

PSYCHONOMIC SOCIETY 58th Annual Meeting

November 9–12, 2017
Vancouver Convention Centre

 **VANCOUVER**
British Columbia, Canada

2017 Addendum

As of November 9, 2017

SPOKEN SESSION CHANGES

ABSTRACT CHANGES

Poster Number 1060, **The Effect of Reality Monitoring on False Memory in the Drm Paradigm**, Title should read “**The Effect of Reality Monitoring on False Memory in the DRM Paradigm.**”

Poster Number 5113, **Biased Reading & Neutral Representations: How Presentation Order of Comprehension Questions Alters Reading Strategies Without Influencing Final Representations**, fifth sentence in abstract should read “We found that preceding comprehension questions resulted in longer response times and faster overall reading times while not affecting response accuracy.”

WITHDRAWN ABSTRACTS

Spoken Talk 47, Friday Morning, 11:00 – 11:15, **A Memory Perspective on Evaluative Conditioning**

Spoken Talk 146, Saturday Morning, 8:40 – 8:55, **Time Course of Noisy Choices From Choice Sets Differing in Size**

Spoken Talk 185, Saturday Morning, 10:00 – 10:15, **Sexual-Judgment Processes in Sexual Aggression: A Performance-Based Characterization of Questionnaire Data**

Spoken Talk 201, Saturday Afternoon, 1:50 – 2:05, **Neural Inhibition Enables Inhibitory Control Over Memory**

Spoken Talk 293, Sunday Morning, 9:20 – 9:35, **Arithmetic Retrieval-Induced Forgetting in Chinese Adults**

Poster Number 1033, **Sequence Effects in Aesthetic Judgments**

Poster Number 1057, **Exploring the Impact of Fear, Anxiety and Empathy on Visual Spatial Abilities**

Poster Number 1161, **Risk-Reward Structures Shape Attentional Processes in Decisions Under Risk**

Poster Number 1223, **Children’s Use of Language as a Cue for Talker Identification**

Poster Number 2042, **Theory of Mind as a Cognitive Reflex**

Poster Number 2054, **Do You Believe Foreigners? Impact of a Foreign Accent on Cognitive Processes**

Poster Number 2081, **Hemispheric Differences Between Left and Right Supramarginal Gyrus for Pitch and Rhythm Memory**

Poster Number 2088, **Predicting Working Memory From Musicality: Subjective and Objective Measures**

Poster Number 2100, **Interference in Autobiographical Memory**

Poster Number 2148, **A Multidimensional IRT Model of Working Memory Span**

Poster Number 2168, **Consequences of Exposure to Hyperbolic Utterances**

Poster Number 2212, **Contributions of Eye Tracking to the Study of Implicit and Explicit Knowledge: An Artificial Grammar Learning Experiment**

Poster Number 3122, **The Potsdam Comics Corpus (PoCoCo): An Annotated Corpus and a Database of Eye Movements for the Study of Attentional and Linguistic Processing During Multimodal Reading**

Poster Number 3141, **Investigating a Deficit in the Dorsal Visual Stream Through Object Recognition in Dyslexia**

Poster Number 3143, **Character Complexity Effects in Reading and Visual Search**

Poster Number 4034, **Alphabet Switching and Memory Load: A New Perspective on Bilingual Processing**

Poster Number 4041, **Explaining the Role of Option Complexity in Measuring Age Differences in Risk Attitude: A Drift Diffusion Modeling Approach**

Poster Number 4087, **Need for Cognition and Judging Truth: A Preference for Thinking Protects People From Truthiness**

Poster Number 4125, **Memory Consolidation in an Implicit Serial Learning Task: An Investigation Using the Hebb Digits Task**

Poster Number 4130, **Retrieval Errors Aid Learning, but Errors May Not Mediate Later Recall**

Poster Number 4160, **How low can you go? Categorization and Recognition of Low Resolution Images**

Poster Number 5021, **Statistical Information Encoded in English Spelling**

Poster Number 5092, **Living in a Noisy World: Examining Monolinguals' and Bilinguals' Performance During Listening-in-Noise Tasks**

Poster Number 5136, **Resisting Misinformation via Discrepancy Detection: The Effects of Unaware Exposure to Smell**

