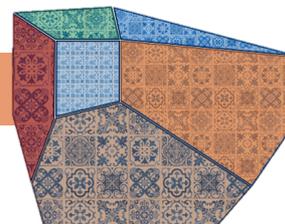




12º Encontro Nacional Associação Portuguesa Psicologia Experimental

Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto
5 e 6 de Maio de 2017

Programa Completo



Sexta-feira, 5 de Maio de 2017

08h45 - Abertura do Secretariado

09h00 - Afixação de Posters

09h15 - Sessão de Boas-vindas

Henrique Vaz - *Direção da FPCEUP*

São Luís Castro - *Coord. do Encontro e Presidente da APPE*

09h30/10h50 - Sessão 1 (Moderadora: Susana Silva)

1. Apples and olives: concept typicality responses in the semantic memory network

Sofia Frade, Andrea Santi, and Ana Raposo

Faculdade de Psicologia da Universidade de Lisboa, University College London

Concept typicality can provide a wide-angle view on the organization of semantic memory. For a given category (e.g., fruit) identifying an atypical item (olive) is more difficult than a typical one (apple). Yet, it is still uncertain how typicality affects the processes engaged by the semantic neural network. We ran an fMRI study using a category verification task in which concept typicality was manipulated parametrically. Both anterior temporal lobe (ATL) and inferior frontal gyrus (IFG) demonstrated a negative correlation with typicality, consistent with the role of ATL in the integration of idiosyncratic features in complement with IFG for semantic control. Conversely, inferior parietal lobe showed a positive correlation with typicality, suggesting its function in the integration of semantically similar features.

2. Domain-specific functional organization: neurocognitive characterization of a case of hemi-prosopometamorphopsia

A. Freixo, M. Tábuas-Pereira, Q. Bukhari, S. Kristensen, D. Duro, I. Santana, and J. Almeida

Faculdade de Psicologia e de Ciências da Educação da Universidade de Coimbra

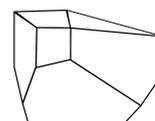
The existence of a neuronal network specialized in face processing is an example of neural domain-specific organization. The way this face network is organized is not completely clear. Hemi-prosopometamorphopsia is a rare neurological deficit where half of the face is perceived as distorted. We conducted a face-processing fMRI experiment in a patient with hemi-prosopometamorphopsia after a lesion in the splenium of the corpus callosum. Results showed that functional connectivity between the different nodes of the face network was modified in our patient. Specifically, the left occipital face area (OFA) seemed to be disconnected from the other areas of the face processing network. Our results support that connectivity between the nodes of the face network is central for normal face perception.

3. “Segue a tua intuição”: Crenças leigas sobre o uso de “intuição” e “análise”

Filipe Loureiro, Teresa Garcia-Marques, e Duane Wegener

William James Center for Research - ISPA, Instituto Universitário

Investigação tem originado diferentes e variadas operacionalizações do constructo de intuição. Porém, desconhece-se se estas coincidem com crenças leigas de intuição. Respondemos a esta questão através de uma abordagem de análise de protótipos. Primeiro, identificámos as descrições apresentadas pela maioria dos participantes como representando “agir intuitivamente”/“agir analiticamente”. Seguidamente, pedimos avaliações destas na sua centralidade e validámo-la ao demonstrar que participantes são mais rápidos a classificar dimensões centrais. Dados destes 3 estudos sugerem a unicidade de representação do que é “agir analiticamente” e três formas distintas de “agir intuitivamente” (Agir automaticamente/afetivamente; Opor-nos a factos/lógica; Raciocinar numa linha de pensamento livre). A intuição vs. racionalidade dos participantes (FI e NFC) modera estes factores, sugerindo que estes representam o conceito de forma distinta.



