SOCIAL/BEHAVIORAL/EDUCATIONAL RESEARCH PROTOCOL

UNIVERSITY OF MISSOURI

Project Title: Social Memory and Recollection on Current and Past Issues

IRB Number: IRB #2095965 MU

Version Number: 1

Version Date: 04/05/23

Principal Investigator: Sean Xiaohao Duan

Funding Source: N/A

1. **Research Objectives/Background**
2. The purpose of the study is to determine if perception of social consensus can impact an individual’s choice to support or oppose universal health care. We would also like to determine if there is an interaction with between the effect of social consensus and moral/ethical beliefs, specifically that of utilitarianism and deontology. We have two main hypothesis. Hypothesis 1: We hypothesize that when participants perceive that a strong social consensus towards universal healthcare exists, they will be more likely to support universal healthcare, as opposed to when they perceive that there is a lack of social consensus. Hypothesis 2: Furthermore, we hypothesize that in conditions of high social consensus, there will be no effect on support towards Universal Health Care due to the individual moral and ethical differences of belief in utilitarianism and deontology.
3. There is significant scientific rationale for this study. In the existing literature, there is a great deal of research on the effects of deontological and utilitarian ethical beliefs on perceptions of moral and ethical issues. Previous literature focuses quite heavily on balancing both utilitarian and deontological moral beliefs in healthcare administration more generally, but has not examined closely whether or not those moral beliefs are predictive of support or opposition to Universal Health Care. Furthermore, existing literature on ethical and moral decision-making indicates that for issues where strong social consensus exists, this social consensus will tend to ‘over-ride’ how an individual would perceive a given issue, regardless of the ‘normal’ conclusion that their inherent moral leanings would generally trend towards. Interestingly enough however, there has been relatively little research on how to successfully manipulate this perception of social consensus with regards to Universal Health Care. This research will ideally add to existing knowledge by illustrating what the moral and ethical preferences tend to be for those that support or oppose Universal Health Care, as well as provide insight as to whether or not social perception can be successfully manipulated with regards to Universal Health Care.
4. **Recruitment Process**
5. The recruitment process for this study will be the exact same as recruitment for any other online-only study that uses the Psych 1000 student subject pool
6. Students will be ‘recruited’ when they examine our informational snippet available on the MU SONA website, and then when they choose to sign up for our experiment.
7. **Consent Process**
8. The consent process will be in the form of a ‘cover letter’ that indicates the content of the study, which is believed to be a study focusing on memory and recollection, centered on recalling American public opinion in 2018 on several contemporary issues. Unbeknownst to our participants, the cover letter is a lie, insofar as the study is about determining whether or not manipulation of social consensus can affect an individual participants’ preference towards Universal Health Care. To be very clear, I would consider this true deception, as we are providing information about American public opinion on several contemporary issues that is inaccurate (modified to be either artificially high or artificially low social consensus on these issues).
9. **Inclusion/Exclusion Criteria**
10. The only inclusion criteria is that our subject pool will be recruited from Psychology 1000 student participation in exchange for research credit.
11. There is no exclusion criteria.
12. **Number of Subjects**
13. Anticipated enrollment is ideally 176 participants.
14. Calculated using GPower 3.1.9.7, under the assumption that we are looking for the difference between two independent means (two groups), a-priori, given that we assume an effect size of .5, an alpha of .05, and a power of .95, we require a total sample size of 176.
15. **Study Procedures/Study Design**
16. Our subjects will begin by clicking on our virtual study link, which consists of a online link to a Qualtrics survey. After clicking on the link, they will be brought to our cover page, that will include a brief (deceptive) description of the research they believe they will be involved in. After indicating their consent by clicking through to the next page, we will assess a baseline measure of their support for Universal Health Care. Next, we will measure individual differences in deontological and utilitarian moral orientation. After this stage, which all subjects go through, our subjects will be randomized to either our high or low social consensus condition. For both experimental conditions, subjects will be asked to estimate what they believe to be the percentage of ordinary Americans in 2018 that agreed with various social and scientific issues. Thess issues include belief in human climate change, support for Universal Health Care, the necessity of capital punishment in America, and whether or not slavery/forced labor is a violation of human rights. After giving their estimate, participants in the high and low consensus conditions are given deceptive information regarding the ‘actual results’ of what Americans believed in 2018. All information on belief (excepting the question on slavery, chosen as a calibration mechanism as a belief almost everyone should have consensus on) is taken from actual surveys of the America public from 2017-2019. In the high consensus condition, percentage agreement information is falsified by increasing the amount of agreement in groups by 20% (e.g., if 60% of Americans agreed that capital punishment is needed in the US, the actual percentage shown to those in the high consensus condition will be 80%), except for the calibration question on slavery. In the low consensus condition, percentage agreement information is manipulated by lowering the amount of agreements in groups by 20% (e.g., if 60% of Americans agreed that capital punishment is needed in the US, the actual percentage shown to those in the high consensus condition will be 40%), again, except for the calibration question on slavery. The participants then indicate on a Likert scale how much ‘surprise’ they felt after being given this feedback information. After this manipulation in perception of social consensus, we ask our participants to estimate what they believe the percentage agreement is for the American public in 2023, and finally, we assess a new measure of their support for Universal Health Care, with the hope that our social consensus intervention has had an effect on their baseline support for Universal Health Care. Next, our subjects will be asked some simple demographic information (age, sex, race, year in school, etc.), as well as be assessed for individual differences in health literacy and numeracy. Lastly, we will provide our subjects with a detailed debrief that truthfully reveals the nature of the actual study, as well as providing them with the actual accurate feedback information on the historical survey information of American public preference of the four previously assessed issues.
17. The time commitment for this study is roughly 20-25 minutes as an online survey, well under the requirement for single credit studies to be completed within 30 minutes.
18. The procedure that we are using in our study is research-only, as based on my understanding, it is not reasonable to expect participants to routinely estimate American public opinion and consensus on past historical issues.
19. **Potential Risks**
20. There are three reasonable foreseeable risks or potential discomforts for our subjects. The first risk is that our participant will take the information we provide to them about social consensus extremely seriously, and that it could perhaps lead to an unintentional warping of their worldview. The second risk is that our participants will be emotionally distressed once they realize that they have been deceived. The third risk is participants disclosing their personal opinions on a small number of social/political issues. Participants could experience embarrassment or distress if a breach of confidentiality occurred, and their responses were revealed to family, friends, or colleagues. Our main step to minimize these risks is to provide a thorough debrief at the end of the study, where we inform our participants of the actual social consensus results, as well as give them an explanation of how and why we felt that deception was necessary for our study. Additionally, for the third risk, we are mitigating this by ensuring that the survey itself is anonymous with no identifying information.
21. Our plan for reporting unanticipated problems or deviations to the IRB is very simple, if something unforeseen occurs that is a problem or deviation, the primary investigator will e-mail the MU eCompliance hotline within five-days and file a report with the IRB.
22. **Anticipated Benefits**
23. The main direct benefit for society is to gain a deeper understanding of how social perception affects issues where there is still significant mixed support on. This is especially pertinent for issues where there is already a strong scientific consensus, but no social consensus (for example, climate change). Furthermore, the main indirect eventual benefit from this study is the improved likelihood of the U.S adopting Universal Health Care, which generally leads to significant improvements in health outcomes both for individuals and society.
24. **Compensation**
25. Compensation will be provided in the form of 1 of the required credits needed for Psychology 1000 student participation. Credit will be disbursed automatically through a web-based protocol upon completion of the Qualtrics survey.
26. An example ‘alternative assignment’ would be something such as: “Please write a 1-2 page paper on how sense and sensation affects human judgement and decision-making”. To be very clear, each individual instructor that is teaching Psychology 1000 (there are several instructors and sections of this course) is allowed to determine on their own what would be an acceptable alternative assignment. I cannot clearly indicate an exhaustive list of potential alternative assignments, as that would not be possible. I have indicated above a single example that is indicative of the type of assignment a Psychology 1000 instructor would request in lieu of research credits for the course.
27. **Data Safety Monitoring Plan**