ABSTRACTS ADDED

Spoken Talk 146, Saturday Morning, 8:40 – 8:55, **Hindsight Bias and Theory of Mind Across the Lifespan**, DANIEL BERNSTEIN, *Kwantlen Polytechnic University*

Participants 3- to 93-years old completed hindsight bias and theory of mind (ToM) tasks. In the hindsight task, participants identified a hidden toy that was gradually revealed. Next, participants saw each toy clearly before indicating when a naïve peer would identify the toy as it was gradually revealed. Participants estimated that a naïve peer would identify the toy sooner than they themselves had identified the toy, indicating hindsight bias. In the ToM task, participants watched a character hide a toy in a 5-foot-long container and exit. The toy was then moved elsewhere in the container. Participants indicated where the character would look for the toy when she returned. Participants thought the naïve character would look near the new location, indicating ToM bias. All age groups showed robust bias across the lifespan, indicating lifelong egocentrism. These biases followed different patterns, suggesting that hindsight bias and ToM are not identical phenomena. Email: Daniel Bernstein, dbernste@kpu.ca

Spoken Talk 185, Saturday Morning, 10:00 – 10:15, **Metacognitive Hindsight Bias**, RAKEFET ACKERMAN, *Technion–Israel Institute of Technology*, DANIEL BERNSTEIN, *Kwantlen Polytechnic University*

After incorrectly answering a question and learning the correct answer, people tend to “recall” their original answer as being more similar to the information they learned than it was. This is the robust Hindsight Bias (HB) phenomenon. Many theories assume uncertainty as a requirement for HB to occur. An overlooked aspect of HB is that people might also incorrectly recall their original uncertainty as more certain after learning the correct answer—Metacognitive HB. In two experiments participants answered general knowledge questions with numeric answers and provided confidence in each answer. They then learned the answers to half the questions, and attempted to recall all their original answers, along with their original confidence. In two experiments, recalled answers and recalled confidence ratings were biased towards the learned information, demonstrating HB and Metacognitive HB. Experiment 2 revealed that Metacognitive HB occurred only when another person was expected to review a respondent's answers and could, therefore, identify him/her; metacognitive HB did not occur when the respondent was anonymous. This study highlights social effects on metacognitive processes and provides novel directions for HB research. Email: Rakefet Ackerman, ackerman@ie.technion.ac.il

Poster Number 2054, Poster Session II, Friday Noon, 11:00-1:30, **The Unselective Nature of Phenomenal Visual Consciousness**, EITAN HEMED, LIANA TKACH, *University of Haifa*, MARIUS USHER, *Tel Aviv University*, YAFFA YESHURUN, BARUCH EITAM, *University of Haifa*

In previous work, we and others have demonstrated strong visual selection ('blindness') based on the stimuli's task (ir) relevance. Here I show that although people were unable

to report on salient features of the irrelevant stimuli they still consciously experienced them. Experiment 1 uses the Ebbinghaus illusion to show that although we find (a) evidence of the illusion, suggesting that people experienced the inducers and that (b) people could not report the relative size of the inducers. Experiment 2 uses visual imagery to index (previous) visual awareness. Participants saw colored letters/numbers and sometimes reported their identity. In other, intermixed, trials, participants formed a mental image of the last stimulus they have seen. We manipulated only the task participants performed (Imagery/reporting identity) on the trial just before a (surprise) question about the irrelevant color. As predicted by our 'unselective visual consciousness' hypothesis, we found strong 'blindness' after reporting on the relevant dimension which was all but gone following the creation of an image of the former stimulus. Together, we take these findings to be substantial evidence for our claim that phenomenal experience is unselective. Email: Baruch Eitam, beitam@psy.haifa.ac.il

Poster Number 2148, Poster Session II, Friday Noon, 11:00-1:30, **Cognitive Audiology: Investigating Cognitive Load and Working Memory Effects on Hearing**, STEPHANIA CERISANO, *McMaster University*, JEFF CRUCKLEY, *Starkey Canada*, MARIJA RADENOVIC, KARIN HUMPHREYS, SCOTT WATTER, *McMaster University*

