# Chapter 1: Introduction – Broad Overview of Research

## A: Overview

1. Why is this study being undertaken? - public perceptions and human belief need to be changed, either due to new information (e.g., discovery of a new drug, or best practice) or due to changing circumstances (e.g., a global pandemic).
2. What main questions will we answer? – Social Consensus is known to be a useful tool, how useful is it (effect size), and what individual differences or covariates can affect it’s effectiveness?
3. What problems are we foreshadowing? - human beliefs can be difficult to change, especially when the issue is highly polarized, or seen as central to one’s perception of ‘right and wrong’ (e.g., Abortion, Immigration, Climate Change, etc.). Greater moral conviction towards one’s beliefs blunts the effectiveness of ‘social consensus’ magnifying the importance of understanding this further.

## B: Statement of the Problem

1. How can social consensus be used to change beliefs, and in what conditions is it effective? We wish to empirically show that social consensus manipulation can increase and decrease beliefs in a variety of issues. Additionally, that the effect of social consensus can be leveraged with a broader categorization (e.g., consensus of American public vs. consensus of peer students/rival students vs. consensus of close friends).
2. Skitka’s “Domain Theory of Attitude” implies that changing moral conviction can lead an attitude to shift from a ‘moral imperative’ (difficult to change belief) to a preference or convention (easier to change belief). However, this has not been empirically assessed as a way of changing beliefs. Additionally, how do different baseline levels of moral conviction around issues affect the willingness to change beliefs?
3. How can we maximize the effectiveness of social consensus to change beliefs? Social consensus is generally very effective at changing beliefs, except in conditions of high moral conviction. In theory, reducing moral conviction should increase the effectiveness of social consensus, however, this has not been empirically tested.

## C: Purpose

1. How can social consensus be used to change beliefs?
   1. How individual differences affect social consensus
   2. What type of social consensus is most effective
2. How does moral conviction affect belief change?
   1. How do different issues differ in baseline levels of moral conviction, and how do these baseline differences affect openness to belief change?
   2. What manipulations are best at increasing/decreasing moral conviction?
3. How do changing levels of moral conviction interact with the effects of a social consensus intervention?

## D: Research Question or Hypothesis/Significance of Study

1. Study 1
   1. We predicted high social consensus would lead to more positive support for highly polarized issues (H1)
   2. Utilitarian and Deontological Orientation, of the ethical standards of judgement questionnaire (ESJQ) would be significant predictors of support for these polarized issues (H2)
2. Study 2
   1. We hypothesize that the moral conviction manipulation would be a significant predictor of support for our four topics (e.g., our hypothesis had no *a-priori­* directional effect), as compared to the control condition (H1).
   2. Moral piggybacking and moral responsibility interventions would increase moral conviction relative to the control, and that the pragmatic and hedonic interventions would decrease moral conviction relative to the control (H2).
3. Study 3
   1. Decreases in moral conviction will lead to significantly greater effect of social consensus or, increases in moral conviction will lead to ‘inoculation’ against social consensus (H1).
4. Significance of the Study – START THE SENTENCE TO DIRECTLY REFERENCE PERSUASION AND BELIEF CHANGE – ESPECIALLY IN POLARIZED TOPICS - Effective persuasion/dissemination of up-to-date information can critically impact public health and safety. Gaining further understanding of one of the best ‘tools’ available in the form of social consensus has direct applications in improving persuasion/science communication. Furthermore, addressing one of the largest theoretical weaknesses in this tool (e.g., high levels of moral conviction acting as ‘inoculation’ against social consensus) improves applicability, especially considering how many vital contemporary issues are held with high levels of moral conviction (e.g., climate change).
   1. For instance… COVID 19 harm caused by inability to persuade or change beliefs – misinformation can cause harm (TWO EXAMPLES)
   2. Applies to healthcare as the origin, but we expand further and go towards why changing beliefs here can be applicable more broadly.

