

Supplemental Online Materials
for
**Creativity and irrelevance processing:
Evidence from online eye tracking**

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Results for study 1 using Ocsai generated originality ratings

There was a positive relation of the originality of the produced uses and the time looking at the peripheral, $r(97) = .32, p = .001$, but not at the central information, $r(97) = .18, p = .072$. Table S1 illustrates the results of the hierarchical multiple regression on originality scores. Originality of the produced uses was predicted by fluency (number of generated uses) but not by openness. The time looking at the peripheral objects was a significant predictor of originality ratings even after accounting for the influence of openness and fluency. The interaction of irrelevance processing and openness did not explain additional variance in originality ratings after accounting for the other three factors. Originality and fluency were positively correlated, $r(97) = .39, p < .001$.

Table S1. Hierarchical multiple regression of originality ratings.

	<i>Originality</i>			
	<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>	<i>Step 4</i>
Fluency	0.07***	0.07***	0.06***	0.06***
Openness		- 0.01	< 0.01	0.01
Obs. length peripheral objects			< 0.01 *	< 0.01
Openness x Obs. length peripheral obj.				< 0.01
R^2	.15	.16	.21	.21
ΔR^2	.15	.01	.05	< .01
F	17.03***	8.91***	8.44***	6.29***
ΔF	17.03	0.87	6.41*	0.09
df	97	96	95	94

Notes. Step 1: Fluency; Step 2: Openness; Step 3: Observation length peripheral objects; Step 4: Openness x observation length peripheral objects. Numbers in the first four rows show standardized regression coefficients.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Regression of creative achievement scores

Table S2 shows the results of the hierarchical multiple regression on creative achievement scores. While openness predicted creative achievement, this was neither the case for observation length of the peripheral objects nor for the interaction of openness and observation length of the peripheral objects.

Table S2. Hierarchical multiple regression of creative achievement scores.

	<i>Creative Achievement</i>		
	<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>
Openness	0.43**	0.45**	0.42*
Obs. length peripheral objects		< 0.01	< 0.01
Openness x Obs. length peripheral obj.			< 0.01
R^2	.09	.12	.12
ΔR^2	.09	.03	< .01
F	9.90**	6.30**	4.17**
ΔF	9.90	2.52	0.04
df	97	96	95

Notes. Step 1: Openness; Step 2: Observation length peripheral objects; Step 3: Openness x observation length peripheral objects. Numbers in the first three rows show standardized regression coefficients.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Descriptive statistics for all personality measures in study 1

Table S3. Means (*M*) and standard deviations (*SD*) for the score in the creative achievement questionnaire (CAQ), each dimension of the openness for experience scale and each Big 5 dimension.

	CAQ	Ingenuity	Intellect	Tolerance	Depth	Aesthetics	Curiosity	Conscientiousness	Extraversion	Openness	Agreeableness	Neuroticism
<i>M</i>	7.78	3.51	3.47	3.99	3.71	3.67	4.07	31.77	25.08	33.13	31.29	24.82
<i>SD</i>	8.60	0.76	0.77	0.54	0.62	0.89	0.51	8.62	8.51	6.08	6.94	10.39

Descriptive statistics for all personality measures in study 2

Table S4. Means (*M*) and standard deviations (*SD*) for the score in the creative achievement questionnaire (CAQ), each dimension of the openness for experience scale and each Big 5 dimension.

	CAQ	Ingenuity	Intellect	Tolerance	Depth	Aesthetics	Curiosity	Conscientiousness	Extraversion	Openness	Agreeableness	Neuroticism
<i>M</i>	11.41	3.45	3.59	3.94	3.73	3.69	4.01	32.69	25.22	33.01	31.51	24.41
<i>SD</i>	12.90	0.86	0.83	0.60	0.64	0.92	0.61	7.74	8.54	6.80	7.83	10.49