# Supplementary Material for 'Countering Demand for Ineffective Health Remedies: Do Consumers Respond to Risks, Lack of Benefits, or Both?’ 

Douglas MacFarlane ${ }_{1, \mathrm{a}}$, Mark J. Hurlstone 1,2 , and Ullrich K. H. Ecker 1
${ }_{1}$ School of Psychological Science, University of Western Australia; M304, 35 Stirling Hwy, Perth 6009, Australia.
${ }_{2}$ Now at the Department of Psychology, Lancaster University, UK.
${ }_{a}$ Corresponding author. email: douglas.macfarlane@research.uwa.edu.au

## Article Citation:

MacFarlane, D., Hurlstone, M.J., \& Ecker, U.K.H. (2020) Countering demand for ineffective health remedies: Do consumers respond more to-A lack of benefits, the potential for harm, or both? In press for Psychology \& Health.

Table S1.
JASP Output for the Bayesian ANCOVA, Showing the Strength Evidence for Each Model Compared to the Null Model (Experiments 1 and 2 Combined)

| Models | P(M) | P(M\|data) | BFM | BF10 | error <br> \% |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Null model | 0.026 | $1.733 \mathrm{e}-15$ | $6.412 \mathrm{e}-14$ | 1 |  |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude | 0.026 | 0.524 | 40.808 | $\mathbf{3 . 0 2 6 e}+\mathbf{1 4}$ | 6.308 |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude + Fear-appeal <br> * Bidding type | 0.026 | 0.214 | 10.064 | $1.234 \mathrm{e}+14$ | 1.766 |
| Contingency condition + Fear-appeal + | 0.026 | 0.088 | 3.573 | $5.081 \mathrm{e}+13$ | 2.666 |
| Bidding type + General-attitude + Contingency <br> condition * Bidding type |  |  |  |  |  |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude + Contingency <br> condition * Fear-appeal | 0.026 | 0.067 | 2.667 | $3.880 \mathrm{e}+13$ | 3.016 |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude + Contingency <br> condition * Bidding type + Fear-appeal * | 0.026 | 0.034 | 1.301 | $1.960 \mathrm{e}+13$ | 2.771 |
| Bidding type |  |  |  |  |  |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude + Contingency <br> condition * Fear-appeal + Fear-appeal * | 0.026 | 0.031 | 1.19 | $1.798 \mathrm{e}+13$ | 2.309 |
| Bidding type |  |  |  |  |  |
| Fear-appeal + Bidding type + General-attitude | 0.026 | 0.014 | 0.53 | $8.145 \mathrm{e}+12$ | 2.785 |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude + Contingency <br> condition * Fear-appeal + Contingency <br> condition * Bidding type | 0.026 | 0.013 | 0.477 | $7.350 \mathrm{e}+12$ | 3.662 |
| Fear-appeal + Bidding type + General-attitude <br> + Fear-appeal * Bidding type | 0.026 | 0.005 | 0.204 | $3.159 \mathrm{e}+12$ | 4.969 |
| Contingency condition + Fear-appeal + <br> Bidding type + General-attitude + Contingency <br> condition * Fear-appeal + Contingency | 0.026 | 0.005 | 0.198 | $3.078 \mathrm{e}+12$ | 2.837 |

condition $*$ Bidding type + Fear-appeal $*$ Bidding type

Contingency condition + Fear-appeal + General-attitude

Contingency condition + Fear-appeal + Bidding type + General-attitude + Contingency condition * Fear-appeal + Contingency condition $*$ Bidding type + Fear-appeal $*$ Bidding type + Contingency condition $*$ Fear-appeal * Bidding type

Contingency condition + Fear-appeal + General-attitude + Contingency condition $*$ Fear-appeal

Fear-appeal + General-attitude
Contingency condition + Bidding type + General-attitude

Contingency condition + Bidding type +
General-attitude + Contingency condition $*$ Bidding type

Bidding type + General-attitude
Contingency condition + Fear-appeal + Bidding type

