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## The General Factor of Personality in selection and assessment samples

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### ABSTRACT

In two large samples ( $N_1 = 44,971$ ,  $N_2 = 7793$ ) we tested the General Factor of Personality (GFP) in the Big Five, measured during selection and assessment. A GFP could clearly be identified in the data, explaining approximately 50% of the Big Five variance. We found indications for socially desirable response tendencies in a subgroup that was tested for selection purposes. Yet, this tendency did not affect the personality factor structure or the GFP characteristics. Moreover, in the selection sample, the GFP was moderately related to the Overall Assessment Rating. The findings confirm the GFP in an applied setting and support the idea that the GFP does not merely reflect methodological artifacts but is substantive.

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### 1. Introduction

Based on observations that many traits are correlated, it has been proposed that a general factor is present in the hierarchical structure of personality (Musek, 2007; Rushton, Bons, & Hur, 2008). For example, several studies showed that in the Big Five, which are often assumed to be orthogonal basic personality factors, a General Factor of Personality (GFP) exists that accounts for 30–50% of the variance (Musek, 2007; van der Linden, te Nijenhuis, & Bakker, 2010). Rushton and Irwing (2011) also showed that a GFP is present in many other personality measures that are not based on the Big Five. Despite this evidence, the GFP remains controversial. Several researchers indicated that the GFP mainly arises from methodological artifacts, such as the tendency to provide socially desirable answers on personality tests (e.g., Anusic, Schimmack, Pinkus, & Lockwood, 2009; Bäckström, Björklund, & Larsson, 2009). Others however, have suggested that the GFP may be a substantive construct that reflects a continuum ranging from a good personality at the high end and a difficult personality at the low end (Musek, 2007; Rushton, et al., 2008). In this substantive view, individuals scoring high on the GFP are assumed to possess a socially desirable mix of traits (e.g., hard-working, sociable, emotionally stable). As such, the GFP may have important real-life implications. For example, high GFP scores have been associated with high self-esteem, good mental health, and life satisfaction

(Figueredo, Vasquez, Brumbach, & Schneider, 2007; Musek, 2007; Erdle, Irwing, Rushton, & Park, 2010), and with supervisor-rated job performance and classmate ratings of likeability and popularity (van der Linden, te Nijenhuis, et al., 2010; van der Linden et al., 2010).

Overall, the current debate about the GFP is still open and often focuses on whether this construct is indeed a substantive factor or only an artifact. The discussion also addresses the question of how the GFP compares to lower-order personality factors in predicting other variables. In addressing these issues, we examined the GFP in two large samples of participants whose personality was assessed either for selection or for development purposes. In the following ways, the analyses of these samples may contribute to the debate about relevance of the GFP.

First, the present samples allow adequate tests of the GFP in an applied setting. Many previous GFP studies used samples with participants who volunteered in a scientific study (e.g., Figueredo et al., 2007; Rushton & Irwing, 2011). The present samples however, were collected in a professional situation with real-life outcomes for the participants (e.g., getting hired or not). It is informative to examine what would be the technical characteristics (e.g., level of explained variance, factor loadings) of the GFP in such settings.

Beyond replication in an applied setting however, there are imperative reasons to analyze the samples. More specifically, in one of our samples we have information about whether participants went through the testing procedure for (i) assessment purposes or for (ii) selection purposes. Comparing these samples may reveal information about the substantive versus artifact explanation of a GFP. Specifically, it can reasonably be assumed

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that the stakes of performing well or of making a good impression are higher in a selection procedure than in an assessment procedure (Ones & Viswesvaran, 1998; Hogan, Barrett, & Hogan, 2007). In the selection procedure, the outcome determines whether one does or does not get the desired job. In contrast, in the assessment procedure, participants already have a job and are appraised in order to discover their strong and weak points. Now, if the GFP would indeed strongly rely on social desirability as response biases then the GFP can be expected to be more prominently present in a selection procedure than in an assessment procedure. In contrast, if a GFP reflects a substantive factor, then GFP-differences between the two settings can be expected to be negligible.

