# Results

Descriptive statistics are summarized in [Table here]. Hypothesis 1a was analyzed using a linear mixed model fitted to our support for UHC outcome measure. Cronbach’s alpha for the items in this measure was 0.85. In opposition to H1a, we did not observe a statistically significant linear main effect for our experimental intervention, *t*(410) = -1.55 ,*p* = .122. We did observe a statistically significant linear main effect of time, *t*(410) = 6.09 ,*p* < .001. Support for UHC increased 1.903 points from pre-intervention to post-intervention. Finally, we also saw a statistically significant two-way interaction between the linear effect of time and condition, *t*(410) = -4.662 ,*p* < .001. Support for UHC was reduced by 2.06 points from pre-intervention to post-intervention in our intervention condition compared to our control condition.

## *Proposed Mediational Effects*

Hypothesis 2a and 2b were analyzed using two linear models and a bootstrapping procedure to test potential mediation. The first linear model tests the effect of our independent variable onto our proposed mediator, the second linear model tests the effect of our mediator on our support for UHC outcome measure, and our bootstrapping procedure allows for us to estimate the indirect effect of our independent variable on our outcome, through our mediator. Cronbach’s alpha for the items in our measure of perceived equity was 0.92. In support of H2a, the effect of our explicit HBP on support for UHC was partially mediated via the perceived equality of the HBP. We observed a statistically significant effect of experimental condition on our proposed mediating variable, perceived equality, *t*(820) = -3.551 ,*p* < .001. Perceived equality decreased 10.49 points in our intervention condition compared to our control condition. Furthermore, we observed a statistically significant effect of perceived equality on our outcome variable, support for UHC, *t*(821) = 18.243 ,*p* < .001. Support for UHC increased by .424 points for every point of increase in perceived equality. We tested the significance of our indirect effect by using bootstrapping procedures. After computing 1000 bootstrapped samples, our estimate for our indirect effect was -2.72 (95% CI = -4.43, -1.03), thus our average causal mediation effect is significant (*p* = 0.002). In opposition of H2b, the effect of our explicit HBP on support for UHC was not mediated by the comprehensibility of the HBP. This is since we do not see a significant effect of experimental condition on our proposed mediating variable, comprehensibility, *t*(820) = -0.805 , *p* =0.421.

We chose to parameterize our proposed mediational relationship using a path diagram, as seen in [Figure here]. Again, in support of H1a, we see that there is a mediational relationship between condition and UHC through the effect of perceived equity. Increased perceived equity increases support for UHC, and the control condition both has greater support for UHC, as well as greater perceived equity.

## *Moderating Effect of Numeracy*

To test H3a and H3b linear regression was used to analyze if there was a significant interaction between the effect of numeracy and condition on support for UHC. In opposition of H3b, the effect of subjective numeracy on support for UHC in [Table here], we see that there is no direct effect, *t*(624) = 1.551 ,*p* = .121, or significant interaction with experimental condition, *t*(624) = -0.867 ,*p* = .386, of subjective numeracy on support for UHC. Given the lack of direct effect and interaction, we were unable to find evidence of a moderating effect of subjective numeracy on support for UHC.

In support of H3a, the effect of objective numeracy on support for UHC in [Table here], we see a direct effect of objective numeracy on support for UHC, *t*(684) = 2.904 ,*p* = 0.004. Support for UHC increases by 1.43 points for each point of increase on the Rasch Numeracy Scale. Furthermore, we also see a significant interaction between the effect of objective numeracy and the condition, *t*(624)= 3.99 ,*p* < .001. In our intervention condition, support for UHC increases by an additional 2.78 points for each point of increase on the Rasch Numeracy Scale. Objective, but not subjective, numeracy has a significant effect on support for UHC, with an even greater effect for subjects in our intervention condition.

Analysing our free-response question, we found very similar responses to those in Study 1, but with some significant differences. Primarily, none of the participants in either condition seemed to have difficulty with the new digital-only experimental material or confusion about the instructions for the activity. This represents a significant improvement from Study 1. Several participants however reported difficulty regarding the decision making required in the task itself. Some examples include:

“it was much more difficult than I thought it was going to be; I had to compromise points in some places to be able to get at least basic coverage in other areas”

“It’s hard for me to think about people having to pick and choose which parts of healthcare they’ll have access to when they’re all important. It makes me wish healthcare would be reformed for the good of everyone and not just those who can afford it.”

Additionally, replicating what we found in Study 1, many participants found the activity particularly interesting and fun. Given that the purpose of the intervention is to increase engagement, this is a positive outcome. An example of these responses:

“Interesting that my answers changed. I would be interested in seeing someone against Universal Health Care make a study, too.”

“Enjoyed it, overall I believe that there should be Universal Health Care, but I did not realize how complicated it was. This exercise showed me how complicated it will be if the US decides to go through with something like this.”