Sensory hearing loss and decline in cognitive processing naturally occur as we age. Together, these factors make hearing more attentionally demanding, especially in difficult listening conditions; there is competition for the cognitive resources that are available. This suggests that cognitive approaches can be used to enhance the fitting and use of hearing aids. The current work explores these ideas in a dual-task experiment using healthy young adults. Participants identified the last word in an auditory sentence, presented in varying conditions of noise and sentence predictability, while completing a simultaneous speeded colour-identification task. Speech recognition accuracy and secondary task performance were measured. Results demonstrate the tradeoffs in cognitive resource allocation that accompany changes in task difficulty. These results are also compared with measures of working memory capacity, as well as listening effort, as measured subjectively and objectively (through pupil dilation and EEG spectral power). Implications for older adults and the fitting of hearing aids will be discussed. Email: cerisas@mcmaster.ca

Poster Number 2212, Poster Session II, Friday Noon, 11:00-1:30, **The Genetic Influence of Spatial Reasoning: A Meta-Analysis**, MICHAEL KING, BROOKE MACNAMARA, DAVID KATZ, *Case Western Reserve University*

Spatial reasoning ability correlates highly with fluid intelligence and math ability, has historically been suggested to differ between sexes, and develops with age. Spatial reasoning includes mentally rotating objects, constructing 2D patterns into 3D shapes, and making mental models based on textual information. Additionally, Raven's Progressive Matrices, have been used as a measure of spatial reasoning. Many cognitive abilities, including spatial reasoning, have been investigated in terms of the genetic contribution towards differences in ability. We conducted a meta-analysis that included 42 twin studies (total N=93178) to determine the genetic, and environmental influence of spatial reasoning and whether genetic or environmental influence vary based on type of spatial skill being tested, age, and sex. Our results

indicate that spatial reasoning ability is highly heritable with genetic influence explaining about 60% of the variance. Shared environment had minimal influence. Email: Michael King, mjk217@case.edu

Poster Number 4034, Poster Session IV, Saturday Noon, 11:00-1:30, **The Power of Crowd: Multi-Voice Effect on Learning**, KICHUN NAM, JAECHUN RYU, YONGWOO KIM, JANGHO PARK, JINWON KANG, JUYOUNG LEE, *Korea University*

This study was based on the hypothesis that, when giving positive / negative feedback, the voices of crowd people may affect the tacit learning more than the voice of one person. Subjects were asked to select a picture with a high probability of positive feedback in the two pictures presented. Three stimuli were presented for each of the single and multiple voice feedback. The experimenter instructed the subject to receive as much positive feedback as possible. The voice stimuli were the 'you are right' and 'you are wrong' monotone voices. Singles voice randomly presented one of six male and female voices, and Multi - voice used voice stimuli recorded simultaneously by six men and women. As a result, it showed significantly higher learning performance than the picture stimulus of single voice feedback in the picture stimulus given the multi - voice feedback. Email: Jaechun Ryu, curiosus@korea.ac.kr

Poster Number 4041, Poster Session IV, Saturday Noon, 11:00-1:30, **Call to Claim Your Prize: Perceived Benefits Drive the Likelihood of Contact In a Mass Marketing Scam**, PATRICIA XI, *Claremont Graduate University*, STACY WOOD, *Scripps College*, LUKAS KLAPATCH, JOSHUA PAUL, *Claremont Graduate University*, PI-JU LIU, *University of California, San Francisco* (Sponsored by ANDREW CONWAY, *Claremont Graduate University*)

Mass Marketing scams (MMS) affect millions of individuals across the globe, burdening them financially, socially, and physically. However, little work has been done investigating the individual differences that lead to vulnerability to MMS. In a preliminary study, "hot" and "cold" versions of a hypothetical but realistic solicitation were presented to 364 adults, who, after reviewing one of these letters, reported their likelihood of contacting an "activation number" to receive a monetary prize. Participants also completed a questionnaire with items referring to their perceived benefits and risks to responding to the letter, demographics, and decision making style. Preliminary analysis revealed that response rates were highest in the cold vs. hot condition, and perceived benefits was the greatest predictor. No age effects were seen. Further investigation is needed to understand the individual differences that lead to vulnerability to MMS and this departure from rationality. Email: Patricia Xi, patricia.xi@cgu.edu

