

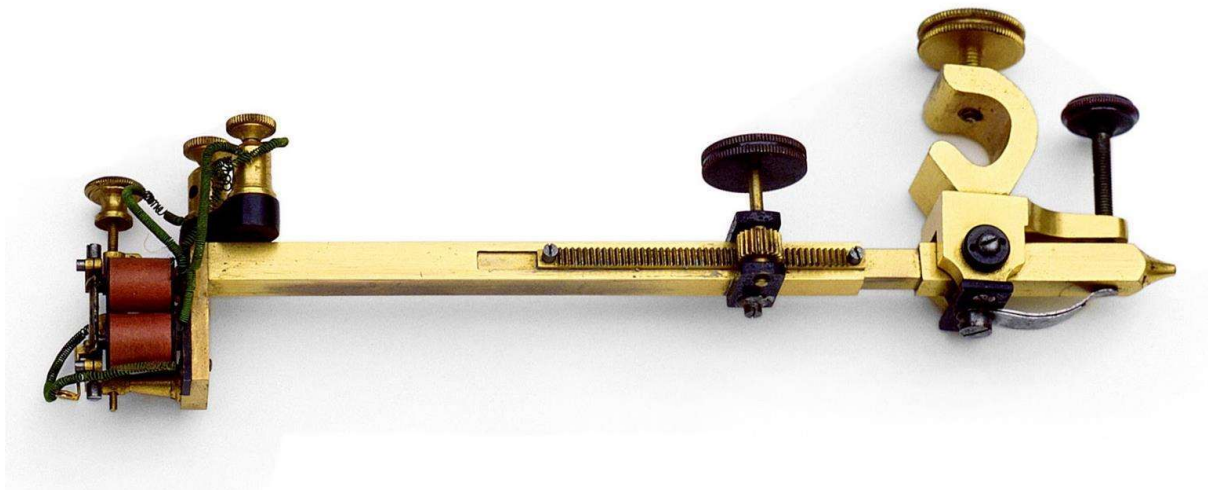
XXIX SCIENTIFIC CONFERENCE

# EMPIRICAL STUDIES IN PSYCHOLOGY

MARCH 31 – APRIL 2, 2023

FACULTY OF PHILOSOPHY, UNIVERSITY OF BELGRADE

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INSTITUTE OF PSYCHOLOGY  
LABORATORY FOR EXPERIMENTAL PSYCHOLOGY  
FACULTY OF PHILOSOPHY, UNIVERSITY OF BELGRADE

XXIX SCIENTIFIC CONFERENCE

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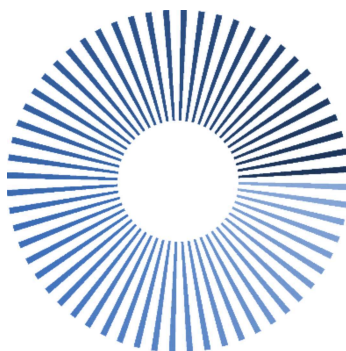
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BELGRADE, 2023

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**Cover photo:**

Deprez time-marker (G. Boulitte, Paris)

Device for setting a fine time base for kymographic recording. It provides oscillations for intervals down to 0.005 sec. A pen is attached to the plunger of an electromagnet. The movements of the plunger may be varied with a conical regulator. The device now lacks the pen. The author of this device is French electrical engineer Marcel Deprez who conducted the first experiments to transmit electrical power (DC) over long distances. Dimensions: 18.5 x 4 x 4.5 cm; Net weight; 145 g; Voltage: V DC = 2 – 4 V

From the collection of old scientific instruments of the Laboratory of experimental psychology, Faculty of philosophy, University of Belgrade

conducted an eight-step hierarchical regression analysis with our general factor (i.e., Ingroup criticism) as a criterion and the aforementioned eight blocks of variables as predictors. All blocks (except free market ideology) contributed significantly to this prediction. The sociodemographics explained 1.5% of variance ( $F_{(5, 800)} = 2.52, p = .028$ ), personality traits and related variables 10.9% ( $F_{(11, 789)} = 8.91, p < .001$ ), thinking dispositions and styles 5% ( $F_{(4, 785)} = 12.26, p < .001$ ), socio-political attitudes 16.6% ( $F_{(4, 781)} = 49.26, p < .001$ ), moral sensitivity 11.7% ( $F_{(2, 779)} = 84.14, p < .001$ ), prejudices 4.4% ( $F_{(1, 779)} = 69.39, p < .001$ ), and ethnocentrism 18.1% ( $F_{(2, 774)} = 222.9, p < .001$ ). The overall percentage of explained variance amounts to 68.6%. Our results show that those prone to IGC tend to be low on ethnocentrism and national pride, to strongly adopt democratic values, are sensitive moral progressivists (morality based on fairness and care), not prejudiced, conscientious, but with slightly elevated Disintegration, proneness to anger, dissatisfaction with life, and need for closure. We discuss the position of IGC at the crossroad of personality and sociopolitical attitudes.