4. A amplificação social de correlações ilusórias

Cristina Mendonça (1), André Mata (2), e Mário Boto Ferreira (1)

(1) CICPSI, Faculdade de Psicologia, Universidade de Lisboa; (2) William James Center for Research, ISPA - Instituto Universitário

Correlações ilusórias são percepções erróneas sobre como duas ou mais variáveis se relacionam. Este enviesamento tem sido estudado ignorando que as pessoas recebem e transmitem informação de e para outras pessoas. Neste estudo, os participantes leram frases sobre membros de um de dois grupos que tinham comportamentos simpáticos ou antipáticos (sem que houvesse correlação entre grupos e tipos de comportamento) e estimaram o número de membros de cada grupo que tinha tido cada tipo de comportamento. Estas estimativas foram depois usadas para determinar as frases que os participantes seguintes leram. Os participantes que receberam informação de outros perceberam uma correlação ilusória mais forte do que a dos participantes que receberam as frases originais, revelando assim uma amplificação social deste enviesamento.

10h50/11h20 – Coffee Break

11h20/12h20 - Sessão 2 (Moderador: Pedro Nobre)

1. O indivíduo no contexto persuasivo: impacto da auto-percepção de atratividade no processo de mudança de atitude

Joana Mello, Teresa Garcia-Marques, Pablo Briñol, e Ana Cancela

William James Center for Research, ISPA-Instituto Universitário

Nesta investigação focamos o impacto da percepção de atratividade física, da fonte e do receptor de uma mensagem persuasiva, nas atitudes e intenções comportamentais correspondentes. No estudo 1, após a exposição a uma mensagem por uma fonte, atrativa ou não-atrativa, os participantes com uma auto-percepção baixa (vs. alta) de atratividade reportaram uma menor confiança nas suas atitudes e consequentemente uma menor consistência entre as suas atitudes e intenções comportamentais. Dois estudos seguintes testaram a necessidade de apresentação física de uma fonte para que estes efeitos ocorram. Os dados sugerem que apenas com a apresentação física de uma fonte, a auto-percepção de atratividade parece ter um impacto na confiança nas atitudes e consequentemente na sua consistência com as intenções comportamentais.

2. Waist-to-hip ratio as supernormal stimuli: Effect of contrapposto pose and viewing angle

Farid Pazhoohi, António Macedo, James Doyle, and Joana Arantes

University of Minho

One physical feature of women attractiveness is the Waist to Hip Ratio (WHR), which is an indicator of attractiveness, health, youthfulness and reproductive potential in women. In the current study we hypothesized viewing angle and body postures influence the attractiveness of these forms based on the view-dependency of WHR stimuli (vdWHR). Using eye-tracking, we quantified the number of fixations and dwell time on 3D images of a female avatar in two different poses (standing and contrapposto) from eight viewing angles incrementing in 45 degrees of rotation. Results showed that contrapposto poses are perceived as more attractive than standing poses and lower vdWHR sides of the stimuli attracted more fixation numbers, first fixations and dwell time.

3. Perception of sexual dimorphism in human faces: An ERP study

M. L. Carrito (1), P. Bem-Haja (2,3), C. F. Silva (2), D. I. Perrett (4), and I. M. Santos (2)

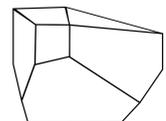
(1) ISPA - Instituto Universitário, William James Center for Research, Portugal.

(2) Center for Health Technology and Services Research (CINTESIS), Departamento de Educação e Psicologia, Universidade de Aveiro, Portugal.

(3) Institute for Biomedical Imaging and Life Sciences (IBILI), Faculdade de Medicina, Universidade de Coimbra, Portugal.

(4) School of Psychology and Neuroscience, University of St Andrews, Scotland, United Kingdom.

Sexual dimorphism, which corresponds to the phenotypic difference between males and female from the same species, is one of the main factors that was proven to influence facial attractiveness in humans. Although there are several studies about the impact of sexual dimorphism perception in mate choice, the underlying neurophysiological mechanisms are still poorly explored. In the current study, masculinity/femininity shape features in human faces were associated with differences in P2, EPN and LPP components. In particular, sexual dimorphic differences elicited P2 and EPN modulations when female participants viewed opposite-sex faces. This result may indicate that the perception of sexually dimorphic shape features in faces of potential mates happens early during visual processing.