Contingency condition + Fear-appeal +
Bidding type + Fear-appeal $*$ Bidding type
Contingency condition + Fear-appeal + Bidding type + Contingency condition $*$ Bidding type

Contingency condition + General-attitude
Contingency condition + Fear-appeal +
Bidding type + Contingency condition $*$ Fearappeal

Contingency condition + Fear-appeal + Bidding type + Contingency condition $*$ Bidding type + Fear-appeal $*$ Bidding type

Contingency condition + Fear-appeal +
Bidding type + Contingency condition $*$ Fearappeal + Fear-appeal $*$ Bidding type
0.02 0.02 0.026
7.133e-7
$2.639 \mathrm{e}-5$
4.116e +8
4.717
0.026
4.658e -8
$1.724 \mathrm{e}-6$
$2.688 \mathrm{e}+7$
3.684
$0.026 \quad 3.130 \mathrm{e}-8 \quad 1.158 \mathrm{e}-6 \quad 1.806 \mathrm{e}+7 \quad 1.676$
$0.026 \quad 3.130 \mathrm{e}-8 \quad 1.158 \mathrm{e}-6 \quad 1.806 \mathrm{e}+7 \quad 1.676$
$0.026 \quad 3.130 \mathrm{e}-8 \quad 1.158 \mathrm{e}-6 \quad 1.806 \mathrm{e}+7 \quad 1.676$
$0.026 \quad 3.130 \mathrm{e}-8 \quad 1.158 \mathrm{e}-6 \quad 1.806 \mathrm{e}+7 \quad 1.676$
0.026
$2.145 \mathrm{e}-8$
$7.935 \mathrm{e}-7 \quad 1.238 \mathrm{e}+7$
2.179
4.385e-7
$6.839 \mathrm{e}+6$
$\begin{array}{lllll}0.026 & 0.002 & 0.084 & 1.314 \mathrm{e}+12 & 1.078\end{array}$
$0.026 \quad 3.223 \mathrm{e}-4 \quad 0.012 \quad 1.860 \mathrm{e}+11 \quad 2.849$
$0.026 \quad 1.949 \mathrm{e}-7 \quad 7.211 \mathrm{e}-6 \quad 1.125 \mathrm{e}+8 \quad 0.814$
$0.026-1.681 \mathrm{e}-7 \quad 6.219 \mathrm{e}-6 \quad 9.699 \mathrm{e}+7$
1.153
$0.026 \quad 4.006 \mathrm{e}-8 \quad 1.482 \mathrm{e}-6 \quad 2.312 \mathrm{e}+7 \quad 1.572$
0.02
0.026
$7.229 \mathrm{e}-9$
$2.675 \mathrm{e}-7$
4.171e +6
5.195