Poster Number 4130, Poster Session IV, Saturday Noon, 11:00-1:30, **The Impact of Domain Knowledge on the Serial Position Effect and Serial Recall**, TRAVIS RICKS, JESSE FUHRMAN, JASMINE McROSS, JAYMI NELSON, NATHAN ROGGENBUCK, *Bemidji State University*

An investigation into how domain knowledge impacted the serial position effect and serial recall was performed. The first experiment presented six National Football League (NFL) teams paired with their host city/state and six states of the United States (US) paired with their capitals. Each list was presented three times with participants recalling the stimuli in the correct order after each presentation. Following the

three presentations the lists were given a different serial order and the lists were presented three times again. Domain knowledge predicted recall for the first presentation of the lists, but not when items were presented again in a different serial order. In the second experiment participants were presented longer lists. The second experiment replicated the first and found that domain knowledge affected the pattern of the serial position effect with better recall for primacy and recency. Email: Travis Ricks, tricks@bemidjistate.edu

SESSION/PRESENTATION CHANGES

Poster Number 4018, **Spatial Misconceptions in 3D Spatial Reasoning from Maps and Cross-Sections**, moved to Spoken Session 273, **Special Session - Learning and Memory: Human Learning and Instruction**, Saturday Morning, 8:00 a.m.-10:00 a.m. (Presentation Time: 8:20 a.m.-8:35 a.m.)

Poster Number 4101, **Enhancing Middle School Mathematics Achievement Through Spatial Skills Instruction**, moved to Spoken Session 274, **Enhancing STEM Learning Using Spatial Thinking**, West Meeting Room 211, Saturday Morning, 8:00 a.m.-10:00 a.m. (Presentation Time: 8:40 a.m.-8:55 a.m.)

Spoken Session 115, **Statistical Regularity in Language Predicts Verb Granularity**, moved to Spoken Session 118, **Semantics**, West Meeting Room 212-214, Friday Afternoon, 3:30 p.m.-5:30 p.m. (Presentation Time: 4:30 p.m.-4:45 p.m.)

Spoken Session 118, **The Grounding Problem in Semantic Representations Derived From Word Associations and Natural Language: A Multimodal Approach Using Visual and Affective Features**, moved to Spoken Session 115, **Semantics**, West Meeting Room 212-214, Friday Afternoon, 3:30 p.m.-5:30 p.m. (Presentation Time: 3:30 p.m.-3:45 p.m.)

Poster Number 1034, **Searching Memory in Time and Space**, moved to Poster Number 4180.5, **Recall II**, Saturday Noon, 11:00 a.m.-1:30 p.m.

Poster Number 1081, **Pushing the Boundaries of the Learning Process: Sensitivity to Community Structure Across Input Domains**, moved to Poster Number 2122, **Application of Network Science to Human Learning**, Friday Noon, 11:00 a.m.-1:30 p.m.

Poster Number 2122, **Metamemory and Memory for a Wide Range of Font Sizes**, moved to Poster Number 2120.5, **Metamemory**, Friday Noon, 11:00 a.m.-1:30 p.m.

Poster Number 2123, **The Development of Perspective-Taking During Adolescence**, moved to Poster Number 1097.5, **Emotion and Cognition I**, Thursday Evening, 4:00 p.m.-7:30 p.m.

Poster Number 4062, **Emotion Recognition with Mouse Cursor Motions: Affective Computing Approach**, moved to Spoken Session 34, **Embodied Cognition**, West Meeting Room 202-204, Friday Morning, 8:00 a.m.-9:40 a.m. (Presentation Time: 9:20 a.m.-9:35 a.m.)

Poster Number 5038, **Modeling Language Through Multiplex Network Representations**, moved to Poster Number 2126.5, **Application of Network Science to Human Learning**, Friday Noon, 11:00 a.m.-1:30 p.m.

Poster Number 5189, **What's Good About Large Pupils?**, moved to Poster Number 5210.5, **Vision**, Saturday Evening, 4:00 p.m.-7:30 p.m.

Poster Number 5190, **The Clash of Spatial Representations: Modality Mixing Knocks Out the Simon Effect**, moved to Poster 5222.5, **Spatial Cognition II**, Saturday Evening, 4:00 p.m.-7:30 p.m.