Third and finally, in the second sample we have information about the participants' final score in the selection procedure. In the literature, such a score is often referred to as the Overall Assessment Rating (OAR; e.g., Collins et al., 2003) and reflects the judgment of the professional assessors about the candidate. The OAR is based on the total information about the participants as obtained in the selection procedure, involving the curriculum vitae, computerized tests, interviews, and assessment tasks such as role playing assignments and team assignments. The OAR has real life implications; when a candidate receives a low OAR, this strongly reduces the odds of being hired, whereas a high OAR strongly increases these odds. Although the OAR reflects assessor ratings, it is important to note that this rating does not only play a role in hiring decisions but is also predictive of actual job performance. For example, a seminal meta-analysis of Hunter and Schmidt (1998) showed that across a wide range of jobs, the predictive validity of assessment ratings is .37.

To the best of our knowledge, there are no previous published studies that have explicitly related the GFP to the OAR in selection. In addition, we will compare the GFP with the Big Five in their relationship to the OAR. A higher level of aggregation, such as shifting from the Big Five to higher-order factors always involves some loss of information. The question is whether this information-loss weakens the relationship between personality and the OAR. For example, in the cognitive ability domain this does not seem to be the case. The highest factor of ability *g* generally shows the strongest relationship to other relevant outcomes (Jensen, 1998). Adding more specific cognitive abilities often does not strongly contribute to the relationship. To date, it remains an empirical question whether the GFP has similar characteristics. This question is also addressed in the current study.

## 2. Method

### 2.1. Samples

Two samples were obtained from one of the largest Human Resource Companies in the Netherlands. Sample 1 consisted of 44,971 persons who have filled out a Big Five personality questionnaire for selection or assessment purposes. Participants differed widely in terms of personal characteristics (education: <Bachelor 30.9%, Bachelor 39.7%, Master level 29.4%) and occupational background (financial 25.4%; legal 10.4%; social 13.0%; linguistic 4.4%; technical 14.3% other 32.4%). The average age was 35.8 years ( $SD = 9.8$  yrs) and 62% was male. In this sample we have the information about the personality assessment only (see Section 2.2 below).

Sample 2 consisted of 7793 persons, tested by the same company (no overlap with Sample 1). In this sample we had information about participants' Big Five (same instrument as in Sample 1), but also about whether they were tested as part of an assessment ( $N = 2398$ ) or selection procedure ( $N = 5395$ ). Moreover, in the selection subsample, information was present about the Over-

all Assessment Rating (OAR). In Sample 2, educational and occupational background of the participants was almost identical to that in Sample 1. The average age was 35.6 ( $SD = 8.7$ ) and 72% was male.

### 2.2. Measures

#### 2.2.1. Big Five

Personality was measured with a computerized test consisting of 224 items (GITP, 2010; Oostrom, Born, Serlie, & van der Molen, 2010) with five answering categories ranging from 1 'strongly disagree' to 5 'strongly agree'. The test assesses the Big Five with 165 items initially forming 23 Big Five facets that have been shown to converge to the five broad factors (GITP, 2010): Openness (O: 47 items), Conscientiousness (C: 40 items), Extraversion (E: 27 items), Agreeableness (A: 28 items), and Emotional Stability (ES: 23 items). The remaining items belong to another scale assessing more specific occupational-based behavior (not relevant for the present study). The study of Oostrom et al. (2010) showed that the Big Five have high internal consistency. This was confirmed in the present study showing that the reliabilities (Cronbach's alpha) of the Big Five were, .90, .93, .92, .85, and .90 for O, C, E, A, and ES, respectively. The test-retest reliabilities of the questionnaire are .64, .48, .61, .66, and .53 (Oostrom et al., 2010), indicating good stability. The Big Five scales used in the present study have also been compared to the scales of the NEO-PI-R ( $N = 261$ ) and showed substantial overlap of .56, .62, .70, .49, and  $-.65$ , for O, C, E, A, and ES, respectively (GITP, 2010; Oostrom et al., 2010). Thus, the convergence of the Big Five measure of the present study with another validated Big Five questionnaire can be considered acceptable.

Finally, the Big Five scales that are used in the present study have been shown to predict performance on a situational judgment task, professional behavior during group meetings, and GPA (Oostrom, Born, Serlie, & van der Molen, 2011). The predictive validities ranged from .21 to .27. These values are in line with the well-known meta-analysis of Barrick and Mount (1991) showing that the Big Five have moderate to low, yet relevant predictive validities.