**Keywords:** ingroup criticism, basic personality traits, socio-political attitudes, thinking dispositions and styles, moral dispositions

#### REI-8: DEVELOPMENT OF A VERY BRIEF VERSION OF RATIONAL-EXPERIENTIAL INVENTORY USING ANT COLONY OPTIMIZATION PROCEDURE

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The Rational-Experiential Inventory-40 (REI-40, Pacini & Epstein, 1999), proposed in the framework of the cognitive-experiential self-theory (CEST) is a widely used instrument for measuring thinking styles. Similar to other dual-processing models, CEST distinguishes between automatic, effortless, rapid (experientiality) and conscious, analytical, effortful, slower (rationality) thinking styles. A short version, REI-10, has already been proposed (Epstein et al., 1996), however, it is based on an outdated REI version and is not compatible with REI-40. There are also modified versions of REI which attempt to capture facets of experientiality, but REI-40 is still used more often than other versions. In the current study we aimed to provide a brief version of REI-40 by employing an Ant Colony Optimisation (ACO) algorithm (Leite et al., 2008; Marcoulides & Drezner, 2009). We used an existing dataset, collected in the Serbian validation of REI-40 (Purić & Jokić, 2022), comprising  $N = 813$  students, 68% females,  $M_{age} = 19.79$  ( $SD_{age} = 1.85$ ). We used the ACO procedure to select four items per each REI scale - Rationality and Experientiality, so as to maximize both confirmatory factor analysis model fit, indicated by high Comparative Fit Index (CFI) and low Root Mean

Square of Approximation (RMSEA), and high reliability. The resulting instrument, REI-8 demonstrated good model fit:  $CFI = .99$  and  $RMSEA = .062$ , 95% CI [.048, .076], as well as reliability - Cronbach's alpha was .75 for both Rationality and Experientiality, while McDonald's omega was slightly higher at .78 for both REI-8 scales. The correlations between REI-8 scales and corresponding REI-40 scales were very high,  $r = .82$  and  $r = .84$ , for rationality and experientiality, respectively, and the two dimensions were practically uncorrelated  $r = .04$ , as the CEST model proposes. Overall, we have constructed a very brief 8-item version of REI which is both reliable and structurally valid. This instrument could be used in large-scale studies where time is limited.

**Keywords:** thinking styles, Rational-Experiential Inventory, rationality, experientiality, Ant Colony Optimization procedure

## THE VALIDATION STUDY OF GENERAL ANIMISM SCALE

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We developed a new concept of general animism that integrates all previous conceptualizations of animism. General animism discerns three types of animisation: *Animistic error*, the attribution of life and psyche to entities without it; *Ecological animism*, an interpersonal relationship with environment; and *Metaphysical animism* – beliefs that everything has consciousness. We developed a 30-item scale to measure general animism (GAS). Showing good psychometric properties (e.g.,  $\alpha = .95$ ), we tested the validity of GAS on convenient sample ( $N = 428$ ; 63.6% women;  $M_{\text{age}} = 28.41$ ,  $SD_{\text{age}} = 14.28$ ) alongside other animism (Adult animism scale - ASA; Anthropomorphism scale, IDAQ; Ontological confusion questionnaire, OCQ) and personality scales (HEXACO-PI-R; Disintegration scale, DELTA9). To validate GAS, Exploratory Factor Analysis (EFA) should yield three lower-order factors, that correspond to our animism types, and one higher-order factor. Lower factors should show strong positive associations with other animism scales, and no or weak correlations with personality traits, with the strongest positive one being with disintegration. EFA, with Oblimin rotation and maximum likelihood extraction, yielded three lower-order factors - Animisation of nature (AN), Animisation of artificial entities (AE), Animisation of universe (AU) - that load onto a higher-order factor we labeled "General animism". Upon analysis, it was evident that our factors formed according to the object of animisation rather than type. AN, AE, and AU had moderate to high association with ASA ( $r$  ranging from .43 to .78, all  $ps < .05$ ), IDAQ ( $r$  ranging from .39 to .59, all  $ps < .05$ ) and OCQ ( $r$  ranging from .49 to .57, all  $ps < .05$ ), while correlations with other personality traits were expectedly low or insignificant ( $r$  ranging from .01 to .23; some  $ps < .05$ ) showing good convergent validity of GAS. Criterion validity was

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