12h20/14h00 – Almoço**14h00/15h40 - Sessão 3 (Moderadora: Ana Raposo)****1. How reactivating a memory influences what we remember of it? Studies on reconsolidation of episodic memories**

A.M. Capelo, P. B. Albuquerque, and S. Cadavid
Universidade do Minho

Recently, reconsolidation hypothesis has emerged as an explanation to the malleable nature of memory. According to this hypothesis, when a consolidated memory is reactivated it enters a state of vulnerability that traditionally characterizes newly formed memories. Considering the theoretical, clinical and ethical implications that reconsolidation hypothesis entails, a reliable protocol to test its assumptions is urgently needed. The present talk aims to explore the evidence that came from the pioneer and widely cited study of Hupbach and collaborators (2007) on reconsolidation of episodic memories. Along with a replication study, additional experiments were conducted to investigate the role of retrieval context, and the direct impact of reactivation on reactivated memory. Compelling evidence was gathered in favour of reconsolidation hypothesis.

2. O papel da recuperação na formação de memórias falsas: proteção ou vulnerabilidade?

Ana Lapa, Paula Carneiro, Leonel Garcia-Marques, e Tânia Ramos
Faculdade de Psicologia Universidade de Lisboa

Recuperar informação aumenta a sua aprendizagem a longo prazo, comparativamente ao seu reestudo. No entanto, está ainda em aberto de que forma a recordação influencia a susceptibilidade a intrusões. Nesta investigação pretendemos estudar o papel da recordação na vulnerabilidade a memórias falsas. Os participantes ouviram uma lista DRM e (a) recordaram-se das palavras da lista, ou (b) reestudaram-nas. A seguir, foram reexpostos à lista, podendo esta conter o item crítico (nova informação falsa). Este procedimento foi repetido para dez listas e terminou com uma tarefa de recordação de todas as listas. Apesar de aumentar a recordação verdadeira, a recordação aumentou também as memórias falsas. Processos de recordação que beneficiam a memória poderão assim ser co-responsáveis pela sua vulnerabilidade a intrusões.

3. Delayed judgments of learning and the effect of font size on memory and metamemory: A meta-analysis

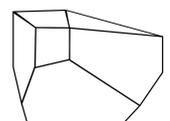
Karlos Luna (1), Beatriz Martin-Luengo (2), and Pedro B. Albuquerque (1)
 (1) *Escola de Psicologia, Universidade do Minho*; (2) *Center for Cognition and Decision Making, National Research University-Higher School of Economics (Federação Russa)*.

Perceptual characteristics of studied items (e.g., font size) affect judgments of learning (JOLs), but not memory performance. We tested whether delayed JOLs could reduce or eliminate the effect of perceptual characteristics on JOLs. We adopted a meta-analytic approach and analysed the results of 26 experiments that manipulated font size. The results showed that the delayed procedures reliably reduced the effect of perceptual characteristics on JOLs, but the effect was still significant after a delay. The meta-analysis also showed a subtle memory advantage for items presented in large font over small font. One plausible explanation is that after a delay, information about font size is not available for some items, causing a reduction in the effect.

4. Memory enhancement in aging - the role of cognitive training combined with tDCS: preliminary results

A. R. Martins, L. Amaral, J. Nogueira, J. Alves, F. Fernandes, F. Fregni, M. Simis, J. Almeida, A. R. Silva, and M.R. Simões
ProAction Lab, Faculty of Psychology and Educational Sciences, University of Coimbra

Cognitive training (CT), a promising approach to enhance cognitive functions in aging, has been used with neuromodulation to explore synergetic effects. Here we combine multiple sessions CT with excitatory transcranial direct current stimulation (tDCS) over the left dorsolateral prefrontal cortex (IDLDFC) or right cerebellar cortex (rCC) to assess episodic memory improvement, compared with sham and a wait list group. We present preliminary data from 45 participants (mean age=67,7, SD=4,5). Results suggest an improvement in verbal and visual episodic memory tasks in the groups receiving CT + tDCS, especially in the rCC. Our results hold promise as a means to enhance cognitive functions in aging. Moreover, greater light may be shed on the role of the cerebellum in cognition.