#### 2.2.2. Overall Assessment Rating (OAR)

Overall Assessment Rating (OAR) was provided by professional raters in the selection procedure and is expressed in six categories, reflecting the performance of the candidate during the assessment. The rating was provided after the participants had gone through all the different stages of testing (e.g., team assignments, in-basket-tasks). The rating categories were (1) lower than 10%, (2) between 10% and 30%, (3) between 30% and 50%, (4) between 50% and 75%, (5) between 75% and 90%, (6) higher than 90%.

### 2.3. Statistical analysis

We used the scale scores of the Big Five as input for the factor analyses. This approach is similar to extracting the *g* factor in the cognitive domain (Jensen, 1998), and has also been used before in the majority of previous studies on the GFP (e.g., Musek, 2007; Rushton & Irwing, 2011; van der Linden, te Nijenhuis, et al., 2010). Scale scores provide reliable and stable measures of presumed factors and can thus be adequately used to conduct second or third-order factor analysis (see for example, Rushton & Irwing, 2011). We used different methods including Exploratory Factor Analyses (EFA), correlations, and regressions, but also Confirmatory Factor Analysis (CFA). For the correlation and regression analyses, the GFP was extracted using the Maximum Likelihood (ML) method. GFP scores were computed by summing the products of participants' *z* scores and the loadings on the general personality factor for each individual Big Five scale. In the CFA method, we compared the GFP model to several other theoretical models

namely, a model assuming five independent factors (the original idea of the Big Five), but also a hierarchical model assuming two independent higher-order factors above the Big Five. Specifically, DeYoung, Peterson, and Higgins (2002) proposed one higher-order factor labeled ‘Stability’ consisting of Conscientiousness, Agreeableness, and low Neuroticism and assumed to reflect adequate social behavior. The other higher-order factor is labeled ‘Plasticity’ consisting of Extraversion and Openness and reflecting the need to search for social or intellectual experiences. The best-fitting model in Sample 1 is also tested in Sample 2, which can be considered a replication or cross-validation.

### 3. Results

#### 3.1. GFP tests and extraction in Sample 1

##### 3.1.1. EFA

Big Five intercorrelations are described in Table 1. An initial second-order EFA (criterion of Eigenvalue >1) on the Big Five dimensions directly led to a one factor solution (GFP) that explained 48% of the variance. The first factor had an Eigenvalue of 2.41, which was much larger than the second factor that explained only 18% of the variance (EV = .92). The one-factor solution was confirmed by the Scree plot (available from the first author), showing a sharp edge after the first factor. Importantly, all individual Big Five dimensions contributed substantially to the GFP because the factor loadings ranged from .45 to .74 (see Table 2), with a mean of .59.

##### 3.1.2. CFA

With CFA we tested (i) a model in which the Big Five directly load on a general factor: the ‘GFP model’, (ii) a model in which the Big Five load on two higher-order factors (Stability and Plasticity) that both load on the GFP: the ‘Hierarchical model’, (iii) a model with two uncorrelated meta-factors Stability and Plasticity: the ‘B2 model’ and (iv) a model assuming relatively independent Big Five dimensions: the ‘B5-model’.

The manual of the present Big Five measure (GITP, 2010) reports that Conscientiousness and Agreeableness, and Conscientiousness and Emotional Stability tend to show two population-dependent correlations that are not directly hypothesized in GFP theory. First, Conscientiousness and Agreeableness show covariance that differentiate between higher- and lower educated participants. Second, Conscientiousness and Emotional Stability sometimes showed correlations depending on gender or test situations. It is not clear whether these correlations that mainly involve Conscientiousness reflect true effects (substantive factors) or method effects specific for this Big Five test. Nevertheless, we included the information on these results in our models by allowing the error variance of Agreeableness and of Emotional Stability to correlate with that of Conscientiousness. For consistent model comparisons, we included these associations in all the models we tested. Including these associations affects the model fits because they account for additional shared variance between subsets of factors that are not part of the variance that is shared by all Big Five

**Table 1**  
Intercorrelations between Big Five factors in Sample 1 (N = 44,971).

	O	C	E	A	ES
Openness	–				
Conscientiousness	.35	–			
Extraversion	.53	.24	–		
Agreeableness	.44	.53	.26	–	
Emotional Stability	.32	.31	.30	.22	–

**Table 2**

Factor loadings of the Big Five factors on a General Personality Factor in the different samples and different groups.

