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ABSTRACTS

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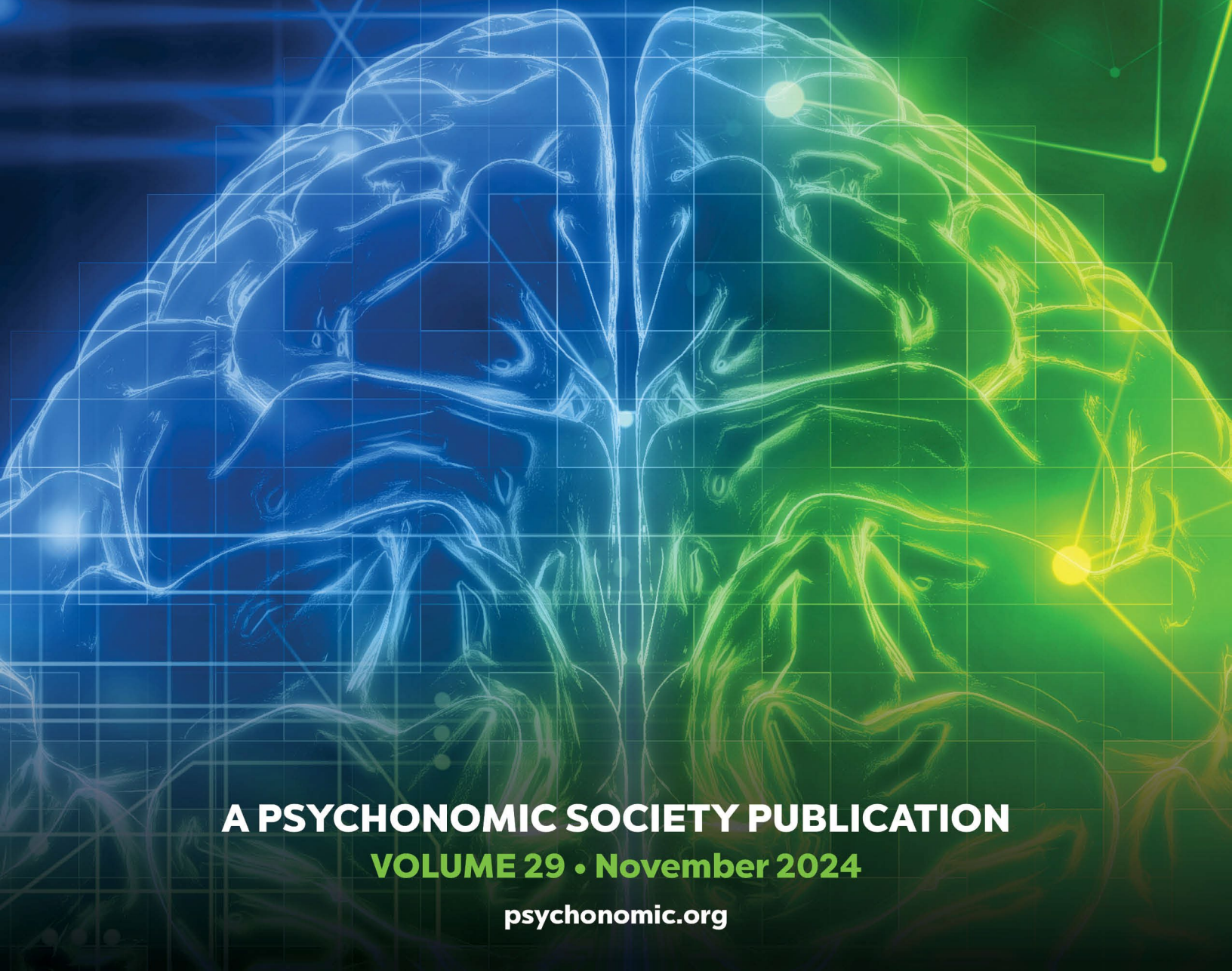

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multiple, distinct ways in which cognitive control strategies can support episodic retrieval.

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7:30-9:00 PM (1155)

Predicting the Accuracy of Spoken Recognition Memory Judgments: Prosody, Confidence, and Response Time. ARMINE BARSEGYAN, *California State University, Northridge*, JUSTIN KANTNER, *California State University, Northridge*, GIZEM FILIZ, *Washington University in St. Louis*, IAN G. DOBBINS, *Washington University in St. Louis* — Goupil and Aucouturier (2021) demonstrated that acoustic characteristics of spoken perceptual discrimination decisions predict their confidence and accuracy, suggesting that such prosodic signatures may serve the same role in the assessment of other cognitive judgments. Following this research, we collected spoken memory judgments in a 2AFC and 4AFC face recognition task. Despite a generic response format in which participants said only "Number One/Two/Three/Four" to indicate which face they had seen before, correct judgments were distinguished from incorrect judgments as higher-pitched, louder, and more rapidly spoken. Volume and speech rate were especially strong predictors, and each accounted for unique variance in accuracy. In a second experiment, we sought to replicate the above findings in a distinct sample. In addition, we examined two factors also likely to predict accuracy in this task: confidence (from explicit ratings) and reaction time (elapsed time before vocal response onset). The predictive power of acoustic speech signatures in tandem with metacognitive confidence and RT will be discussed, as will the application of these findings to real-word scenarios such as everyday conversation and eyewitness memory.

