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The General Factor of Personality and faking: A cautionary note on the meaningfulness of the GFP under different response conditions

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ABSTRACT

What happens to the General Factor of Personality (GFP) when extracted under different test-taking instructions such as to fake-good? This study investigates the nature of the GFP across two different samples of students, each having completed a different personality measure, and under different test-taking instructions. Specifically, participants were applicants into a teacher education program who had been successful and accepted into the program. After placement, groups of students were asked to complete the same personality measure, that they completed as an applicant, with instructions to respond honestly, to fake-good, or to try to reproduce the responses they had given as applicants. Across the two studies, the resulting GFP in the fake-good condition was more robust than the other conditions, accounting for over 50% of the variance. The GFPs from the initial applicant responses were also strong, but not as strong as the fake-good GFPs. These results suggest caution when interpreting a GFP in applied settings, especially with applicants who would want to present themselves in a desirable light.

1. Introduction

Analogous to the superordinate general intelligence factor, *g*, the General Factor of Personality (GFP) has been described as a meaningful psychological construct, derived typically from the first unrotated factor of a collection of personality scales, and has been suggested to reflect socially effective behaviour (Dunkel, van der Linden, Beaver, & Woodley, 2014; Rushton, Bons, & Hur, 2008). At the other end of the spectrum, however, there are concerns that the GFP reflects variance due to response styles and therefore does not represent an individual difference factor beyond social desirability or impression management. In fact, the GFP has been found to correlate significantly with social desirability measures (Schermer, Carswell, & Jackson, 2012; Schermer & MacDougall, 2013; Schermer & Vernon, 2010) and with self-report faking (Schermer & Goffin, 2018). Supporters of a meaningful GFP suggest that these correlations with social desirability reflect the actual character of those scoring highly on the GFP (van der Linden, Bakker, & Serlie, 2011). Recently Schermer and Goffin (2018) speculated that a test of the GFP and response styles may be conducted by assessing how the GFP may differ, or not, when extracted under faking conditions, compared to honest or straight-take situations. Specifically, the approach taken in the present study to help understand the GFP goes

beyond examining the correlates with self-report social desirability or faking by examining the GFP under experimentally manipulated test-taking conditions.

In his classic critique of the lexical Big Five model, Block (1995) stated that the factors correlate together because of "an overriding evaluative component" (p. 199) and described that when individuals rate people that they dislike, the factors correlate highly. Block (1995) further argued that the Big Five factor model changes structure depending on the test-taking conditions. These observations then may cast doubt on the generality of the GFP. Two previous studies that have touched upon the influence of socially desirable responding (but not faking) and the nature of the GFP, include the selection and assessment samples from van der Linden et al. (2011) and the twin and student samples from Rushton and Erdle (2010). van der Linden et al. (2011) reported that with respect to mean scores on the GFP (linear aggregates, weighted by factor loadings), values were higher in a selection group (applicants for positions) than in an assessment group. The authors stated that these mean differences were due to socially desirable responding but did not measure social desirability. The authors also stated that the GFP did not differ with respect to percentage of variance accounted for or GFP factor loadings between those whose responses determined if they would be hired or not (selection group) versus the

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Table 1
Inter-correlations of the IPS scales for the applicants (below the diagonal) and the honest retake condition (above the diagonal).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Activity in familiar communication		42	09	25	07	−12	06	−18	13	08	15	14	−16	24	13
2 Required assertive communication	46		−24	27	17	−32	16	−43	30	04	15	11	−20	23	25
3 Tendency for confrontation in social conflict	−15	−35		−21	−41	29	−26	16	−44	−14	−20	−08	−18	−22	−43
4 Efficacy as leaders	27	34	−11		20	−17	22	−03	36	33	21	23	08	28	11
5 Considerateness when socially responsible	17	24	−36	12		−03	15	−02	32	19	08	02	05	12	10
6 Sensitivity to social frustration	−20	−40	47	−16	−17		−26	38	−42	−22	−19	−25	−23	−16	−34
7 Commitment when required	27	40	−29	27	31	−33		−30	58	30	48	17	09	11	−06
8 Inertia when attitude change is required	−15	−47	40	−14	−20	49	−25		−36	−22	−28	−16	−04	−28	−05
9 Stability when under stress	10	28	−38	24	30	−40	47	−37		37	45	10	23	15	03
10 Self-confidence in tests	19	36	−43	15	17	−45	28	−37	46		28	42	33	28	−02
11 Career commitment and readiness for job risks	32	39	−29	23	23	−30	37	−36	27	31		03	24	15	−01
12 Optimism when in demanding situation	28	36	−36	28	31	−31	33	−45	40	37	34		23	19	19
13 Ability to relax after work	16	34	−40	16	30	−38	36	−41	40	34	32	27		19	−01
14 Active non-work recreation	37	44	−35	32	32	−30	23	−35	24	26	30	36	29		07
15 Preventive health behaviour after warnings	15	28	−34	23	24	−32	10	−33	29	28	30	35	32	34	

Decimals have been removed. Correlations > 0.25 are significant at $p < .01$, two-tailed for the applicants and correlations > 0.40 are significant at $p < .01$, two-tailed for the retake condition sample.