Our data monitoring plan will be focus on being simple and effective. All of the data that we collect will be automatically anonymized, so there will be no concerns regarding connecting the data to any particular participant. Additionally, only the primary investigator will be involved in data analysis, lowering the likelihood of the data to be shared unnecessarily.

1. When or if something needs to be reported, the primary investigator will send an email to the MU eCompliance hotline
2. The data will be monitored after data collection has been completed upon meeting our predetermined initial participant goal (176 participants)
3. The monitoring will be handled by the primary investigator, the data being monitored will be the entire output of the Qualtrics surveys.
4. We believe that our data analysis procedures will primarily center on creating linear models and assessing both percentage of variance accounted for by our variables, as well as statistical significance in difference of means for our dependent variables amongst both groups.
5. If needed, after data collection has been completed, communicating regarding the data will occur through the primary investigator.
6. **Multiple Sites**
7. N/A
8. **References**

Albert, L. S., Reynolds, S. J., & Turan, B. (2015). Turning Inward or Focusing Out? Navigating Theories of Interpersonal and Ethical Cognitions to Understand Ethical Decision-Making. *Journal of Business Ethics*, *130*(2), 467–484. https://doi.org/10.1007/s10551-014-2236-2

Andrade, G. (2020). Medical conspiracy theories: cognitive science and implications for ethics. *Medicine, Health Care and Philosophy*, *23*(3), 505–518. https://doi.org/10.1007/s11019-020-09951-6

Barilan, Y. M., & Brusa, M. (2008). Human rights and bioethics. *Journal of Medical Ethics*, *34*(5), 379–383. https://doi.org/10.1136/jme.2007.020859

Bateman, C. R., Valentine, S., & Rittenburg, T. (2013). Ethical Decision Making in a Peer-to-Peer File Sharing Situation: The Role of Moral Absolutes and Social Consensus. *Journal of Business Ethics*, *115*(2), 229–240. https://doi.org/10.1007/s10551-012-1388-1

Benatar, S. R. (1997). *the Boundaries of Bioethics*. 397–415.