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7:30-9:00 PM (1156)

Recognition Memory: Does the Question Matter? SOPHIA P. FABRIZIO, *Binghamton University, SUNY*, DAVID PEITA, *Binghamton University, SUNY*, ALEXUS S. LONGO, *Binghamton University, SUNY*, RACHEL NELSON, *Binghamton University, SUNY*, CRYSTAL COLLINS, *Binghamton University, SUNY*, DEANNE L. WESTERMAN, *Binghamton University, SUNY* — In recognition memory experiments, participants are typically asked, "Is this old?" and respond "yes" to classify a stimulus as previously experienced. A recent study found that if the question is instead framed as, "Is this new?" (with "yes" indicating novelty), recognition memory for words was substantially altered (Brainerd et al., 2022). Specifically, the "Is this new?" framing reduced accuracy, mainly by inflating false alarm rates. The present study tested the generality of this effect by including images and words printed in distinctive fonts, as these stimuli should produce lower false alarm rates (i.e., the distinctiveness heuristic) and may be less impacted by the framing of the question. The results showed a distinctiveness heuristic and an image superiority effect, as expected. In addition, sensitivity decreased across all stimulus types under the "Is this new?" framing, suggesting that the effect of question type on recognition performance is robust and generalizes across different types of stimuli.

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7:30-9:00 PM (1157)

The Attentional Boost Effect and Levels of Processing. WINSTON GOH, *National University of Singapore*, NUR NAZURAH MOHAMAD NASIR, *National University of Singapore* — The attentional boost effect (ABE) is the enhanced encoding for items that are paired with targets than with distractors. The present study examined whether the ABE will be affected by levels of processing (LOP), given that previous work focused on perceptual properties, such as colour detection, when discriminating between targets and distractors. If the ABE is based on the enhancement of early stage processes, using a conceptual processing level may attenuate it. Participants studied abstract/concrete words followed by old/new recognition. They were assigned to one of three encoding conditions: full attention, divided attention with a colour detection task (low LOP), or divided attention with a concreteness detection task (high LOP). Results show that LOP does not influence the ABE; the boost to targets relative to distractors was found in both low and high LOP conditions. These findings suggest that the ABE is not limited to perceptual processing during encoding.

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7:30-9:00 PM (1158)

The Benefits of Underlining are a Combination of Perceptual and Motor Advantages. PEDRO B. ALBUQUERQUE, *Universidade do Minho*, ANDREIA

RIBEIRO, *Universidade do Minho*, PEDRO F. S. RODRIGUES, *Portucalense University* — Underlining is a widely used study technique, but research on its efficacy has been scarce and somewhat inconsistent. This work aimed to explore the role of underlining in word recognition. In Experiment 1, participants were instructed to (1) underline and (2) read words silently and perform a recognition test. Results showed higher recognition for underlined words than those only read in silence. To determine if the perceptual cues (colourful-underlining) alone, without motor involvement of underlining, are sufficient to enhance memory, Experiment 2 was conducted. Participants (1) read silently underlined words (passive-underlining) and (2) words without underlining. The results showed higher recognition for previously underlined words than non-underlined words. Finally, in Experiment 3, the impact of motor movement on recognition was examined. Results demonstrated a recognition advantage for words that were only motor-underlined. Together, these results indicate that the benefits of underlining memory depend on perceptual and motor cues.

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7:30-9:00 PM (1159)

The Impact of Immersive Environments on Memory Performance. ANJALI THAPAR, *Bryn Mawr College*, MARRIAN TAN, *Bryn Mawr College*, OLIVIA TAYLOR, *Bryn Mawr College*, ALINE NORMOYLE — The traditional lab setting used in memory research does not reflect the complexities of the real-world environment in which we encode and remember information. Researchers have begun to use more immersive environments for studying memory performance. Virtual reality (VR) is one such environment that offers potential, but research in this area is limited. While some studies suggest that immersive environments enhance memory accuracy (Ventura et al., 2019), others highlight the potential for increased distractions which are generally associated with decreased memory performance (Craik, 2014). The present study assessed the impact of immersive environments (such as 3D-VR and 2D-Desktop gaming environment) versus a traditional environment (such as 2D static images) on memory performance, reaction time, and confidence ratings in a subsequent item-recognition memory test. We found a reliable impact of encoding condition on performance: immersive environments resulted in slower response times and improved memory accuracy for previously seen items. The results support the idea that more immersive environments enhance memory accuracy, highlighting the importance of realistic encoding settings in understanding memory processes.

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7:30-9:00 PM (1160)

The Survival Processing Effect in a Second Language: Influence of Linguistic Competence and Emotional Resonance. ANGEL FERNANDEZ, *Universidad de Salamanca*, BEATRIZ BERMÚDEZ-MARGARETTO, *Universidad de Salamanca*, MARÍA J. SÁNCHEZ, *Universidad de Salamanca* — The survival processing effect (SPE) refers to enhanced memory performance for survival-relevant information, indicating the adaptiveness of human memory. Whereas the SPE has been systematically replicated in the first language (L1), a recent study revealed no SPE in a second language (L2), arguably a consequence of reduced emotional activation in L2 and suggestive of the role of emotions in encoding and retrieving information. In this study, native speakers of Spanish varying in language command and ability to express emotions in their L2 (English) rated the relevance of common English words in regard to a survival or a moving (control) scenario, and then completed an unexpected free recall test. The extent to which the SPE was modulated by participants' L2 level of linguistic and emotional competence, and the implications of these findings are discussed in light of current theoretical approaches to emotional processing in bilinguals.

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7:30-9:00 PM (1161)

Hindsight Bias and Reversed Hindsight Bias in the Classroom. YUH-SHIOW LEE, *National Chung-Cheng University* — Hindsight bias can occur when people make a prediction and later are asked to recall their prediction. This study examined this memory bias in a real-world situation. In both experiments, college students were asked to predict their exam scores before the exam conducted two weeks later. One day after students had received their exam scores, they were asked to recall their predicted scores. Experiment 1 found that among a total of 142 students, 36 made errors in their recall of predicted scores. More importantly, 78% of students showed a memory error consistent with