Table 2
Inter-correlations of the IPS scales for the fake good (below the diagonal) and the reproduce condition (above the diagonal).

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Activity in familiar communication		52	−17	40	21	−17	18	−11	04	12	37	29	12	31	24
2 Required assertive communication	53		−14	38	14	−22	29	−47	29	27	37	27	32	47	34
3 Tendency for confrontation in social conflict	−41	−43		−08	−40	24	−34	22	−20	−50	−14	−38	−20	−37	−29
4 Efficacy as leaders	19	12	−20		07	−37	28	−18	30	20	35	36	36	36	45
5 Considerateness when socially responsible	43	46	−62	16		−02	27	−06	15	19	06	25	18	29	12
6 Sensitivity to social frustration	−44	−33	32	−14	−22		−27	34	−37	−42	−17	−33	−29	−18	−26
7 Commitment when required	35	59	−50	11	56	−33		−34	51	34	30	30	30	30	18
8 Inertia when attitude change is required	−46	−70	36	−13	−38	49	−55		−41	−27	−57	−23	−43	−23	−20
9 Stability when under stress	42	54	−39	18	45	−40	57	−69		44	21	48	33	28	35
10 Self-confidence in tests	59	85	−39	21	42	−45	50	−66	54		26	49	24	22	22
11 Career commitment and readiness for job risks	49	59	−48	12	52	−42	56	−51	54	53		33	35	27	24
12 Optimism when in demanding situation	58	63	−71	25	56	−34	60	−47	47	65	53		38	35	35
13 Ability to relax after work	61	54	−60	19	54	−63	49	−55	61	50	64	69		49	42
14 Active non-work recreation	50	60	−82	25	72	−25	67	−46	47	55	63	85	70		50
15 Preventive health behaviour after warnings	51	54	−68	27	57	−28	52	−38	38	55	56	64	58	75	

Decimals have been removed. Correlations > 0.40 are significant at $p < .01$, two-tailed.

assessment group. Rushton and Erdle (2010) reanalysed twin data which included self-ratings on personality adjectives, found to fit a Big Five model, as well as the Eysenck Lie scale. Using both principal components analysis and principal axis factoring, GFP loadings were found to remain fairly stable after statistically controlling for lie scores (openness and extraversion dropped slightly, conscientiousness increased, agreeableness remained stable, and emotional stability remained low when uncorrected and statistically partialled results were compared). Rushton and Erdle (2010) also examined the GFP in a sample of students who completed a Big Five personality measure, the Eysenck Lie scale, as well as measures of positive and negative affect. The authors reported that the correlations between the GFP and the affect measures remained significant when the lie scores were partialled from the correlation (factor loadings were not reported). Although these studies demonstrate that social desirability and lying may affect GFP values, they do not address the faking and GFP question.

The present study is possibly the first to try to answer the question proposed by Schermer and Goffin (2018), specifically, what is the nature of the GFP under faking good conditions? Using archival data from one study and a second sample of recently collected data, a GFP was extracted for each sample of students who completed different measures of personality. Although the GFP is typically examined with respect to personality measures assessing the Big Five, general factors have been found in various measures of personality (Just, 2011) which has been regarded as reflecting the robust nature of the GFP (Irwing, 2013). These results suggest that a GFP can be extracted from the

different personality measure used in the first sample (the second sample completed a Big Five measure). In each sample, student applicants to a teacher education program completed a personality measure as part of their application, therefore in a real life selection setting. Later, students who had been accepted into the program were contacted and completed the same personality measure under standard instructions (answer honestly) and/or varying response conditions, such as instructions to fake-good and to respond as they did when initially applying to the program (reproduce their initial responses). If the GFP differs between the honest and faking conditions and if the fake-good GFP resembles the applicant GFP, this may have implications about the interpretation and the utility of the GFP.

2. Sample 1 method and results

The data for sample 1 was from Krammer, Sommer, and Arendasy (2017) and included 175 women and 68 men with a mean age of 23.20 years ($SD = 4.84$, range = 18 to 44). Participants completed the Inventory for Personality Assessment in Situations (IPS; Schaarschmidt & Fischer, 2013) which includes 15 personality scales of three higher-order factors. For each personality scale, a situational context is given, and respondents are asked to rate how likely they would engage in personal behaviours (five to nine) in the given situation on a 4-point Likert scale (not true at all–definitely true). The IPS scales have been reported to be internally consistent ($0.71 \leq \alpha. \leq 91$) and stable ($0.70 \leq r_{tt-4\ weeks} \leq 88$) in multiple samples, and there has been