
- studies that evaluate the Behaviour Wheel Change, in multimorbidity (Sinnot et.al, 2015), Childhood Obesity (Taylor et.al, 2016) and cigarette smoking habits (Goul et.al, 2017), and
- studies that evaluate the impact of digital campaigns for alcohol and smoking reduction apps (Perski et.al, 2017), tobacco prevention in youth people (Zhao. et.al, 2016), and
- social media campaigns more generally – Rand (2020) papers on truth labels in social media.

Research contributions



Longitudinal structure

- ① Baseline survey (Wave 1) – Description of the Covid sexuality contingency.
- ② Invitation to participate in a longitudinal study.
- ③ A total of 4-5 waves of evaluation and re-treatment – depending on budget. Estimated cost 25.000 USD, for economic incentives to respond to the survey.



Wave 1 - survey Structure

- ① Informed consent
- ② Instructions, that enhance:
 - ① Economic compensation, and
 - ② Social contribution
- ③ Stated knowledge of USACH campaigns
- ④ Socio-demographics
- ⑤ Dependent variables of interest
- ⑥ Invitation to participate in future waves
- ⑦ If Accept — Randomize Video P; T1; T2; T1xT2 + payment info — measure 'Like'
- ⑧ If Not Accept — payment information
- ⑨ 15 minutes survey

First wave results provide descriptive measure of USACH student's sexuality during COVID

The structure of Wave 2+

- ❶ Informed consent
- ❷ Stated knowledge of USACH campaigns
- ❸ Measure other dependent variables
- ❹ Treatment video: P; T1; T2; T1xT2 (same treatment allocated in wave 1)
- ❺ Willingness to share the video (from Wave 2 onwards)

Power

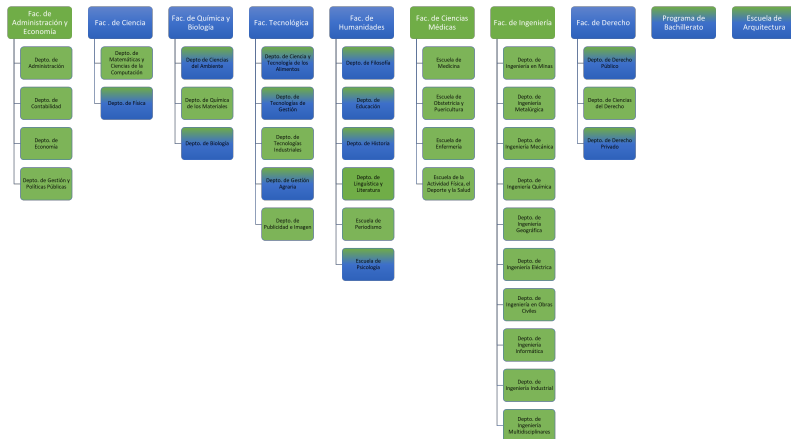
- ① There are 25.000-ish USACH students
- ② Wave 1: 2000 (8 % Answer survey) - Baseline - T
- ③ Wave 2: 1200 (60 % retention) - $T + 1months$
- ④ Wave 3: 1020 (85 % retention) - $T + 3months$
- ⑤ Wave 4: 714 (70 % retention) - $T + 6months$

Randomization

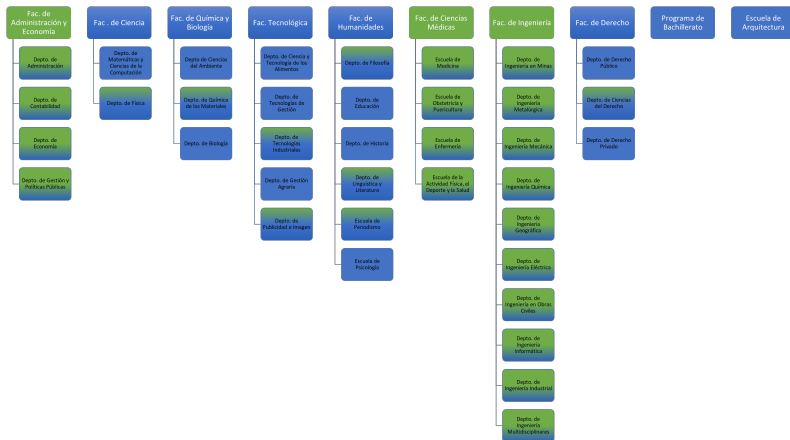
Cluster randomization with diffusion design, that allow one to measure spillovers (Hudgens and Halloran, 2008, Kang and Keele, 2019). En epidemiological approach.

- ① $\frac{3}{10}$ Faculties with Placebo, $\frac{7}{10}$ Faculties with Treatment
- ② Within the Treated Faculties, Departments are randomized: $\frac{1}{3}$ Placebo, $\frac{2}{3}$ Treatment.
- ③ Within the treated Departments, individuals are randomized with probabilities: $\frac{1}{3}(\frac{1}{2}P|T1)$; $\frac{1}{3}(\frac{1}{2}P|T2)$; $\frac{1}{3}(\frac{1}{2}P|T2 * T3)$, in gender and age blocks.

Randomization



Conjectures regarding diffusion



Research importance



- Health Sistem
- Evidence
- *M-Health*
- Mechanism of behavioral evaluation in Health

Research progress

- Second part of the DICYT project to support clinical research (2019-2020): "Effects of digital interventions for the prevention of STI/HIV in young people" (02193 DA-MED)
- Videos for experimental conditions
- Survey
- A Methodological model for intervention and evaluation



¡Thank You!