

Supplement to Big Five Inventory (BFI) – development for Swedish settings, Social Science Reports from Mid Sweden University 2010:3

English summary

Big Five Inventory (BFI) is a psychological test comprising 44 statements, intended to measure the five basic personality dimensions Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness (John & Srivastava, 1999). The inventory has been developed mainly for research purposes, but a systematic development of a Swedish version has not been carried out.

In this study five subsamples with a total of 431 participants (45% men and 55% women), with an age range between 18 and 80 years, were used to evaluate the factor structure of the inventory and the reliabilities for the subscales, as well as the construct and criterion related validity. The subsamples were of three kinds: a) administrative staff at a public authority ($n = 62$), b) students from two different universities ($n = 63$ and $n = 132$, respectively), and c) friends and relatives to students taking a research methods course ($n = 59$ and $n = 114$, respectively).

A principal component analysis with the extraction of five factors showed a decent factor pattern, explaining about 44% of the variation. Factor loadings ranged between .32 (Agreeableness) and .82 (Extraversion). Split half reliabilities ranged between .72 (Openness) and .85 (Extraversion) and Cronbach's alpha between .73 (Agreeableness) and .84 (Extraversion). Correlations between dimensions were low to moderate, the highest was .34 (between Agreeableness and Conscientiousness). Neuroticism correlated negatively with all other dimensions.

Women scored significantly higher than men on three dimensions: Agreeableness, Conscientiousness, and Neuroticism. Agreeableness and Conscientiousness were positively related to age ($r = .16$ and $r = .17$, respectively; $p < .01$).

Creativity was operationalized in two ways, as two different performance measures, and one self-evaluation measure, used in two of the five subsamples ($n = 63$, and $n = 46$). Openness showed positive and significant correlations with all three creativity measures (ranging from .28, $p < .05$ to .44, $p < .001$). Extraversion was significantly correlated to two measures,

and Conscientiousness and Neuroticism were negatively related to one measure each.

In one of the student groups ($n = 126-131$) personality was analyzed in relation to work related motives – security, self-actualization, and instrumental motives. Safety motives were positively related to Agreeableness ($r = .26, p < .01$) and Neuroticism ($r = .23, p < .05$), while self-actualization was positively related to Extraversion ($r = .35, p < .001$), Conscientiousness, ($r = .23, p < .01$), and Openness ($r = .35, p < .001$). Finally, instrumental motives showed a significant correlation only with Conscientiousness ($r = .18, p < .05$).

As a last analysis the personality dimensions were correlated to measures of social dominance orientation (SDO), right-wing authoritarianism (RWA), modern racism, and modern sexism in one of the subsamples ($n = 60-62$). The correlations were low to moderate, and significant only in two cases: Openness displayed a negative correlation with RWA ($r = -.28, p < .05$), and with modern racism ($r = -.33, p < .05$).

All in all, most associations between the personality dimensions and the chosen validation measures were most often in the expected direction, the factor structure was reproduced, and reliabilities were good. Thus, it can be concluded that the Big Five Inventory was successfully adapted to Swedish settings.

The report ends with three appendices: the Swedish version of the inventory, the scoring key, and comparison tables.