5. Memory enhancement in aging - the role of cognitive training combined with tDCS: preliminary neuroimaging results

Amaral, L., Martins, A.R., Nogueira, J., Spínola, M., Alves, J., Fernandes, F., Fregni, F., Simis, M., Almeida, J., and M.R. Simões
ProAction Lab, Faculty of Psychology and Educational Sciences, University of Coimbra

We use an innovative design to explore the synergetic effects of cognitive training (CT) combined with transcranial direct current stimulation (tDCS) on memory enhancement in aging. Here, we present preliminary neuroimaging data showing that participants receiving excitatory tDCS over the right cerebellum (that show enhanced behavioral performance in verbal episodic memory tasks) present higher functional connectivity between the hippocampus – a main episodic memory area – and superior temporal gyrus (BA 22), after 12 sessions of CT combined with tDCS. Other studies also show the coupling between the hippocampus and BA 22, reflecting the verbal episodic memory functional network. These results demonstrate an effect of the intervention at the neural level and support the importance of the cerebellum in cognition.

15h40/16h00 – Coffee Break

16h00/16h40 - Sessão 4 (Moderador: Pedro Albuquerque)

1. A bad deed says more about you if the power is not with you: power and trait inferences

Filipa de Almeida, Diana Orghian, Sofia Jacinto, Sofia Santos, and Leonel Garcia-Marques
Universidade de Lisboa

In the present research we explore the link between power holding and person perception. Specifically, we want to know how the power held by an actor affects the way we infer traits from his behavior. We provide evidence that, when faced with behavioral descriptions about others, people infer more negative traits about powerless than about powerful actors (study 1). Moreover, by adding a control condition for power we realize that this effect is due to inferring more negative traits for the powerless and not due to inferring less negative traits for the powerful (study 2). Using the False Recognition Paradigm we show that this effect can occur spontaneously (study 3). Theoretical explanations for the found patterns are discussed.

2. Just be confident? Children's and adults' perceptions of intellectual arrogance, humility, and diffidence

Sara Hagá (1) and Kristina R. Olson (2)

(1) *Faculdade de Psicologia, Universidade de Lisboa*; (2) *University of Washington, USA*

Preschoolers tend to favor confident informants over uncertain or cautious ones – a tendency that persists throughout adulthood. But does this mean that sounding highly confident will always lead to more positive perceptions? In 2 studies, we tested children's (ages 4 to 11 years) and adults' perceptions of a highly confident informant who readily dismissed other people's beliefs (arrogant target), a confident informant who willingly considered other people's beliefs (humble target), and a low confident informant who readily accepted other people's beliefs (diffident target). Young children did not favor the intellectually humble person over the others, but older children and adults liked this person better and tended to consider her nicer than the arrogant one and smarter than the diffident one.

16h45 /17h45 – Conferência Plenária (Moderadora: São Luís Castro)

Influence of music training on cognition and brain functions: Societal impact for education and rehabilitation

Mireille Besson and Eva Dittinger

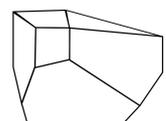
Laboratoire de Neurosciences Cognitives & Brain and Language Research Institute CNRS & Aix-Marseille Université

Many results in the past 15 years have demonstrated that music training positively influences different aspects of cognition and modifies the anatomo-functional architecture of the brain through strong brain plasticity mechanisms. After reviewing this line of work, I will focus on a series of experiments, using both behavioral and electrophysiological measures, conducted in children (9-12), young (18-27) and older adults (65-75) to examine whether music training facilitates learning the meaning of novel words in an unknown language. In the three groups of participants, results revealed increased word learning efficiency and faster brain plasticity in musicians compared to non-musicians. I will detail the reasons why the design of these experiments and the results clearly open new perspectives both for the diagnosis of children with learning difficulties and, more generally, for the rehabilitation of patients with various neurological disorders with music training.

18h00/19h45 – Sessão de Posters

19h00/19h45 – Assembleia Geral APPE

21h00 – Jantar de Convívio



Sábado, 6 de Maio de 2017

09h30/11h10 - Sessão 5 (Moderador: César Lima)

1. The impact of task decomposability and scheme activation in hypothesis testing strategy

Sofia Jacinto, João Braga, Marina Ferreira, Cara Lewis, and Elizabeth Collins

Faculty of Psychology, University of Lisbon; Indiana University, Bloomington; Instituto Universitário de Lisboa (ISCTE-IUL), CIS-IUL