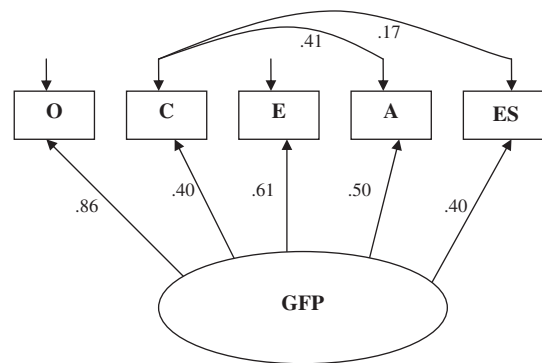
	Sample loadings		
	Sample 1 (N = 44,971)	Selection in Sample 2 (N = 5395)	Assessment in Sample 2 (N = 2398)
Openness	.74	.79	.79
Conscientiousness	.57	.50	.45
Extraversion	.58	.59	.62
Agreeableness	.62	.56	.50
Emotional Stability	.45	.45	.44

**Table 3**

Fit indices for the CFA models in Sample 1.

	$\chi^2$	df	CFI	NNFI	RSMEA
GFP model	641.63	3	.99	.96	.07
B2 model	8909.75	5	.82	.63	.20
B5 model	3710.06	8	.36	.20	.29

Note. GFP model = Big Five load directly on general factor; B2 model = Big Five load on independent factors Alpha and Stability; B5-model = Five relatively uncorrelated factors.



**Fig. 1.** Confirmatory factor model of the General Factor of Personality (GFP) in Sample 1. O, Openness; C, Conscientiousness; E, Extraversion; A, Agreeableness; ES, Emotional Stability.

dimensions, namely the GFP. Nevertheless, such associations did not affect the relationships between the different variables (e.g., GFP loadings, OAR in Sample 2) in the models.

Table 3 shows the different fit indices. The GFP model (Fig. 1) showed acceptable fit to the data. The B2-model and the B5-model did not show a good fit to the data. The fact that the independent Big Five model showed a poor fit may not be surprising given the large number of studies that have now shown that these factors display significant intercorrelations in the majority of published studies (e.g., van der Linden, te Nijhuis, et al., 2010). In addition, the Hierarchical model did not lead to an acceptable solution as it contained several Heywood cases (negative variance and standardized paths >1) therefore the fit indices of this model are not described in Table 3.

#### 3.2. Selection versus assessments comparisons of the GFP in Sample 2

In Sample 2 we found the mean score on the GFP to be higher in the selection setting than in the assessment setting (see Table 4) with an average effect size of one fourth of a standard deviation (M = .24, range .09–.37). This suggests that social desirability in responding was indeed more important during selection than

**Table 4**  
Means and SD on GFP and on the Big Five in the selection and the assessment groups.

	$M_{\text{Selection}}(N = 5395)$	$SD_{\text{Selection}}$	$M_{\text{Assessment}}(N = 2398)$	$SD_{\text{Assessment}}$	Effect size(Cohen's D)
GFP <sup>a</sup>	.08	.85	-.18	.91	.31*
Openness	184.88	15.91	182.00	14.98	.18*
Conscientiousness	161.66	16.14	158.35	14.80	.21*
Extraversion	100.26	14.35	95.89	12.98	.32*
Agreeableness	108.57	9.37	107.75	8.98	.09*
Emotional Stability	87.31	11.33	83.51	10.30	.37*

<sup>a</sup> Standardized values.

\*  $p < .01$ .

during assessment. The higher GFP score was due to significantly higher scores on each of the individual Big Five scales in the selection setting (see Table 4).

