

Appendix

Previous studies have mostly used confirmatory factor analysis (CFA) rather than ESEM to investigate socially desirable responding and the GFP (e.g., Anglim, Morse, De Vries, MacCann, & Marty, 2017; Chang, Connelly, & Geeza, 2012; Irwing, 2013). In order to check the reliability and consistency of our findings and test their relative independence of the method of analysis we conducted parallel analyses using CFA.

CFA and ESEM predominantly differ in the way non-targeted overlap between constructs is modeled; in ESEM, cross-loadings are allowed, resulting in more pure estimates of factor intercorrelations and general factor loadings (Arias, Jenaro, & Ponce, 2018; Marsh, Morin, Parker, & Kaur, 2014; Morin, Arens, & Marsh, 2016), making this method especially suitable for studying the influence of applicant faking on factor structures (Lee, Mahoney, & Lee, 2017). In CFA, independent clusters are assumed, meaning that items/facets only load on their targeted factor. Because of this assumption in CFA, larger factor intercorrelations in the oblique model (compared to ESEM) can be expected because the only way that overlap between items/facets can be manifested is through these intercorrelations. These larger intercorrelations would imply a larger general factor. Similarly, stronger loadings on the general factor in the bifactor CFA model (vs. ESEM) can be expected: because of the orthogonality of the factors, any overlap between the facets can only be expressed through the general factor loadings. As a result, we can expect general factor saturation (e.g., ω_h) to be higher when CFA is used compared to ESEM. In general, however, regardless of the method of analysis, the rationale of the current study does not change. That is, also when CFA is used, we would expect similarity of the general factor across the groups if this factor mostly reflects a relatively stable personality characteristic, rather than a factor due to situational pressures for response distortion.

Results of the analyses are reported in Table A1 through Table A3 below. As expected, factor intercorrelations were larger when CFA was used instead of ESEM (Table A1). However, the pattern of intercorrelations across the four groups did not change: for example, the factor intercorrelations were not meaningfully higher in the selection context than in the development context, mimicking the ESEM results (average absolute $r = .59$, $r = .54$, $r = .46$, $r = .51$ for forced-choice development, forced-choice selection, Likert development, and Likert selection respectively in CFA, versus $r = .27$, $r = .29$, $r = .22$, $r = .25$ in ESEM).

The results of the measurement invariance tests are presented in Table A2. Overall, the fit values of the ESEM models were much higher than for the CFA models, which can be expected because of the extra modeled cross-loadings. As with ESEM, the addition of the general factor significantly improved model fit with CFA. The patterns of results of the measurement invariance test (in terms of decrements/increments in fit values and information criteria) for the four groups analyzed together were nearly identical to the results found for ESEM.

This similarity in patterns of findings also held when the forced-choice version was analyzed separately. A minor difference was that in CFA, in the Strong model the information criteria were higher than in the Weak model indicating non-invariance (in ESEM this was the other way around), yet, the fit values indicated invariance (as in ESEM, even a slight increase in *TLI*). As in ESEM, the information criteria indicated that latent factor means were different between the two groups.

For the Likert version, the results overall were also similar in CFA compared to ESEM, although slight differences were found. For example, in contrast with the ESEM analyses, moving from the Configural to Weak model the decrement in *CFI* was too large ($\Delta CFI = .029$), yet the other changes in fit values and (adjusted) *BIC* values indicated

invariance of loadings. In addition, in ESEM only the information criteria indicated that the factor variances were not invariant, while in CFA both the information criteria and the decrements in *CFI* and *TLI* indicated non-invariance of factor variances. In line with the ESEM results, the results indicated that invariance of residuals and latent means did not seem to hold. Overall, it can be concluded that the results of the measurement invariance tests converged between CFA and ESEM, although especially for the Likert version, slightly more indications of non-invariance were found.

Finally, measures of general factor saturation in the four groups are presented in Table A3. Slightly larger ECV values were found in CFA compared to ESEM. However, ω_h values were highly comparable across the methods of analysis. And more importantly, as with ESEM, the values did not differ much across the four groups, indicating that the opportunity and motivation to self-enhance do not seem to have a large influence on the size or importance of the general factor in the personality questionnaire. This conclusion was also supported by the finding that general factor loadings were highly similar across the methods of analyses (absolute average $\lambda = .52$, $\lambda = .53$, $\lambda = .44$, $\lambda = .46$, for forced-choice development, forced-choice selection, Likert development, and Likert selection respectively in CFA, and $\lambda = .52$, $\lambda = .52$, $\lambda = .45$, $\lambda = .45$ in ESEM). Correlations of the general factor loadings across methods of analyses (e.g., correlation between general factor loadings in Likert development ESEM vs Likert development CFA) were close to 1.

