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Personality correlates of fluid and crystallised intelligence in the New Zealand workplace

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Paul Q. Wood

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Abstract

This study investigated relationships between personality traits and intelligence, and the extent to which personality traits can predict intelligence. The General Reasoning Test 2 served as the general intelligence measure, also assessing crystallised and fluid intelligence (N=4120). Two personality inventories were used to measure personality traits. 1576 participants completed the Fifteen-Factor Questionnaire; and 2544 participants completed the Occupational Personality Profile. Overall, the strongest correlations with intelligence for the Fifteen-Factor Questionnaire were for the personality traits ‘Conscientious’ and ‘Disciplined’. The strongest correlations with intelligence for the Occupational Personality Profile were those related to the personality traits ‘External locus of control’ and ‘Detail-Conscious’; followed by the personality traits ‘Pragmatic’, ‘Contesting’, ‘Trusting’, and ‘Conform’. The predominant relationships were between personality traits and crystallised intelligence. Hypothesis testing established consistently negative relationships for the primary personality traits that combine to make up the Five-Factor Model (FFM) personality trait of ‘Conscientious’, which is consistent with previously reported findings (e.g. Ackerman & Heggestad, 1997). Also consistent with previous research, combinations of personality traits predicted intelligence to varying degrees (Moutafi, Furnham, & Crump, 2003), and did so most successfully for crystallised intelligence. Implications of the findings include issues concerning the homogeneity of the job performance construct, the consistency of the measurement of job performance, and the additive use of the personality trait ‘Conscientious’ and intelligence scores to increase predictive validity in workplace selection decisions. Further implications of the findings, limitations and suggestions for future research are also addressed.
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