| Fear-appeal + Bidding type | 0.026 | $6.005 \mathrm{e}-9$ | $2.222 \mathrm{e}-7$ | $3.465 \mathrm{e}+6$ | 0.842 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Contingency condition + Fear-appeal + Bidding type + Contingency condition $*$ Fearappeal + Contingency condition * Bidding type | 0.026 | $5.874 \mathrm{e}-9$ | $2.173 \mathrm{e}-7$ | $3.389 \mathrm{e}+6$ | 9.171 |
| General-attitude | 0.026 | 2.083e-9 | 7.706e-8 | $1.202 \mathrm{e}+6$ | 0.002 |
| Fear-appeal + Bidding type + Fear-appeal * Bidding type | 0.026 | $1.679 \mathrm{e}-9$ | $6.211 \mathrm{e}-8$ | 968627.977 | 2.239 |
| Contingency condition + Fear-appeal | 0.026 | 1.666e-9 | $6.165 \mathrm{e}-8$ | 961470.234 | 2.435 |
| Contingency condition + Fear-appeal + <br> Bidding type + Contingency condition $*$ Fear- <br> appeal + Contingency condition $*$ Bidding type + Fear-appeal $*$ Bidding type | 0.026 | $1.552 \mathrm{e}-9$ | 5.742e -8 | 895509.616 | 2.575 |
| Contingency condition + Fear-appeal + Bidding type + Contingency condition $*$ Fearappeal + Contingency condition $*$ Bidding type + Fear-appeal $*$ Bidding type + Contingency condition $*$ Fear-appeal $*$ Bidding type | 0.026 | 2.746e-10 | 1.016e -8 | 158475.792 | 4.168 |
| Contingency condition + Fear-appeal + Contingency condition $*$ Fear-appeal | 0.026 | 2.166e-10 | 8.016e -9 | 125006.357 | 1.781 |
| Fear-appeal | 0.026 | 7.544e-11 | $2.791 \mathrm{e}-9$ | 43534.02 | $\begin{aligned} & 5.249 \mathrm{e}- \\ & 10 \end{aligned}$ |
| Contingency condition + Bidding type | 0.026 | 1.205e-12 | 4.458e-11 | 695.306 | 2.446 |
| Contingency condition + Bidding type + <br> Contingency condition $*$ Bidding type | 0.026 | 3.166e-13 | 1.172e-11 | 182.716 | 11.502 |
| Bidding type | 0.026 | $7.519 \mathrm{e}-14$ | 2.782e-12 | 43.388 | $\begin{aligned} & 2.415 \mathrm{e} \\ & -7 \end{aligned}$ |
| Contingency condition | 0.026 | 2.272e-14 | 8.407e-13 | 13.111 | $\begin{aligned} & 2.594 e \\ & -6 \end{aligned}$ |

Note. This table contains data shows the JASP output of the results from the data pooled from three experiments (Experiment 2 and both iterations of Experiment 1) with careless responders excluded ( $N=$ 536). The table compares possible models for predicting WTP and provides an estimate of the strength of the evidence for each model compared to the null model. Text in bold shows the strongest model, as determined by the greatest $\mathrm{BF}_{10}$.

Table S2.
Bayesian Analysis of Effects for Willingness-to-pay Predicted by Condition and Bidding Type (Experiments 1 and 2 Combined)

| Effects | P(incl) | P(incl\|data) | BF 10 Inclusion |
| :--- | :--- | :--- | :--- |
| Contingency condition | 0.737 | 0.979 | 17.038 |
| Fear-appeal | 0.737 | 1 | 77271.395 |
| Bidding type | 0.737 | 0.997 | 132.95 |
| General-attitude | 0.5 | 1 | $2.919 \mathrm{e}+6$ |
| Contingency condition * Fear-appeal | 0.316 | 0.119 | 0.291 |
| Contingency condition * Bidding type | 0.316 | 0.147 | $\mathbf{0 . 3 7 4}$ |
| Fear-appeal * Bidding type | 0.316 | 0.294 | $\mathbf{0 . 9 0 4}$ |
| Contingency condition * Fear-appeal * Bidding type | 0.053 | 0.001 | $\mathbf{0 . 0 2}$ |

Note. Showing results from three experiments (Experiment 2 and both iterations of Experiment) with careless responders excluded ( $N=536$ ). The results in bold confirm that there were no interactions between biding amount and the intervention treatments, meaning that effect of condition on WTP was comparable between the hypothetical and incentivized experiments.

Figure S1. Test for Homogeneity of Regression Slopes


Figure Sl. Showing results from the first iteration of Experiment 1 with careless responders removed ( $N=156$ ). This figure shows how, by random chance, general attitudes varied across conditions which thus violated the assumption of homogeneity of regression slopes. Error bars indicate standard error.

Figure S2. Bayesian Interaction Plot for Pooled Data from both experiments with careless responders removed
(a) Experiment 1: Hypothetical bids

(b) Experiment 2: Incentivised bids



Figure S2. Showing results from both experiments ( $N=536$ )—both sub-samples of Experiment 1, Experiment 2—with careless responders removed $(n=84)$. Plot (a) shows the results for hypothetical bids, and plot (b) shows results for bids that were incentivized.
Error bars indicate 95\% credible intervals.

