

### **Cognitive reflection test adopted for the Study**

For this study, we developed three items that were similar to the original three (Frederick, 2005) in structure, but differed in content as we wanted to make them more work related and face valid. Here are all three items:

1. You are a production manager at a local craft brewery and are considering packaging for your beer. Beer and packaging together cost 11 HRK. If the beer costs 10 HRK more than the packaging, how much does the packaging cost? (intuitive response = 1 HRK, correct response = 0.5 HRK).
2. You are a manager in an auto equipment factory. If 5 machines make 5 car parts in 5 minutes, how many minutes would it take for 100 machines to make 100 car parts? (intuitive response = 100, correct response = 5).
3. You hold a managerial position in a company that has doubled the number of employees every year. If it reached today's number of employees in 6 years, in how many years did it reach half (50%) of employees? (intuitive response = 3 years, correct response = 5 years).

### **Combining samples for the incremental validity analysis**

As we had multiple items and variables that were the same across both studies, we were able to combine them and join our two samples. This larger sample then allowed us to conduct incremental validity analyses with greater statistical power. Specifically, we managed to combine samples for AOT measure, Big Five personality traits (after transforming Study 2 ratings that were originally on a seven-point scale to the five-point scale that was used in Study 1), subordinates' ratings of managers Decision-Making Quality and Intellectual Humility, as well as perceptions of subordinates' Job Satisfaction and Perceived Organizational Support. When combining the sample, we were looking for "common denominator" of both samples, i.e., items that were the same in both samples. This resulted in Decision-Making Quality measure consisting of only three items that were identical across studies (first three items in both studies), which was the only substantial deviation from the measures as they are commonly used. Other measures were the same as they appeared in Study 1, meaning that the combined sample consisted of a 10-item AOT version, Mini IPIP, and Job Satisfaction and Perceived Organizational Support measures that were the same in both studies. This combined sample had between  $N = 214$  and  $N = 250$  cases, depending on the variable.

### **Results of the incremental validity analysis**

To conduct the incremental validity analysis, we did a SEM regression, regressing the four outcomes on Big five factors and AOT factor simultaneously. SEM regression analysis is done on latent variables that are free from measurement error. This means that prior to calculating beta weights, we specified a model where each of the latent variables (four outcomes, five personality factors and AOT) were defined by their respective manifest variables (i.e., the scale items) and where these latent variables were allowed to freely covary. This model showed an acceptable fit to the data ( $CFI = .84$ ,  $RMSEA = .06$ ,  $SRMR = .07$ ). There was one problematic AOT item ("There is nothing wrong with being undecided about many issues") whose loading on the AOT factor was negative. However, as removing

this item when specifying the AOT factor did not have any effect on the results of regression analyses, here we report the results with this item included in the scale.

In total we conducted four SEM regression analyses with subordinate ratings of managers' Decision Making Quality and Intellectual Humility, subordinates' Job Satisfaction and Perceived Organizational Support as outcomes, and personality traits and AOT as predictors. The results of these analyses are shown in the Table A.

Table A Results of SEM regression analyses

	Manager's decision making quality			Manager's intellectual humility			Job satisfaction			Perceived organizational support		
	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$	B	SE	$\beta$
Open.	-0.13	0.10	-0.14	-0.07	0.08	-0.09	-0.15	0.09	-0.16*	-0.45	0.16	-0.29**
Consc.	0.01	0.08	0.01	-0.01	0.07	-0.01	-0.12	0.07	-0.14	-0.09	0.13	-0.06
Extra.	-0.12	0.10	-0.13	-0.10	0.09	-0.13	-0.09	0.09	-0.11	0.19	0.17	0.13
Agree.	0.43	0.16	0.33**	0.27	0.13	0.25*	0.30	0.14	0.24*	0.60	0.25	0.28**
Neuro.	-0.04	0.13	-0.03	-0.08	0.12	-0.07	0.04	0.12	0.03	-0.10	0.22	-0.04
AOT	0.19	0.14	0.16	0.23	0.12	0.23*	0.21	0.13	0.18*	0.37	0.22	0.19*
R <sup>2</sup>	0.129**			0.122**			0.119**			0.171**		
$\Delta R^2$	0.018			0.042			0.022			0.027		

Note. \*\*  $p < .01$ , \*  $p < .05$

Open. = Openness; Consc. = Conscientiousness; Extra. = Extraversion; Agree. = Agreeableness; Neuro. = Neuroticism; AOT = Actively Open-Minded Thinking. R<sup>2</sup> – Total proportion of variance in outcomes explained by all predictors;  $\Delta R^2$  – Additional proportion of variance in outcomes explained by AOT after accounting for the effects of Big five factors.