



Research Premise

Stereotype threat¹ is the situational phenomenon where a reminder of a stereotype impacts task performance in such a way that **confirms the stereotype**.

There is a cross-cultural belief² that women experience depression at higher rates than men. **Can stereotype threat alter mobile depression screening scores?**

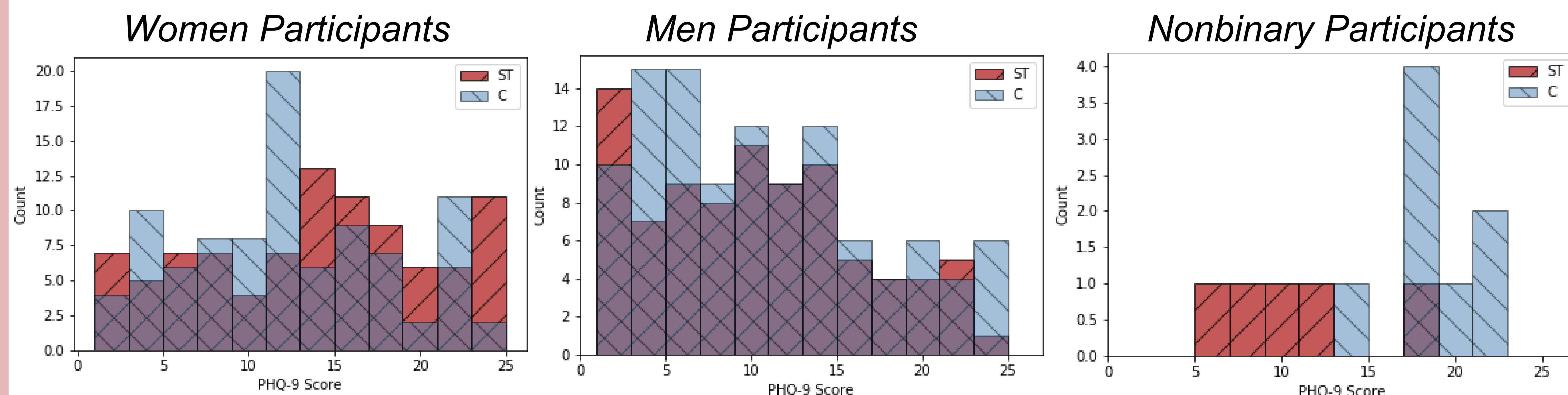
Data Collection

Half of crowd-sourced participants were reminded of the **gender depression disparity** to trigger stereotype threat.

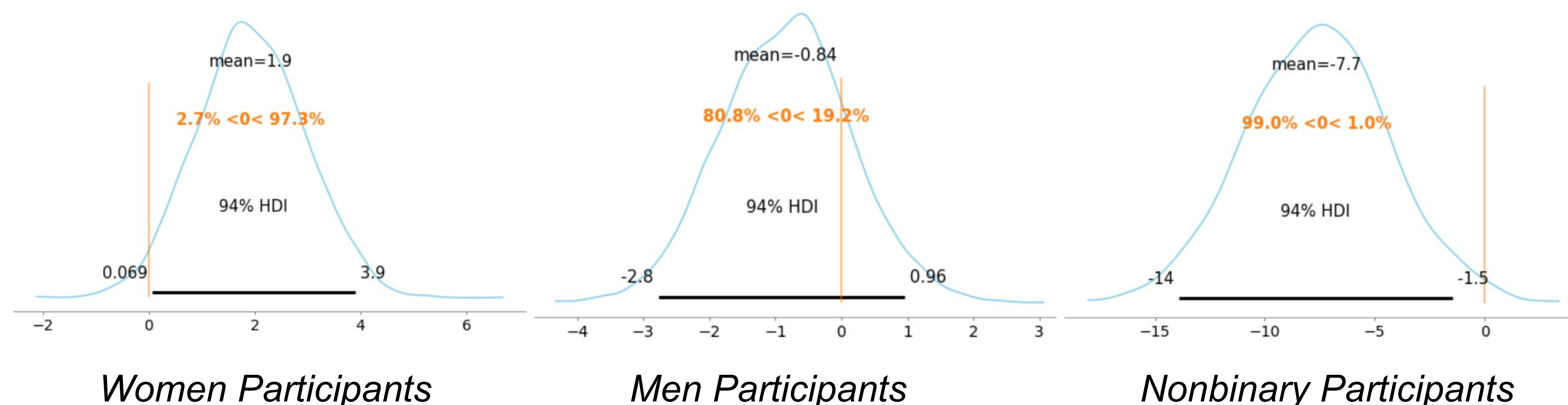
The screenshot displays the EMUTIVO survey interface. It is divided into three main sections: 'EMUTIVO Study Overview', 'EMUTIVO Depression Fact', and 'EMUTIVO Survey 1'. The 'Study Overview' section includes a goal, procedure, privacy policy, and a voluntary/risk statement. The 'Depression Fact' section states: 'Women experience depression at roughly twice the rate of men.' The 'Survey 1' section contains a question about how often participants have been bothered by various problems, with a 4-point Likert scale (0-3). The survey is titled 'PHQ-9 depression screening survey'.

PHQ-9 depression screening survey³ used to label data.

Distribution of Depression Screening Scores



Bayesian Estimation Results



Approximated posterior distributions^{4,5} compares means of PHQ-9 scores. As the high density interval (HDI) does not include 0 for the women and nonbinary participants, their difference of means is statistically significant. Thus, the **reminder of the gender depression disparity statistically significantly** increased PHQ-9 scores of women and decreased PHQ-9 scores of nonbinary participants. Thus, stereotype threat can impact screening scores.

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References

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