Crockett, M. J., Kurth-Nelson, Z., Siegel, J. Z., Dayan, P., & Dolan, R. J. (2014). Harm to others outweighs harm to self in moral decision making. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(48), 17320–17325. https://doi.org/10.1073/pnas.1408988111

Bruine de Bruin, W., Galesic, M., Parker, A. M., & Vardavas, R. (2020). The Role of Social Circle Perceptions in “False Consensus” about Population Statistics: Evidence from a National Flu Survey. *Medical Decision Making*, *40*(2), 235–241. https://doi.org/10.1177/0272989X20904960

Farrow, C. V., & Tarrant, M. (2009). Weight-based discrimination, body dissatisfaction and emotional eating: the role of perceived social consensus. *Psychology & Health*, *24*(9), 1021–1034. https://doi.org/10.1080/08870440802311348

Garrafa, V., Da Cunha, T. R., & Manchola, C. (2018). Access to Healthcare: A Central Question within Brazilian Bioethics. *Cambridge Quarterly of Healthcare Ethics*, *27*(3), 431–439. https://doi.org/10.1017/S0963180117000810

Goldberg, M. H., van der Linden, S., Leiserowitz, A., & Maibach, E. (2020). Perceived Social Consensus Can Reduce Ideological Biases on Climate Change. *Environment and Behavior*, *52*(5), 495–517. https://doi.org/10.1177/0013916519853302

Greene, J. D. (2007). Why are VMPFC patients more utilitarian? A dual-process theory of moral judgment explains. *Trends in Cognitive Sciences*, *11*(8), 322–323. https://doi.org/10.1016/j.tics.2007.06.004

Kobayashi, K. (2018). The Impact of Perceived Scientific and Social Consensus on Scientific Beliefs. *Science Communication*, *40*(1), 63–88. https://doi.org/10.1177/1075547017748948

Laakasuo, M., & Sundvall, J. (2016). Are utilitarian/deontological preferences unidimensional? *Frontiers in Psychology*, *7*(AUG), 1–11. https://doi.org/10.3389/fpsyg.2016.01228

Lee, J. J., & Gino, F. (2015). Poker-faced morality: Concealing emotions leads to utilitarian decision making. *Organizational Behavior and Human Decision Processes*, *126*, 49–64. https://doi.org/10.1016/j.obhdp.2014.10.006

Love, E., Salinas, T. C., & Rotman, J. D. (2020). The Ethical Standards of Judgment Questionnaire: Development and Validation of Independent Measures of Formalism and Consequentialism. *Journal of Business Ethics*, *161*(1), 115–132. https://doi.org/10.1007/s10551-018-3937-8

Macko, A. (2021). Contingencies of self-worth and the strength of deontological and utilitarian inclinations. *Journal of Social Psychology*, *161*(6), 664–682. https://doi.org/10.1080/00224545.2020.1860882

Mandal, J., Ponnambath, D., & Parija, S. (2016). Utilitarian and deontological ethics in medicine. *Tropical Parasitology*, *6*(1), 5. https://doi.org/10.4103/2229-5070.175024

Topline, F., Trend, P., & Comparison, F. O. R. (2021). *1 Pew Research Center 2021*. *January*, 1–14.

Schminke, M., Ambrose, M. L., & Noel, T. W. (1997). The Effect of Ethical Frameworks on Perceptions of Organizational Justice. *Academy of Management Journal*, *40*(5), 1190–1207. https://doi.org/10.5465/256932

Stapleton, G., Schröder-Bäck, P., Laaser, U., Meershoek, A., & Popa, D. (2014). Global health ethics: An introduction to prominent theories and relevant topics. *Global Health Action*, *7*(SUPP.1). https://doi.org/10.3402/gha.v7.23569

van Stekelenburg, A., Schaap, G., Veling, H., van ’t Riet, J., & Buijzen, M. (2022). Scientific-Consensus Communication About Contested Science: A Preregistered Meta-Analysis. *Psychological Science*, *33*(12), 1989–2008. https://doi.org/10.1177/09567976221083219

McGlothlin, H., & Killen, M. (2010). Special issue article How social experience is related to children ’ s intergroup attitudes. *European Journal of Social Psychology Eur.*, *40*(June 2009), 625–634. https://doi.org/10.1002/ejsp

Tseng, P. E., & Wang, Y. H. (2021). Deontological or utilitarian? An eternal ethical dilemma in outbreak. *International Journal of Environmental Research and Public Health*, *18*(16). https://doi.org/10.3390/ijerph18168565

Vearrier, L., & Henderson, C. M. (2021). Utilitarian Principlism as a Framework for Crisis Healthcare Ethics. *HEC Forum*, *33*(1–2), 45–60. https://doi.org/10.1007/s10730-020-09431-7

Wagner, J. M., & Dahnke, M. D. (2015). Nursing Ethics and Disaster Triage: Applying Utilitarian Ethical Theory. *Journal of Emergency Nursing*, *41*(4), 300–306. https://doi.org/10.1016/j.jen.2014.11.001