## E: Summary of Methodology

1. Brief summary of methods – Unsure how to parameterize

## F: Definition of Terms

1. Universal Health Care (UHC) - Universal health coverage (UHC) means that all people have access to the full range of quality health services they need, when and where they need them, without financial hardship. It covers the full continuum of essential health services, from health promotion to prevention, treatment, rehabilitation and palliative care.
   1. Tracking universal health coverage: 2017 global monitoring report. Geneva: World Health Organization; 2017 (https://www.who.int/publications/i/item/9789241513555, accessed 27 July 2023
2. Capital Punishment – The process of sentencing convicted offenders to death for the most serious crimes (capital crimes) and carrying out that sentence.
   1. (Kasten 1996)
3. Climate Change – Climate change is a measurable systemic change in the state of the climate driven by natural events or anthropogenic activities that alter the composition of the atmosphere.
   1. Salonen, A.O., Reiser, D. (2023). Climate Change. In: Idowu, S.O., Schmidpeter, R., Capaldi, N., Zu, L., Del Baldo, M., Abreu, R. (eds) Encyclopedia of Sustainable Management. Springer, Cham. https://doi.org/10.1007/978-3-031-25984-5\_75
4. Utilitarianism – Ethical judgement based on outcomes, not intentions
   1. (Brady and Wheeler, 1996)
5. Deontology - Ethical judgement based on whether or not behavior adheres to a preconceived set of ‘rules’, this includes concepts like ‘rights’, ‘ideals’, and explicitly recorded law.
   1. (Brady and Wheeler, 1996)
6. Social Consensus – The degree of social agreement that a proposed act is evil or good
   1. (Jones 1991)
7. Moral Conviction - Morally convicted attitudes represent something psychologically distinct from other constructs (e.g., strong but nonmoral attitudes or religious beliefs), are perceived as universally and objectively true, and are comparatively immune to authority or peer influence. Morally convicted attitudes are held due to core beliefs about what is fundamentally right or wrong (i.e., abortion should be legal, due to the core belief that women should have full bodily autonomy).
   1. (Skitka, 2021; Skitka 2010)

# Chapter 2: Review of the Literature

## A: Introduction of Topics, Purposes, and Methods

## B: Description and Discussion/Critique of Scholarly Literature

## C: Inferences for Forthcoming Studies

# Introductory Paragraph Draft

Human belief change and persuasion has many direct applications in society. Providing information regarding best practices, scientific consensus, and state-level policy priorities in general can directly improve quality of life for ordinary people. However, dissemination of up-to-date information can be objectively worthless if the message itself does not adequately lead to belief change for the behavior at hand. For example, COVID-19 vaccine hesitancy was estimated to result in at least 232,000 preventable deaths, and a significant majority of those who refused vaccination had been exposed to persuasive misinformation through social media and other outlets (Jia et al., 2023; Lee et al., 2022). Changing beliefs also has common application with regards to political policy; Universal Health Care (UHC) has been shown to result in better overall population health outcomes, yet the United States is the only country in the developed world that still lacks Universal Health Care (UHC) for its citizens (Alspaugh, 2021). Changing the generally negative public perception of UHC in the United States (36% of Americans support UHC) would increase the likelihood of UHC adoption, and in doing so, improve population health (Pew Research Center, 2020).

Belief change is a multifaceted process, and prior literature lists many factors affecting openness to belief change for a given topic. Individual differences in (a) deontological and (b) utilitarian orientation broadly shape priorities and how issues are interpreted; (c) social consensus (e.g., the level of agreement on an issue amongst friends, family, peers, or other in-groups) consistently influences individuals; and (d) differences in attitudes due to core beliefs about what is fundamentally right or wrong (e.g., abortion should be legal, due to the core belief that women should have full bodily autonomy), which we define here as Moral Conviction, ‘inoculates’ individuals against changing their beliefs. Assessing how each of these individual factors interact and influence belief change broadly has real and direct implications for public health and safety.

## Utilitarian and Deontological Orientation

Utilitarian and Deontological orientation influence how individuals perceive issues, as well as concepts of ‘right’ and ‘wrong’ (Brady and Wheeler, 1996). This directly affects openness to belief change and the effectiveness of persuasion. Utilitarian reasoning can be defined as ethical judgement based on outcomes, not intentions. In contrast, Deontological reasoning can be defined as ethical judgement based on whether or not behavior adheres to a preconceived set of ‘rules’, this includes concepts like ‘rights’, ‘ideals’, and explicitly recorded law.

Many highly polarized beliefs are rooted in utilitarian and deontological values (Tseng, 2021). For example, during the COVID-19 pandemic, healthcare professionals prioritizing a patients deontological ‘right’ to bodily autonomy would find mandatory vaccination unacceptable. In contrast, support of mandatory vaccinations was justified based on utilitarian reasoning that they resulted in net health outcome improvement.

## Social Consensus

Social consensus is a strong and consistent direct influence on individual beliefs.

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