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and scientifically stronger than an identical product named 'Right Start' training. The presence of an unrelated MRI brain image enhanced the perceived scientific rationale of the product. These results confirm that researchers' fears are justified: by implying a strong scientific basis, „brain-based" product names are remarkably effective in implicitly manipulating consumer opinion.

A-0034

THE DEVELOPMENT OF THE SEMANTIC NETWORK IN CHILDHOOD AND ITS DETERIORATION IN ALZHEIMER'S DISEASE: A COMPARATIVE STUDY

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According to Rubial-Alvarez et al. (2013), the comparison of cognitive functioning between children and Alzheimer's disease patients (AD) shows an inverse evolution pattern that supports the hypothesis of retrogenesis. The purpose of our research is to analyze the retrogenesis process of the lexico-semantic network in order to better understand the conceptual organization of semantic memory. 90 children aged 5-9 and 90 patients at different stages of the Alzheimer's disease will be tested. We elaborate a unique and original experimental paradigm adapted to these different populations. First of all, we adapted a semantic memory questionnaire by developing a computing interface. Secondly, we created a priming paradigm in order to evaluate children and AD patients on the words relations strength in their semantic memory. Many pre-tests and psycholinguistic variables analyses (verbal association, frequency, age of acquisition, conceptual strength, ...) have allowed to select 22 words (11 naturals and 11 manufactured), each of them being associated with a taxonomic and a thematic linked word. Finally, a semantic pictorial sorting test will be proposed in order to evaluate more explicitly the concepts organization.Experiments are now in progress. The semantic memory questionnaire, the priming paradigm and the first results will be presented.

A-0035

WHAT YOU LIKE IS WHAT HAS DECREASED: FEATURE-BASED PERCEPTION OF THE SCARCITY ENHANCES OBJECT VALUE

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Scarce objects attract people. This study examined whether perceiving the scarcity is based only upon object features, which have decreased, or it can be generalized to different features over the category. In our experiment, white and black cookies were used as stimuli that participants were to evaluate. In a white-decrease condition, a plate that contained 9 white and 1 black cookies was first exposed to participants. However, the experimenter subsequently exchanged it for a new plate containing 4 white and 1 black cookies; that is, five white cookies decreased in front of the participants. In a black-decrease condition, four white and 6 black cookies were initially presented, and five black cookies decreased then. After such manipulations of the scarcity, the participants rated how much they liked a white and black cookie respectively. Even though all the participants tasted the same cookies between the conditions, the likeability was rated higher for a cookie whose color was same as the decreased cookies than for that of different color; i.e. object value was selectively enhanced by what had decreased in each condition. These results suggest that the human cognitive system performs elaborate, yet rather finical, discrimination of object features when perceiving the scarcity.

A-0036

AUTOMATIC PROCESSING OF TEMPORAL ORDER OF MAGNITUDE

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It was found that magnitude comparisons are faster when the numbers are presented in ascending compared to descending temporal order (e.g., Ben-Meir, Ganor-Stern, & Tzelgov, 2012; Müller & Schwarz, 2008). The same pattern was found for comparisons of both numerical and physical magnitudes, thus suggesting that this advantage for ascending temporal order of magnitude is a general property of our magnitude system. But, is temporal order of magnitude processed automatically? In order to explore this possibility, we used a same/different task, which is a cardinal and not an ordinal task, and thus does not trigger the processing of temporal order of magnitude. In this task participants judged whether the sequentially presented numbers were identical in numerical value in the numerical task or identical in physical size in the physical task. An advantage for ascending compared to descending temporal order of magnitude was found for both tasks. However, it was found only when participants pressed the right key for „different" response, and not when they pressed the left key for „different" response. This suggests that under specific conditions, temporal order can be shown to be processed automatically.

A-0037

IMPACT OF A TRAINING ON NUMERICAL ABILITIES IN LOW LANGUAGE-SKILLED CHILDREN.

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Our project aims at a better understanding of the relationships between language development and numerical abilities. Recent data show indeed that children with low language skills develop difficulties in arithmetic. More precisely, we will investigate the links between language abilities and the knowledge of the counting sequence, the counting skills, the memory for elementary arithmetic facts, phonology, lexicon, and morphosyntax. In order to do so, we have assessed language and numerical skills in 200 children in the second year of primary school to identify a small group of children with low language skills. In a later stage, we will develop a specific training aiming at enhancing arithmetic skills for those children and evaluate its effectiveness.

Our hypothesis is that delays in language development can lead to arithmetic impairments through a causal chain of difficulties: language difficulties could hinder the