ABSTRACT

THESIS: Methods for estimating the propensity score when weighting volunteer web samples: A comparison of strategies for variable choice

STUDENT: Rachel Stenger

DEGREE: Master of Science

COLLEGE: Teachers College

DATE: July 2018

PAGES: 101

Propensity scores have been suggested in previous literature as a method for weighting volunteer web samples in survey research (APPOR, 2013; Couper, 2000; Duffy et al., 2005; Lee, 2004; Lee, 2006; Lee & Valliant, 2009; Schonlau et al., 2007; Valliant & Dever, 2011). However, researchers have been somewhat unclear on their methods of building the propensity score model itself. Some researchers have suggested the use of webographic variables, or attitudinal variables, in these models to account for differences between Internet users and non-users beyond demographics, like differences in lifestyles and opinions, but their effectiveness in decreasing the bias in unadjusted volunteer web sample estimates is unclear. This study investigated the use of webographic variables in the propensity score model when using propensity scores as a weighting method. Results showed that including all demographics was important for decreasing bias in the unadjusted estimate as well as including webographics that were related to having Internet access or to the study variable in question.