More important however, was that the absolute differences in mean scores did not strongly affect the factor-structure of personality (see Table 2). In both settings, the results were highly comparable. In the selection setting, the first factor explained 47.0% of the variance (Eigenvalue = 2.35) Mean factor loading was  $M = .59$ , (range .45–.79). In the assessment setting explained variance was 46.6% (Eigenvalue = 2.28) and mean loading was .56, (range from .44 to .79; see Table 2).

### 3.2.1. CFA, group differences tests

We applied the GFP model from the analyses in Sample 1 to the Selection and Assessment setting in Sample 2. We tested a model in which we constrained the loadings and correlations in the two groups (i.e., selection, assessment) to be equal. The model showed a very good fit to the data ( $\chi^2 = 87$ ,  $df = 12$ , CFI = .99, NNFI = .98, RSMEA = .03). Moreover, this model was not significantly different ( $\chi^2$ -difference test) from a model in which we did not constrain the loadings and correlations to be equal. Thus, the GFP model that fit the data well in the large Sample 1 also showed good fit in Sample 2 and was equal in the selection and in the assessment groups.

### 3.3. GFP and the Overall Assessment Rating

We tested the relationship between the OAR and the GFP and whether the Big Five were related to OAR, *after controlling* for the GFP. The idea behind the latter test is that, by definition, the GFP should be partly present in each of the individual Big Five factors. Our first approach consisted of a hierarchical regression analysis in which we entered the GFP in Step 1 and the Big Five factors in Step 2. The focus in this analysis is on the level of explained variance in each step. The individual beta-weights are not readily interpretable as the variable in Step 1 (the GFP) is a linear combination of the variables in Step 2. Therefore, we do not report these beta-weights but only the  $\Delta R^2$ . The GFP in Step 1 explained 1.3% of the variance in the OAR. Beyond that, the unique variance of the Big Five, added another 1.4% explained variance in Step 2. This suggests that the GFP accounted for almost half of the association between the Big Five and the OAR, but the unique characteristics of the individual Big Five dimensions also contributed.

Because the regression approach did not lead to readily interpretable individual beta-weights, a second approach consisted of looking at the correlations. This showed that the GFP and Emotional Stability had the highest first-order correlations with OAR (both  $r = .13$ ,  $p < .01$ ), closely followed by Extraversion and Openness (see Table 5), followed by relatively low correlations with Agreeableness and Conscientiousness. Partial correlation analysis showed that, after controlling for the GFP, the OAR–Big Five correlations showed substantial reductions and became, .02, -.10, .04, -.03, and .07, for O, C, E, A, and ES, respectively. So, for example,

the correlation of Openness with OAR was reduced 83% (from .12 to .02), the Extraversion correlation was reduced 66%, and the Emotional Stability correlation 46%.

### 3.3.1. CFA/SEM tests of the personality–OAR relationship

The GFP model from Sample 1 was applied in testing the GFP–OAR relationship in Sample 2 (see Fig. 2). The model fit was good ( $\chi^2 = 124.70$ ,  $df = 7$ , CFI = .98, NNFI = .96, RSMEA = .06). Moreover, the pathway between the GFP and OAR had a value of .14, which is in accordance with the findings in the correlation and regression approach. Figure 2 is based on the correlations as reported in Table 5. The alternative models that showed poor fits in Sample 1 (i.e., the B2, B5, hierarchical models), also showed poor fits in the present sample.

## 4. Discussion

The current study showed that a clear GFP emerged in a Big Five personality measure applied during selection and assessment. For two reasons the present findings go beyond replication and contribute to insight into the nature of the GFP.

First, we found that the GFP did not substantially differ in the selection setting and the assessment setting. In the former setting, we assumed that the effects of providing socially desirable answers would be larger than in the assessment setting (Hogan et al., 2007). This assumption was supported because participants in the selection sample provided higher and more desirable ratings on all Big Five dimensions, with a mean effect size of  $d = .25$ . Nevertheless, this presumed social desirability tendency did not affect the characteristics of the GFP in terms of level of explained variance and factor loadings. This is in accordance with several other studies that have shown that social desirability affects absolute scores on the Big Five but leaves intact its factor structure (e.g., Ones & Viswesvaran, 1998).

Second, we found support for the relevance of the GFP because this construct was related to the OAR, provided by professional raters. The OAR is based on the total performance of the

**Table 5**  
Correlations between the GFP, Big Five, and OAR (the latter in bold face) in the selection subset of Sample 2 ( $N = 5395$ ).

