APPENDIX D: Weighting Procedures

The ATP data were weighted in a multi-step process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that some panelists were subsampled for invitation to the panel. Next, an adjustment was made for the fact that the propensity to join the panel and remain an active panelist varied across different groups in the sample. The next step was a weighting cell adjustment for non-response to the experience sampling study since the response rate differed somewhat across the treatment groups. The final step in the weighting uses an iterative technique that matches gender, age, education, race, Hispanic origin, region and smartphone type to parameters for US adults who have a smartphone from the October 2014 wave of the ATP. Normally ATP samples are calibrated to benchmarks for the US adult population. For this study, however, the target population was US adults who have a smartphone. There are no official government statistics on the demographics of this population. The best available data were from the October 2014 wave of the American Trends Panel, which featured a national probability-based sample of 2,188 adult smartphone users.

The margins of error reported and statistical tests of significance are adjusted to account for the survey's design effect, a measure of how much efficiency is lost from the weighting procedures. The Hispanic sample in the American Trends Panel is predominantly native born and English speaking. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.