Establishing the accuracy of online panels for survey research

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Many surveys being conducted today for academic research, government policy-making,  
and marketing collect data via the Internet from groups of respondents who volunteered  
to answer questions regularly, rather than from random samples of individuals who  
were selected using the scientific methods that have dominated survey research for  
decades. This paper compares the accuracy of results obtained from 18 such opt-in  
online panels with the results obtained from respondents selected randomly from the  
population who answered questions either via the Internet or via face-to-face  
interviewing. The non-probability samples yielded less accurate estimates of  
proportions and notably different relations between variables than did the probability  
samples, and these differences were not eliminated by weighting. These findings  
reinforce the value of scientific random sampling to permit generalizing research  
findings to a larger population. These findings suggest that the marketing community  
should pay more attention to and provide elaborate and honest descriptions of the  
nature of survey samples, to allow consumers of the data to assess their likely accuracy.

**Keywords:** Online non-probability panels, online surveys, accuracy of survey estimates,  
accuracy of relationships, weighting online panels.