	1	2	3	4	5	6	7
1. GFP	–						
2. Openness	.91	–					
3. Conscientiousness	.64	.46	–				
4. Extraversion	.73	.61	.27	–			
5. Agreeableness	.57	.36	.51	.27	–		
6. Emotional Stability	.65	.47	.38	.36	.38	–	
7. OAR	<b>.13</b>	<b>.12</b>	<b>.01</b>	<b>.12</b>	<b>.04</b>	<b>.13</b>	–

Note: GFP, General Factor of Personality; OAR, Overall Assessment Rating.

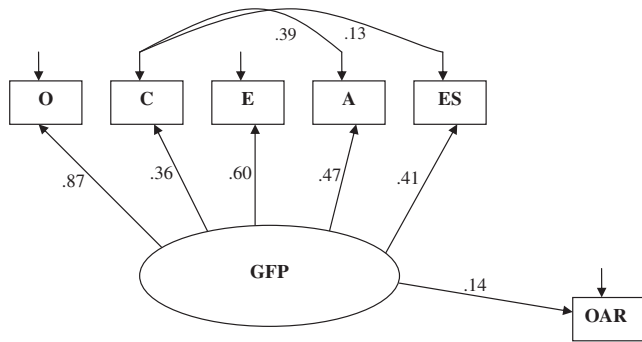


Fig. 2. Structural equation model of the relationship between GFP and Overall Assessment Rating (OAR) in Sample 2.

participant during the selection procedure and has implications for the participants' further career. Participants with high GFP scores tended to receive higher OARs. The different methods we applied converged to similar effect sizes of the GFP–OAR relationship, with estimates ranging from .13 to .14. In absolute terms, these effect sizes are small. Yet, these effect sizes were often as large or larger, than those obtained with the individual Big Five dimensions that ranged from .01 to .13. Moreover, the relatively modest effect sizes are in line with the results of several large meta-analyses on this topic. For example, Barrick and Mount (1991) reported associations between the Big Five and performance ranging from .04 to .22.

We found the relationship between the Big Five dimensions and the OAR to be attenuated after controlling for the GFP. Such a finding is conceptually similar to findings in the cognitive domain, in which the general factor *g* underlies a large share of the association between specific cognitive tasks and other relevant variables (Jensen, 1998). Moreover, this present finding converges with the currently limited number of other studies that have tested the relationship of the GFP with other ratings. For example, in a study on supervisor ratings of job performance, it was found that adding the Big Five beyond the GFP, did not lead to a significant increase in level of explained variance (van der Linden, te Nijenhuis, et al., 2010).

Even though in the present study, the unique variance of the Big Five dimensions (beyond GFP) still explained some additional part of the variance in OAR, this finding does not compromise conclusions about the GFP. Namely that this construct may be a substantive factor that is eminently present in the Big Five measures and has a real-life impact on whether participants did or did not receive their desired job.

In as far as the GFP indeed is a substantive component a relevant question that remains open is how to interpret such a construct. Recent literature provides some interesting ideas about this. One is that the GFP, at least partially, overlaps with emotional intelligence (Veselka, Schermer, Petrides, & Vernon, 2009), which is characterized by the ability to know what others expect in social interactions and to behave accordingly and to have control over one's behavior and mood. It may not be difficult to imagine how a high emotional intelligence might exert a broad influence on different aspects of personality. In Big Five, or other personality measures such a broad impact would emerge as a general factor consisting of positive traits (Veselka et al., 2009). Such traits may have a direct and positive effect on performance during the assessment or otherwise indirectly affect the OAR by influencing the perception of the raters in the assessment procedure.

## 5. Conclusion

In general, the technical evidence for a GFP in selection and assessment was quite convincing and this GFP was not affected by higher overall mean scores on the personality scales. For a subset of participants, high GFP scores contributed to getting their desired job by obtaining higher OARs from assessors. As such, the present study may increase the currently very limited set of empirical articles that tested the relationship between the GFP and other real-life outcomes.