CHAIR CHANGE

Judgment II, Saturday Morning, 10:00 a.m.-12:00 p.m., Rakefet Ackerman, Chair

AUTHORS ADDED/CORRECTED

Poster Number 1058, Correct Author list is: **Tanjeem Azad**, *Kent State University*, **Maria Zargoza**, *Kent State University*, **D. Stephen Lindsay**, *University of Victoria* (Tanjeem Azad was omitted in the program)

Poster Number 1060, Correct Author list is: **Matia Okubo**, *Senshu University*, **Yayoi Kawasaki**, *Senshu University* (Yayoi Kawasaki was omitted in the program)

Poster Number 1066, Correct Author list is: **Ulrich Ecker**, *The University of Western Australia*, **Stephan Lewandowsky**, *University of Bristol*, **Adam Berinsky**, *Massachusetts Institute of Technology*, **Briony Swire-Thompson**, *Northeastern University* (Briony Swire-Thompson was omitted in the program)

Poster Number 1233, Correct Author list is: **Stephanie J. Babb**, *University of Houston*, **Ruth M. Johnson**, *University of Houston-Downtown* (Ruth M. Johnson was omitted in the program)

Poster Number 2021, Correct Author list is: **Savannah Cookson**, *University of California, Berkley*, **Eliot Hazeltine**, *University of Iowa*, **Eric Schumacher**, *Georgia Institute of Technology* (Savannah Cookson was omitted in the program)

Poster Number 3007, Correct Author list is: **Gary D. Fisk**, *Georgia Southwestern State University*, **Steven J. Haase**, *Shippensburg University* (Steven J. Haase was omitted in the program)

Poster Number 3017, Correct Author list is: **Jared Novick**, *Nina S. Hsu*, *University of Maryland*, **Sara Milligan**, **Donald Bell-Souder**, **Albert E. Kim**, *University of Colorado, Boulder* (Albert E. Kim was omitted in the program)

Poster Number 3091, Correct Author list is: **Dana M. Basnight-Brown**, *United States International University*, **Chi-Shing Tse**, *The Chinese University of Hong Kong*, **Jeanette Altarriba**, *University at Albany, State University of New York* (Dana M. Basnight-Brown was omitted in the program)

Poster Number 4026, Correct Author list is: **Rebecca Weldon**, **Lindsey Gearhart**, **Elise Kury**, *Juniata College* (Rebecca Weldon was omitted in the program)

Poster Number 4031, Correct Author list is: **Jhotisha Mugon**, *University of Waterloo*, **Andriy Struk**, *University of Waterloo*, **Maria Sokolowski**, *University of Toronto*, **Abigail Scholer**, *University of Waterloo*, **James Danckert**, *University of Waterloo* (Jhotisha Mugon was omitted in the program)

Poster Number 4066, Correct Author list is: **Seyma Onder**, *Koc University*, **Sumeyra Tosun**, *University of Pretoria*, **Hannah E. Roome**, *The University of Texas at Austin* (Hannah E. Roome was omitted in the program)

Poster Number 5054, Correct Author list is: **Masayo Noda**, *Kinjo Gakuin University*, **Hiroki Tanabe**, *Nagoya University* (Masayo Noda was omitted in the program)

Poster Number 5143, Correct Author list is: **Sara Peters**, *Newberry College*, **Christina McCartha**, *Newberry College*, **Charles Horn**, *Newberry College*, **Renee Stubbs**, *Newberry College* (Sara Peters was omitted in the program)

Poster Number 5177, Correct Author list is: **Jennifer L. Briere**, **Tammy A. Marche**, *St. Thomas More College* (Author removed)

Poster Number 5217, Correct Author list is: **Cristina Sampaio**, *Western Washington University*, **Ranxio Frances Wang**, *University of Illinois at Urbana-Champaign*, (Cristina Sampaio was omitted in the program)

CONDENSED PROGRAM ADDITIONS/CHANGES

Condensed Program B, Add Bilingualism II (266-271), Sunday, November 12, 2017, 8:00 a.m. 10:00 a.m., West Meeting Room 208-209 (Missing from Program)

AWARDS

The correct photo for J. Frank Yates Travel Award recipient Tyler Ensor is:

