

Variation in the Effects of the Big-Five Personality Traits: The 10-Item Scale versus the 44-Item Scale

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Abstract

In this paper, we focus on the Big-Five personality traits—extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience—to test the validity of unstable factors when using them as proxy variables for individual unobservable heterogeneity in an economic empirical analysis: this is an established method to measure personality in the field of psychology. We use two datasets, one with a 10-item inventory and the other with 44, to measure the Big-Five personality traits. In general, the procedure to measure personality includes the 44-item questionnaire, which is a time-consuming yet commonly used method in psychology studies. The 10-item questionnaire, on the other hand, is a newly developed method and can save time for researchers and respondents. Both procedures are certified as a sufficient method to measure personality traits in psychology analyses; however, this does not mean that both provide similar outcomes in economic analyses. In this paper, we estimated the Mincer equation with personality traits to compare the effects of personality on wages among the Big-Five variables, estimated using the 10 and from 44-item questionnaires. The results show that two personality traits, agreeableness and conscientiousness differ between the 10 and 44-items, which can be attributed to differences in the expressions of each item between the two questionnaires. The key finding of the analysis in this chapter is that short questions save time for respondents and have a consistent effect on economic in comparison to the widely used, time-consuming questions; however, this holds true for “some” personality traits, not all. When using measuring procedures with short questions in economic empirical research, it is important to pay careful attention to the expression of each item in the questionnaire, particularly those for agreeableness and conscientiousness.

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