Stay at Home: Self-Isolating Behavior Among Young Adults During Coronavirus (COVID-19) Outbreak

BDS 502: Norms and Nudges Project Proposal

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Introduction:

Staying home to prevent the spread of coronavirus presents a common good problem. Individuals find it more personally beneficial not to stay home for a variety of reasons, but it is in the interest of public health that individuals do so to prevent widespread transmission (Bauch & Galvani, 2013). Our project aims to motivate millennials and Gen-Z in the United States to stay home for the common public good. The reason we target this population is that the common good problem is the least salient for them, as they may be less likely to be seriously affected by the disease; therefore, they have less of a personal cost from not staying home. However, they can be silent transmitters and have a huge impact on the spread of the disease. Although the official term often used is "social distancing," which broadly means limiting one's social contact, this term is vague and can allow for "moral wiggle room" (Appleby, 2020; Bicchieri, 2020). For this reason, our proposal focuses on the specific and measurable behavior of encouraging the millennial and Gen-Z population to stay home.

Diagnosing what motivates the behavior:

We believe the "stay home" behavior to be interdependent, as the construct of social norms has been commonly used in other similar health promotion efforts focusing on behavior change such as those addressing sanitation and hygiene and substance abuse issues (Edberg & Krieger, 2020). Therefore, motivation for "stay home" behavior falls under two brackets: non-social and social.

Non-social motivations:

- Simple individual preference for staying at home versus being outside or socializing
- Whether their needs are taken care of if they stay at home, and in this case, it is usually financial eg. employees that go to work because they will lose their job otherwise (Jones & Peter, 2020)
- Personal normative beliefs, which are individual beliefs about what should be done
    - Prudential reasons to stay at home include avoiding getting infected by the disease
    - Moral reasons include staying home to limit the spread of the disease because the individual personally believes it is the right thing to do

Social motivations (Relevant reference network: individual's friends):

- Empirical expectations: whether the individual thinks friends in their reference network are staying at home. For example, seeing friends post pictures of being at a beach (as crowds still flocked to Florida's beaches during the pandemic), may motivate the individual to not stay at home. However, showing pictures of people in their reference network (other young people) staying at home would encourage the desired behavior.

First changing empirical expectations has been shown to be the most effective way to create a new norm (Bicchieri, 2020).

- Normative expectations: whether the individual thinks friends in their reference network think that one should stay at home. Social media posts like the term "covidiot" and the image of 'flattening the curve' that are circulating around, affect normative expectations that people think that everyone should stay at home.
- Effectiveness of moral messages on public health behavioral intentions during the COVID 19: deontological messages focused on duties and responsibilities toward family, friends, and fellow citizens forms the most effective moral messages on people's intentions to wash their hands, avoid social gatherings, self-isolate, and share health messages (Everett, Colombatto, Chituc, Brady & Crockett, 2020).
- Age-based messaging strategies for communication about COVID 19: Messages highlighting the risk to older adults alone have little power in influencing attitudes and behaviors but messages highlighting risks to younger adults, in addition to risks to older adults, make individuals perceive COVID-19 as a more serious threat (Utych & Fowler, 2020).

Accurately measuring the behavior (pre- and post-intervention):

In order to accurately measure the behavior both pre- and post-intervention, a difference-in-difference analysis will be effective. One way to measure the change in behavior is by aggregating cell phone location data among young adults. This measure would read similar to a live heat map to understand how active a city or neighborhood is. Another way to behaviorally measure behavior is by using social media. Given that the target population uses Instagram and/or Facebook, these platforms would allow for the measurement of individuals in their built-in reference network. Instagram allows advertising brands to survey users within the main feed while they are scrolling. A brief pop-up survey can be implemented here to measure user behavior, empirical expectations, and normative expectations pre- and post-intervention. Additionally, survey questions can be embedded in Facebook videos before they play.

Suggested intervention(s):

In order to create a new norm of staying at home, we propose a multi-stage intervention that follows the phases as proposed by the Applied Behavioral Science Lead at Rare's Center for Behavior and the Environment (Thulin, 2020):

1. Generate collective demand
    a. Believing staying at home should occur (Personal Normative Beliefs)
        i. Social media messaging about the risks involved for the target population with a tailored emotional appeal such as "People like you[r age group] can become seriously sick from COVID-19. You are not immune. Stay home to reduce your chances of death."
            1. Utilitarian messaging
            2. Aged-based messaging strategy
        ii. Social media messaging about protecting our new heroes, healthcare workers

1. Deontological messaging focused on fellow citizens working on the frontline

iii. Social media messaging about protecting the elderly and vulnerable
1. Deontological messaging focused on vulnerable members of society and family
2. Use the Identifiable Victim Effect rather than statistics to achieve maximum impact

b. Believing others think people should stay at home (Normative Expectations)
i. Normative messaging, such as "Most of your peers think that it is only appropriate that one stays home during this period of time"
ii. Normative messaging on social media about protecting the elderly and vulnerable. For example,"Most of your peers think that it is right to stay at home in order to protect vulnerable populations"

2. Coordinate shift in behavior
a. Believing others are staying at home (Empirical Expectations)
i. Empirical messaging on social media that most peers in the reference network are staying at home
ii. Create a public survey that socializes and gamifies the act of staying home
iii. Clearly define the desired behavior

3. Strengthening the new norm
a. Believing that others will find out if one does not stay at home (observability)
i. Make a commitment to stay at home observable. Create a social media challenge to stay home
ii. Social media add-on for friends to track each other's locations to make sure everyone stays home
b. Believing that if one is caught not staying at home, that no excuse will be seen as valid (excuse elimination)
i. Make it easier for people to stay socially connected without in-person interactions. For example, show "The Future of Interactions" using digital platforms
ii. Shift products and services to minimize social contact as much as possible by providing contactless delivery services, allowing people to work from home, specified grocery store hours

Desired effect:

The goal of this project is to use ideas from Behavioral Science and knowledge of Social Norms to minimize the spread of Coronavirus by encouraging young people to **stay at home**.

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