The notion of a GFP does not imply that lower-order personality factors lose their relevance. Often it may be informative to describe individual differences in personality in terms of specific traits (extraverted, friendly, etc.). Also, specific traits may sometimes predict behavior better than more global dimensions. Nevertheless, the GFP may be a construct with potential impact on personality theory as well as with practical implications.

## References

- Anusic, I., Schimmack, U., Pinkus, R. T., & Lockwood, P. (2009). The nature and structure of correlations among Big Five ratings: The Halo-Alpha-Beta model. *Journal of Personality and Social Psychology, 97*, 1142–1156.
- Bäckström, M., Björklund, F., & Larsson, M. R. (2009). Five-factor inventories have a major general factor related to social desirability which can be reduced by framing items neutrally. *Journal of Research in Personality, 43*, 335–344.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. *Personnel Psychology, 44*, 1–26.
- Collins, J. M., Schmidt, F. L., Sanchez-Ku, M., Thomas, L., McDaniel, M. A., & Le, H. (2003). Can basic individual differences shed light on the construct meaning of assessment center evaluations? *International Journal of Selection and Assessment, 11*, 17–29.
- DeYoung, C. G., Peterson, J. B., & Higgins, D. M. (2002). Higher-order factors of the Big Five predict conformity: Are there neuroses of health? *Personality and Individual Differences, 33*, 533–552.
- Erdle, S., Irving, P., Rushton, J. P., & Park, J. (2010). The General Factor of Personality and its relation to Self-Esteem in 628,640 Internet respondents. *Personality and Individual Differences, 48*, 343–346.
- Figueredo, A. J., Vasquez, G., Brumbach, B. H., & Schneider, S. M. R. (2007). The K-factor, covitality, and personality: A psychometric test of life history theory. *Human Nature, 18*, 47–73.
- Hogan, J., Barrett, P., & Hogan, R. (2007). Personality measurement, faking, and employment selection. *Journal of Applied Psychology, 92*, 1270–1285.
- Hunter, L. S., & Schmidt, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. *Psychological Bulletin, 124*, 262–274.
- Jensen, A. R. (1998). *The g factor: The science of mental ability*. Westport, CT: Praeger.
- Musek, J. (2007). A general factor of personality: Evidence for the Big One in the five-factor model. *Journal of Research in Personality, 41*, 1213–1233.
- Ones, D. S., & Viswesvaran, C. (1998). The effects of social desirability and faking on personality and integrity assessment for personnel selection. *Human Performance, 11*, 245–269.
- Oostrom, J. K., Born, M. Ph., Serlie, A. W., & van der Molen, H. T. (2010). The role of individual differences in the perceived job relatedness of a cognitive ability test and a multimedia situational judgment test. *International Journal of Selection and Assessment, 18*, 394–406.
- Oostrom, J. K., Born, M. Ph., Serlie, A. W., & van der Molen, H. T. (2011). A multimedia situational judgment test with a constructed-response item format: Its relationship with personality, cognitive ability, job experience, and academic performance. *Journal of Personnel Psychology, 10*, 78–88.
- Rushton, J. P., Bons, T. A., & Hur, Y.-M. (2008). The genetics and evolution of a general factor of personality. *Journal of Research in Personality, 42*, 1173–1185.
- Rushton, J. P., & Irving, P. (2011). The General Factor of Personality: Normal and abnormal. In T. Chamorro-Premuzic, S. von Strumm, & A. Furnham (Eds.), *The Wiley-Blackwell handbook of individual differences*. Blackwell Publishing.
- Manual G5-R. (2010). GTP: Amsterdam.
- van der Linden, D., Scholte, R. H. J., Cillessen, A. N. H., te Nijenhuis, J., & Segers, E. (2010). Classroom ratings of likeability and popularity are related to the Big Five and the General Factor of Personality. *Journal of Research in Personality, 44*, 669–672.
- van der Linden, D., te Nijenhuis, J., & Bakker, A. B. (2010a). The General Factor of Personality: A meta-analysis and a criterion-related validity study. *Journal of Research in Personality, 44*, 315–327.
- Veselka, L., Schermer, J. A., Petrides, K. V., & Vernon, P. A. (2009). Evidence for a heritable general factor of personality in two studies. *Twin Research and Human Genetics, 12*, 254–260.