A non-decomposable task, such as a clinical session, favors holistic and intuitive judgment processes (Hammond et al., 1987), constraining the interpretation of subsequent information according to the activated scheme (Eyal et al., 2011). Thus, we hypothesize that non-decomposable tasks favor primacy effects and lead to confirmatory biases, when comparing to decomposed tasks. In two studies, we manipulated the decomposability (uninterrupted vs. interrupted) of an audio excerpt of a client describing depression symptoms. We measure hypotheses testing strategy through participants' ratings of the likelihood of three possible diagnoses. Results show that when a scheme is activated, understanding the case in a non-decomposable way leads to more confirmatory strategy than in the decomposable condition. Implications to therapy session will be discussed.

2. No cure for correspondence bias: Diagnosis is not used to discount the trait inference

Marina Ferreira, Sofia Jacinto, João Braga, Anne Krendl, and Elizabeth Collins

Faculty of Psychology, University of Lisbon

People tend to draw dispositional inferences from behavior, neglecting situational explanations (correspondence bias; Gilbert & Malone, 1995). However, they discount the implied trait when there is an alternative explanation (Gilbert 2002). Behaviors symptomatic of mental disorders should be categorized as situational, not as dispositional traits (DSM-5). Our goal is to test whether disorder diagnosis lead to discounting trait inferences as situational explanations for behaviors. In six studies, we manipulated behavior account (neutral, physical impairment, disorder diagnosis) of paragraphs simultaneously implicative of traits and diagnosis (e.g., lazy-depression). We measured implicated traits rating. Together, these studies suggest that disorder diagnosis lead to insufficient discount, implying that they are not perceived as alternative behavior explanations.

3. Temporal asymmetries in impression formation

João Braga, Sofia Jacinto, and Diana Orghian

Católica Lisbon, School of Business and Economics

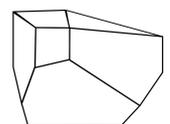
People can easily draw personality trait inferences from other's behaviors. However behavioral information may come from past, present, or future behaviors. The present work explores how temporal asymmetries may impact trait inferences. In study 1, we asked participants to make trait inferences from a positive past vs. positive future behavior and found more extreme inferences from past behaviors than from future behaviors. In study 2, we manipulated perceived intentionality and valence and show this result only stands for social-positive behaviors when the intentions of the actor are unequivocal. Importantly, under uncertainty regarding the actor's intention, people infer more extreme traits from future than from past social-negative behaviors, thus reversing the previous finding.

4. The benefits of planning: Examining outlining effects on writing dynamics and final texts

Teresa Limpo and Rui A. Alves

University of Porto

Planning, translating, and revising are key writing processes that can be managed through the use strategies, such as outlining. This research examined outlining effects on writing dynamics and final texts across two experiments, randomly assigning undergraduates to an outline or no-planning condition. Experiment 1 used the triple-task to assess cognitive effort and processes distribution and Experiment 2 used keystroke logging to gauge pauses and bursts. Outlining neither influenced cognitive effort nor pauses, but influenced processes distribution and bursts. Outlining participants translated more in the beginning and middle of composition and revised more at the end, where they produced longer bursts than their peers. No-planning participants distributed their attention among all processes. Consistently, outlining increased writing fluency, text quality, and persuasiveness.



5. Code-switching and cross-linguistic similarity: evidence from trilinguals

Ana Santos Costa, Montserrat Comesaña, and Ana Paula Soares
Centro de Investigação em Psicologia, Universidade do Minho

Recent studies on cross-linguistic similarity have shown that cognates (translations that formally overlap: PAPEL[Portuguese]–PAPER[English]) have a remarkable influence upon bilingual performance and induce more Code-Switching (CS) than non-cognates (translations with no formal overlap). However, little is known about the nature of this relationship in the multilingual mind, especially at early stages of processing. We investigated cognate status and CS interactions in Portuguese (L1), English (L2) and German (L3) trilinguals. Cognates in two and three languages and non-cognates were presented in a masked priming lexical decision task. Targets in each language block were preceded by unrelated primes in the three languages to produce switch and no-switch trials. Results will be discussed in the light of current bilingual word recognition models.

