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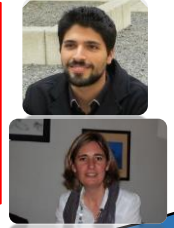
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A French Adaptation of the Remote Associate Test (RAT)



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Introduction

Conclusion

The RAT of Mednick (1962) is used by numerous researchers in **creativity** and more generally in language understanding. Recently, the need for understanding the cognitive processes involved when completing the RAT (e.g., Marko, Michalko & Riečanský, 2018), highlights that a French adaptation is clearly missing. In this work, we propose to **provide the early investigations for a French version of the RAT**, based on the variant proposed by Bowden and Jung-Beeman (2003), in which the solution is always connected by syntagma (i.e., forms a compound word) to each word of the problem.

As shown in results, problems selected seems difficult to solve since only 18% of problems reached 50% of success. However, further quantitative analysis are needed to examine all the psycholinguistic characteristics of our word sample that may determine the difficulty of each problems (e.g., lexical frequency and emotional valence of the compounds words, etc.) **All in all, we are working to provide in a close future a french normative database of problems** with informations about response time and difficulty to find the solutions.

Results	Problem traductions	Solution traductions	Response times (ms)	Mean freqfilms ¹ (and S.D)
Problems the most succeeded (n > 70 %)	panties/late/ozone	layer	7840.06	10,886 (22,21)
	arch/guitar/seventh	sky	8359.78	
	measurement/circuit/broth	short	6147.93	
	rolling/scales/high	chair	7085.88	
	fluff/polar/brown	bear	6628.90	
Problems the less succeeded among problems succeeded once (n < 5 %)	eye/water/foot	glass	12009.00	65,67 (78,77)
	misery/slipper/dress	train	12460.91	
	cross/iron/table	path	4725.62	
	nuclear/quarrel/album	family	13407.45	
	fat/mouth/perfume	burnt	8037.34	

¹Note. Mean freqfilms : the mean lexical frequency in films for each words of the problems, took from New, Pallier, Brysbaert & Ferrand database (2004)



Method

Participants

- ✓ 49 students (42 females ; M = 19.28, S.D = 3.32) from Paul Valéry University - Montpellier III
- ✓ All participants were fluent french speakers

Material and Procedure

- ✓ We designed 99 problems based on 294 words (adjectives and nouns, see figure 1 for more details) mainly took from French language dictionaries (e.g., Larousse)
- ✓ Problems were presented on a computer screen with Opensesame software (see figure 2)
- ✓ Participants were told to find a fourth word connected by syntagma to those from the problem, in a maximum time of 30 s
- ✓ A feedback after each answer was given

Descriptive statistics showed that:

- ✓ In mean, problems were solved by 29% of participants. This result is in line with those reported by Bowden et al., (2003)
- ✓ 18 problems were succeeded by at least 50% of participants
- ✓ The mean response times was 10794.39 ms (S.D = 25.28) with a minimum of 4725.62 ms and a maximum of 18363.12 ms for correct answers.

The Pearson correlation revealed a significant negative correlation between accuracy and response times ($r = -.35$; $p < .001$).

3 types of compound words

	Suffix/Prefix	Connected with hyphen	Detached
Ex.	unhappy	eco-friendly	animal lover

Figure 1. Detailed lexical construction of the compound words authorized as solution

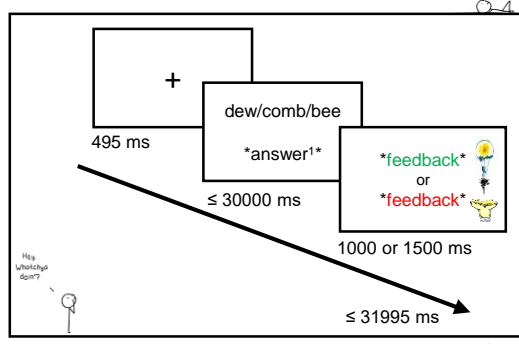


Figure 2. Experimental procedure illustration for one trial on Opensesame software

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Thank you for your attention ! 😊