

## **Preregistration Report (05/02/2018)**

**Title:** The A/B Illusion: Best Drug: Teaching Exact Replication in mobile sample using Pollfish

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### **Summary**

We will attempt to replicate the A/B Illusion effect observed in the comparative effectiveness in a walk-in clinic (“Drug – Teaching”) scenario using a sample of mobile users recruited on Pollfish. As in the Pollfish replication of the safety checklist scenario, we will recruit a larger number of participants because we expect a smaller effect (approximately 50% of the original effect size, as was found in the safety checklist scenario). Assigning 240 participants to each condition provides 95% power to detect an effect of  $d = .33$  (two-tailed  $t$ -test;  $\alpha = .05$ ) in each of the critical comparisons (A:A/B; B:A/B).

### **Procedure**

The same experiment labeled “Drug Teaching (Prescriptions 2)” in the preregistration document, “The A/B Illusion: Full Experiment on Piloted Domains (Drug Prescriptions, Retirement Savings, Charity, Education, Community Healthcare, and Welfare Services)” will be run using the mobile survey software Pollfish with the goal of replicating the A/B Illusion in a sample outside of Mechanical Turk.

### **Changes from original experiment**

We have made no changes to vignette wording or our dependent measure. As we did in our Pollfish replication of the safety checklist scenario, however, we will collect a larger sample size. In this case, we will recruit 360 participants to replicate the original experiment, and an additional 360 participants who complete the same experiment but with a reversed appropriateness scale (ranging from Very Appropriate to Very Inappropriate, instead of Very Inappropriate to Very Appropriate). Because Pollfish does not offer a randomization feature, we will launch six surveys (three vignette conditions \* two scale directions), each recruiting 120 participants.

### **Materials:**

A: Several drugs have been approved by the US. Food and Drug Administration as safe and effective for treating high blood pressure. Doctor Jones works in a multi-doctor walk-in clinic where patients see whichever doctor is available. Some doctors in the clinic prescribe drug A for high blood pressure, while others prescribe drug B. Both drugs are affordable and patients can tolerate their side effects. Doctor Jones wants to provide good treatment to his patients, so he decides that his patients who need high blood pressure medication will be prescribed drug A.

B: Several drugs have been approved by the US. Food and Drug Administration as safe and effective for treating high blood pressure. Doctor Jones works in a multi-doctor walk-in clinic

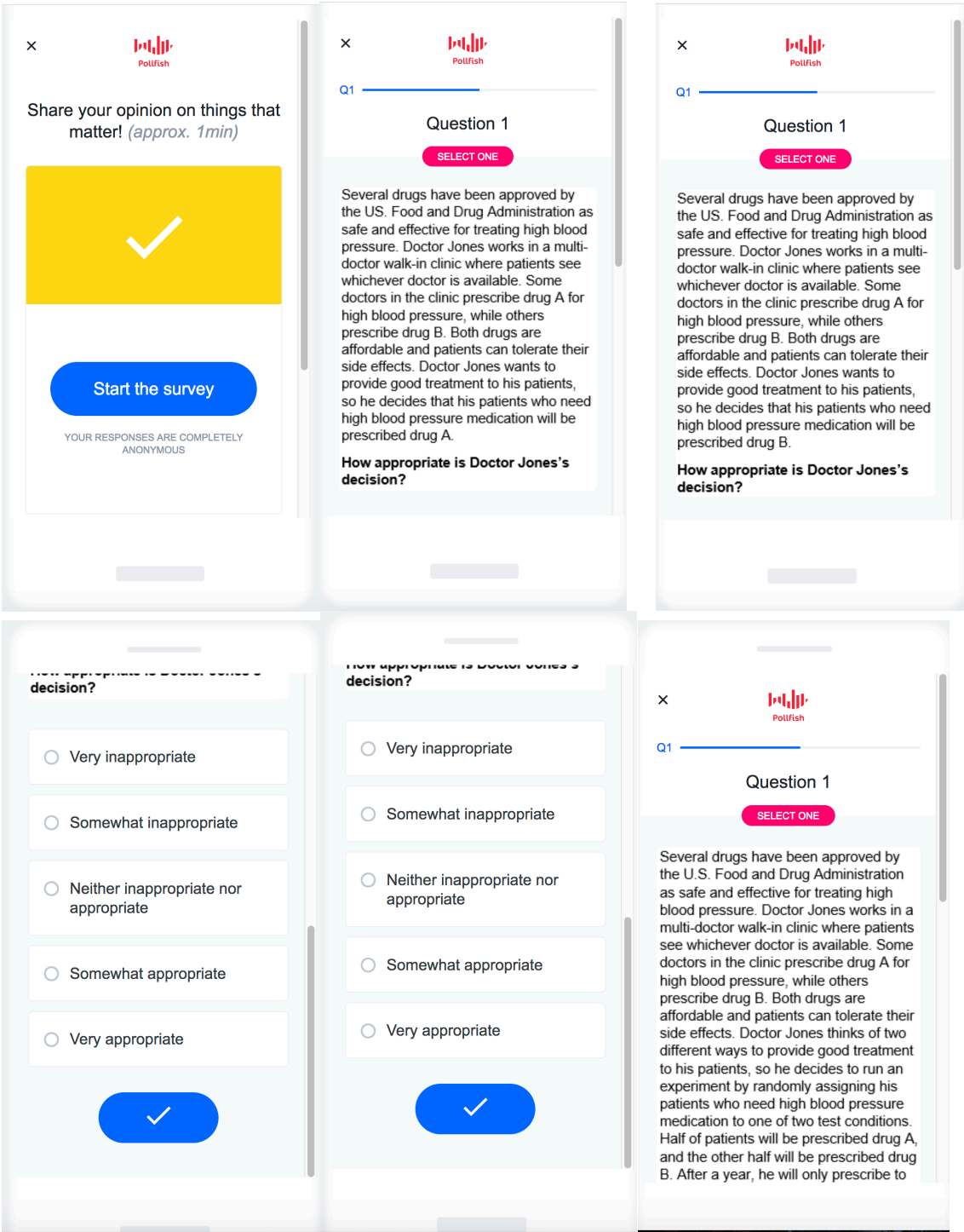
where patients see whichever doctor is available. Some doctors in the clinic prescribe drug A for high blood pressure, while others prescribe drug B. Both drugs are affordable and patients can tolerate their side effects. Doctor Jones wants to provide good treatment to his patients, so he decides that his patients who need high blood pressure medication will be prescribed drug B.

A/B: Several drugs have been approved by the U.S. Food and Drug Administration as safe and effective for treating high blood pressure. Doctor Jones works in a multi-doctor walk-in clinic where patients see whichever doctor is available. Some doctors in the clinic prescribe drug A for high blood pressure, while others prescribe drug B. Both drugs are affordable and patients can tolerate their side effects. Doctor Jones thinks of two different ways to provide good treatment to his patients, so he decides to run an experiment by randomly assigning his patients who need high blood pressure medication to one of two test conditions. Half of patients will be prescribed drug A, and the other half will be prescribed drug B. After a year, he will only prescribe to new patients whichever drug has had the best outcomes for his patients.

DV: How appropriate is Dr. Jones's decision?

Free Response: In a few sentences, please tell us why you chose the option you chose.

Screenshots of mobile survey page mockups:



B. After a year, he will only prescribe to new patients whichever drug has had the best outcomes for his patients.

**How appropriate is Doctor Jones's decision?**

☐ Very appropriate

☐ Somewhat appropriate

☐ Neither appropriate nor inappropriate

☐ Somewhat inappropriate

☐ Very inappropriate

B. After a year, he will only prescribe to new patients whichever drug has had the best outcomes for his patients.

**How appropriate is Doctor Jones's decision?**

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☐ Very inappropriate