

Statistical Analysis Plan

Title of Project: A Chatbot Intervention for Reducing HPV Vaccine Hesitancy

NCT #: NCT05959564

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We will conduct Analyses of Covariance (ANCOVAs) and multiple regressions to examine the group differences. The primary dependent variables will consist of parents' attitudes and intentions toward vaccinating their children against HPV (both are continuous variables). Secondary dependent variables will consist of chatbot ratings. In ANCOVAs, the key independent variable will be chatbot (personalized, non-personalized, no chatbot control). Covariates will include key demographic variables such as age, gender, and education. In regression analyses, a block structure will be used where the first block will consist of the control variables (i.e., covariates) and the second block will contain the key predictor variables—dummy-coded chatbot variables. We will report standard descriptive statistics and correlation matrices for all key variables.