Together, although expected differences in results were found due to differences in assumptions of the methods, the CFA results did not lead to substantially different conclusions on the influence of the motivation and opportunity for social desirable responding on the general factor of personality.

Table A1.

Latent Factor Intercorrelations for Development and Selection by Item Format (CFA).

Forced-Choice						Likert					
	I	SO	EXU	STRC	STAB		I	SO	EXU	STRC	STAB
I	-	.78**	.84**	-.22**	.83**	I	-	.52**	.66**	-.02	.43**
SO	.82**	-	.66**	-.46**	.66**	SO	.57**	-	.76**	.37**	.69**
EXU	.88**	.70**	-	-.09	.79**	EXU	.72**	.65**	-	.47**	.73**
STRC	-.26**	-.50**	-.14*	-	-.12*	STRC	-.11*	.11*	.31**	-	.48**
STAB	.84**	.66**	.82**	-.24**	-	STAB	.55**	.64**	.73**	.26**	-

Note. * $p < .05$. ** $p < .01$. Correlations below the diagonal are based on the development group, correlations above the diagonal on the selection group. I = Influence; SO = Sociability; EXU = Exuberance; STRC = Structure; STAB = Stability.

Table A2.

Goodness-of-Fit Statistics and Information Criteria for the CFA Models Estimated.

	χ^2	<i>df</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>RMSEA 90% CI</i>	<i>SRMR</i>	<i>AIC</i>	<i>BIC</i>	<i>ABIC</i>
<i>Four groups</i>										
Oblique Model	22301.455	1065	0.621	0.573	0.142	[0.140 - 0.143]	0.139	234031	236138	235073
Bifactor Configural	17873.029	1000	0.699	0.638	0.13	[0.129 - 0.132]	0.109	228539	231055	229784
Bifactor Weak	18419.466	1132	0.691	0.673	0.124	[0.122 - 0.125]	0.127	229349	231034	230183
<i>Forced-Choice</i>										
Oblique Model	14940.600	535	0.595	0.546	0.165	[0.162 - 0.167]	0.161	113508	114432	113908
Bifactor Configural	11768.139	500	0.683	0.620	0.150	[0.148 - 0.153]	0.121	109508	110627	109992
Bifactor Weak	11682.990	544	0.687	0.654	0.143	[0.141 - 0.146]	0.122	109516	110389	109893
Bifactor Strong	11885.638	563	0.682	0.661	0.142	[0.140 - 0.144]	0.122	109629	110396	109961
Bifactor Strict	11980.824	588	0.680	0.673	0.140	[0.137 - 0.142]	0.123	109719	110346	109990

(continued)

Table A2 (*continued*).

	χ^2	<i>df</i>	<i>CFI</i>	<i>TLI</i>	<i>RMSEA</i>	<i>RMSEA 90% CI</i>	<i>SRMR</i>	<i>AIC</i>	<i>BIC</i>	<i>ABIC</i>
Bifactor StrictVar	12008.265	594	0.679	0.676	0.139	[0.137 - 0.141]	0.124	109752	110345	110008
Bifactor Means	12201.768	600	0.674	0.674	0.139	[0.137 - 0.142]	0.130	109954	110514	110196
<i>Likert</i>										
Oblique Model	7352.191	535	0.662	0.621	0.113	[0.111 - 0.115]	0.131	120715	121639	121115
Bifactor Configural	5954.925	500	0.73	0.675	0.105	[0.102 - 0.107]	0.095	119031	120150	119515
Bifactor Weak	6572.552	544	0.701	0.67	0.106	[0.103 - 0.108]	0.100	119110	119983	119488
Bifactor Strong	6217.119	563	0.720	0.701	0.100	[0.098 - 0.103]	0.099	119185	119951	119516
Bifactor Strict	6583.137	588	0.703	0.697	0.101	[0.099 - 0.103]	0.104	119544	120171	119815
Bifactor StrictVar	6879.018	594	0.688	0.685	0.103	[0.101 - 0.105]	0.112	119740	120333	119996
Bifactor Means	7285.781	600	0.669	0.669	0.106	[0.104 - 0.108]	0.123	119951	120511	120193

Note. *FM* = freely estimated means; *CFI* = comparative fit index; *TLI* = Tucker–Lewis Index; *RMSEA* = root mean square error of approximation; *CI* = confidence interval; *AIC* = Akaike information criterion; *BIC* = Bayesian information criterion; *ABIC* = sample-size-adjusted *BIC*.

Table A3.

Measures of General Factor Saturation (CFA).

	Forced-Choice		Likert	
	Development	Selection	Development	Selection
ECV	.55	.54	.49	.53
ω_h	.76	.75	.72	.77
ω	.94	.94	.91	.92
Relative omega	.80	.79	.78	.84

Note. ECV = explained common variance; ω_h = coefficient omega

hierarchical; ω = coefficient omega total.