11h10/11h30 – Coffee Break

11h30/12h30 - Sessão 6 (Moderadora: Selene Vicente)

1. Estratégias de aprendizagem em pombos

Carlos Pinto e Armando Machado
Universidade do Minho

Analisámos a aprendizagem de pombos em tarefas de discriminação visando identificar a que estímulos o animal atenderia e, com base nesses estímulos, que regras de resposta criaria. Com base numa tarefa de correspondência à amostra que podia ser aprendida de mais que uma forma, verificámos: a) que tanto a amostra como a luz de iluminação geral (que sinalizava o intervalo entre-ensaios) pareceram controlar as respostas, e b) os pombos não recorreram à estratégia que consistia no estabelecimento do número mais elevado de regras de resposta. Adicionalmente, as condições para a adopção de uma estratégia podem não só depender das características da tarefa ou da modalidade dos estímulos, como também podem variar significativamente entre indivíduos.

2. Pigeons playing on slot-machine like tasks: do they prefer near hits?

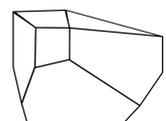
Inês Fortes (1), Jacob P. Case (2), and Thomas R. Zentall (2)
 (1) *University of Minho, Portugal*; (2) *University of Kentucky, USA*

To win on a slot machine, the player has to obtain three matching symbols - e.g., XXX. When the first two symbols match but the third does not - e.g., XXO - it is a near hit because before presenting the third symbol, the sequence resembles a win. Despite equally resulting in losses, humans prefer near hits to clear losses, which occur when the second symbol signals the loss - e.g., XOO. That preference for near hits occurs in a variety of contexts, and it seems to be related with a belief that the chances of winning are increasing. We asked whether pigeons would also prefer near hits to clear losses. The differences found between humans and pigeons will be discussed.

3. O que está na base do responder por exclusão?

Armando Machado e Camila Domeniconi
Universidade do Minho e Universidade Federal de São Carlos, Brasil

O responder por exclusão, um dos fenómenos mais robustos da Psicologia Experimental, ocorre quando após termos aprendido um conjunto de relações (por ex., dado o estímulo S1, escolhemos A em vez de B, mas dado S2 escolhemos B em vez de A), na presença de um estímulo não treinado, novo, ou indefinido, S3, tendemos a escolher uma alternativa não treinada, nova, indefinida, C em vez de A ou B. O responder por exclusão poderá explicar como crianças e adultos associam palavras novas a objectos novos. Para compreender os requisitos mínimos do responder por exclusão e relacioná-lo com processos básicos de aprendizagem, simplificámos a tarefa padrão usando estímulos unidimensionais - S1, S2, etc., foram durações distintas de um mesmo som - e respostas simples - A, B, C, etc., foram círculos de cores distintas ou contendo distintas figuras abstratas. Nesta comunicação relatamos os resultados de dois estudos em que não só replicámos o responder por exclusão em adultos e crianças, como previmos o fenómeno a partir dos gradientes de generalização dos estímulos treinados. O gradiente de generalização temporal definiu o grau de novidade do estímulo e daí a probabilidade do sujeito responder por exclusão. Assim, talvez o responder por exclusão se possa reduzir a processos de aprendizagem simples e de grande generalidade.



12h30 /13h30 – Conferência Frederico Marques (Prémio APPE 2016)**Hierarchies and recursion**

Maurício Dias Martins

Berlin School of Mind and Brain, Humboldt University zu Berlin Max Planck Institute for Human Cognitive and Brain Sciences

Complex hierarchical structures occur in language, music and action planning. In these domains, it is difficult to establish the boundaries of hierarchical depth, especially when external memory resources are available. Recursive hierarchical embedding is probably a key capacity to achieve this power. In this talk, I will summarize the results of our research program aiming at describing the cognitive architecture underlying the representation of recursive hierarchical embedding. After conducting a series of behavioral and fMRI experiments in the visual, musical and motor domains, we found that, behaviorally, the acquisition of recursive rules seems supported by cognitive resources that are general across domains. However, when we test well-trained participants in the fMRI, their representation of recursion seems supported by retrieving representations stored in (visual, musical and motor) domain-specific repositories. This suggests that the resources necessary to acquire recursive rules are different from those necessary to utilize these rules after extensive training.

13h30 – Encerramento