

# Supplementary material for

## Creative thinking does not promote dishonesty

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### Instructions

#### **Mind Game**

##### *Part 1: Number generation*

First, please come up with a random number between 1 and 8 and write it on a piece of paper.

As soon as you have chosen your number, press Space to continue.

##### *Part 2: Honesty measure*

If your number is "7" you receive an additional bonus of 0.5 pounds.

Press "J" if you chose "7" and press "F" if you chose another number.

#### **Classification Task (rule-based thinking)**

Your next task is a simple classification task in which you have to sort packages based on their label. You must sort everything into "machine" and "organic". In each trial you will see packages that are therefore either labeled "machine" or "organic".

If you see the label for "machine", please press "S/L".

If you see the label for "organic", please press "L/S".

You have 2 seconds for your answer.

Press Space to continue.

### **Remote Associates Task (convergent thinking)**

Next, you will see three words on each run.

Your task is to find a fourth word that is somehow related to all three.

For example:

dream - break - light: day

cream - cage - cottage: cheese

Some of these riddles will be easy and some will be challenging. Don't worry if you sometimes don't find the correct solution in time. You have 40 seconds for each trial, and please only use lowercase letters. The experiment automatically proceeds after 40 seconds.

Press Space to start.

### **Alternative Uses Task (divergent thinking)**

Next, there will be one item in each trial. Your task is to come up with as many alternative uses as possible for this item.

For example:

Paper clip: earring, bookmark, ...

Coffee cup: soup bowl, plant pot, ...

The items will be presented to you one by one and you have five minutes for each item.

Press Space to start.

## Supplementary results

Results for each logistic regression when using data sets of the first 150 participants per group, independent of performance in the inducer task

**Table S1.** Results from the logistic regression of reporting the same number as indicated on the screen within the mind game.

Variable	$\beta$
Thinking style	
Thinking style(1)	-0.21 (0.27)
Thinking style(2)	< 0.01  (0.23)
Time-point (1)	1.05*** (0.14)
Thinking style * Time-point	
Thinking style (1) by Time-point (1)	-0.14 (0.35)
Thinking style (2) by Time-point (1)	-0.31 (0.31)
Constant	-1.08*** (0.11)
N	450

*Thinking style:* Convergent vs. divergent vs. rule-based thinking. *Time-point:* Before vs. after the thinking style manipulation. Numbers in parentheses indicate specific contrasts, i.e., a difference contrast for the thinking style (1 = convergent vs. divergent, 2 = averaged convergent and divergent vs. rule-based) and an indicator contrast for the time-point (the time-point before the thinking style manipulation serves as the reference). Note that the contrasts of the thinking style predictor test for differences at the reference time-point only. Standard errors in parentheses, \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ .

**Table S2.** Results from the logistic regression of reporting the same number as indicated on the screen within the mind game, additionally including the DAT score as a predictor.

Variable	$\beta$
Thinking style	
Thinking style (1)	-0.23 (0.27)
Thinking style (2)	0.01 (0.24)
Time-point (1)	1.01*** (0.15)
Thinking style * Time-point	
Thinking style (1) by Time-point (1)	5.99 (3.28)
Thinking style (2) by Time-point (1)	2.39 (3.02)
DAT	0.01 (0.01)
Time-point * Thinking style * DAT	
Time-point (1) by Thinking style (1) by DAT	-0.08 (0.04)
Time-point (1) by Thinking style (2) by DAT	-0.04 (0.04)
Constant	-1.52 (1.03)
N	413

*Thinking style:* Convergent vs. divergent vs. rule-based thinking. *Time-point:* Before vs. after the thinking style manipulation. *DAT:* Score in the divergent association task. Numbers in parentheses indicate specific contrasts, i.e., a difference contrast for the thinking style (1 = convergent vs. divergent, 2 = averaged convergent and divergent vs. rule-based) and an indicator contrast for the time-point (the time-point before the thinking style manipulation serves as the reference). Note that the contrasts of the thinking style predictor test for differences at the reference time-point only. Standard errors in parentheses, \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ .

**Table S3.** Results from logistic regression of reporting the same number as indicated on the screen within the mind game, additionally including ratings of rule-constrainedness as a predictor.

Variable	$\beta$
Thinking style	
Thinking style (1)	-0.24 (0.27)
Thinking style (2)	-0.01 (0.23)
Time-point (1)	1.05*** (0.15)
Thinking style * Time-point	
Thinking style (1) by Time-point (1)	-0.13 (0.52)
Thinking style (2) by Time-point (1)	-0.56 (0.42)
Rule-constrainedness	< 0.01  (< 0.01 )
Time-point * Thinking style * Rule-constrainedness	
Time-point (1) by Thinking style (1) by Rule-constrainedness	< 0.01  (0.01)
Time-point (1) by Thinking style (2) by Rule-constrainedness	0.01 (0.01)
Constant	-0.96*** (0.15)
N	450

*Thinking style:* Convergent vs. divergent vs. rule-based thinking. *Time-point:* Before vs. after the thinking style manipulation. *Rule-constrainedness:* Rating of rule-constrainedness. Numbers in parentheses indicate specific contrasts, i.e., a difference contrast for the thinking style (1 = convergent vs. divergent, 2 = averaged convergent and divergent vs. rule-based) and an indicator contrast for the time-point (the time-point before the thinking style manipulation serves as the reference). Note that the contrasts of the thinking style predictor test for differences at the reference time-point only. Standard errors in parentheses, \*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ .