

SynAPP: An online web application for exploring creativity

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DESCRIPTION

SynAPP is a web application currently hosted at AGH-UST (<http://149.156.205.250:15180>) designed to stimulate users' creative skills through image association tasks and a rating feedback system. In SynAPP users perform two tasks related to image-image associations:

-Associating two images using a word or short phrase. The two images can be presented simultaneously, left and right, or sequentially with a five seconds delay in between. The user is allowed to make only one association per couple.

-Evaluating associations generated by other users according to two criteria: originality (0, 0.5 or 1 points) and intelligibility (0, 0.5 or 1 points).

The set of image pairs for these two tasks are mutually disjoint, so if a user generates association for an image pair, then she or he does not evaluate associations generated by other users for the same pair; and vice versa.

All the responses are recorded with their respective time stamps, and the time taken to perform each association is also recorded. A user can see how her or his associations were rated (with respect to their originality and intelligibility) by other users, and also how this evaluation evolved over time. This information is shown in an intuitive way using tables and graphs.

Users perform three standard tests of creativity before and after using SynAPP:

-Will Shortz & Morgan Worthy's word equation (ditloid) puzzles like "24 = H. in O. D." ("24 = Hours in One Day"). Different equations are used for before-SynAPP and after-SynAPP tests.

-Guilford's alternative uses task: the user is asked to give as many uses as possible of a common item. Different objects are used for before-SynAPP and after-SynAPP tests.

-Wallace & Kogan's assessment of creativity: A test similar to Guilford's, but the user is asked to find objects with a common property instead.

The answers given by each user are evaluated by the other users, similar to the image associations, and statistics on these evaluations is also displayed graphically to the user.

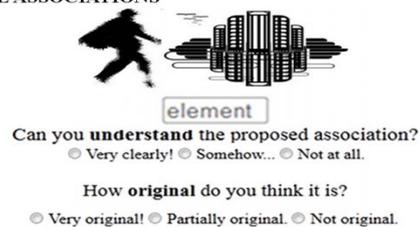
We hypothesize that SynAPP helps users to improve their creative, out-of-the-box divergent thinking cognitive abilities, and our goal is to properly evaluate this hypothesis based on the analysis of the data collected from the association tasks and the creativity tests.

APPLICATION WORKFLOW

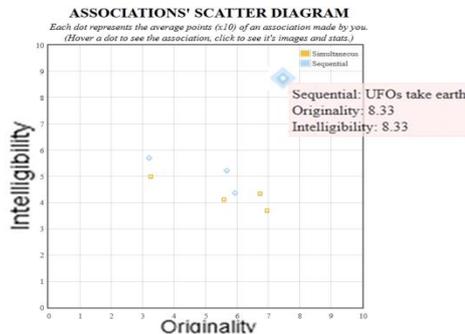
WRITE ASSOCIATIONS



RATE ASSOCIATIONS



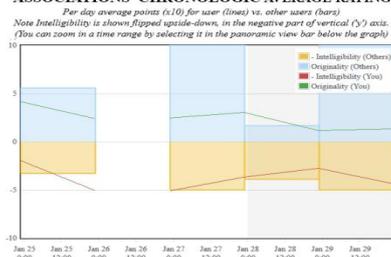
CHECK YOUR PROGRESS AND GET FEEDBACK



ASSOCIATION DETAILS

IMAGES' PRESENTATION	AVERAGE POINTS (x10)	Full Votes (+1 point) (Intelligibility/Originality)	Half Votes (+0.5 points) (Intelligibility/Originality)	Zero Votes (+0 points) (Intelligibility/Originality)	Time of association
Sequential	8.33	17/16	6/8	1/0	2012-01-23 04:08:47

ASSOCIATIONS' CHRONOLOGIC AVERAGE RATINGS



REARRANGABLE ASSOCIATIONS' TABLE

Average points shown on this table are calculated as the sum of the average of intelligibility points and the average of originality points, divided by 2 and then multiplied by 10.

ASSOCIATION	IMAGES' PRESENTATION	AVERAGE POINTS (x10)	Full Votes (+1 point) (Intelligibility/Originality)	Half Votes (+0.5 points) (Intelligibility/Originality)	Zero Votes (+0 points) (Intelligibility/Originality)	Time of association
UFOs take earth	Sequential	8.33	17/16	6/8	1/0	2012-01-23 04:08:47
yst seca the pot	Simultaneous	5.54	12/5	7/10	4/8	2012-01-23 04:09:10
ice skating duck	Sequential	5.45	11/6	3/11	8/5	2012-01-23 04:09:21