

& Dunlosky, 2011). Positive affect was higher and negative affect was lower in OAs relative to YAs (Gallant, Spaniol, & Yang, 2019), lending additional evidence to an orientation toward the positive in older adulthood. These results are novel in that they demonstrate an age-related positivity effect that extends beyond the domains of memory and emotion to the domain of metacognitive aging. Discussion will focus on theoretical, methodological, and applied implications.

#### HEART AND MIND: ESSENTIAL COMPONENTS IN SOUND DECISION-MAKING

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Consumer tasks permit an ecologically-valid context in which to examine the contributions of affective and cognitive resources to decision-making processes and outcomes. Although previous work shows that cognitive factors are important when individuals make decisions (Patrick et al., 2013; Queen et al.), the role of affective components is less clear. We examine these issues in two studies. Study 1 used data from 1000+ adults to inform a cluster analysis examining affective aspects (importance, meaningfulness) of making different types of decisions. A 4-cluster solution resulted. In Study 2, we used affective cluster membership and cognitive performance as predictors of experimental decision-making outcomes among a subset of participants ( $N = 60$ ). Results of the regression ( $F(2, 40) = 6.51, p < .01, R^2 = .25.$ ) revealed that both the affective clusters ( $b = .37, p = .01$ ) and cognitive ability ( $b = -.30, p = .04$ ) uniquely contributed to the variance explained in decision quality. Age did not uniquely contribute. Results are discussed in the context of developing measures that enable us to move the field forward.

#### INFORMATION AVOIDANCE IN DECISION MAKING: DO THE REASONS VARY BY AGE?

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Older adults make up the majority of the U.S. patient population and age differences in information avoidance have potential implications for their ability to participate in informed medical decision making. Meta-analytic evidence suggests that older adults seek less information before making a decision than younger adults do (Mata & Nunes, 2010). However, age differences in explicit information avoidance have yet to be quantified. We hypothesized that older adults would avoid decision-relevant information more strongly than younger adults do. We also examined the self-reported reasons for information avoidance and hypothesized that older adults would express more concern about unwanted information influencing their affect (Reed & Carstensen, 2012) and decision preferences (Mather, 2006), both of which are known predictors of information avoidance (Woolley & Risen, 2018). To test these assumptions, we conducted a pre-registered online study involving three different health-related decision scenarios. For each scenario, an adult lifespan sample ( $N=195$ ,  $Mage=52.95$ , 50% female, 71% non-Hispanic White) chose to either receive or avoid information. Responses were highly correlated across scenarios and results were pooled into a single avoidance

measure. Analyses indicated that concerns about consequences for decision preferences positively predicted decision avoidance ( $p < .001$ ), whereas concerns about consequences for affect did not ( $p = .079$ ). Contrary to predictions, older age was not significantly associated with information avoidance ( $p = .827$ ). Further, self-reported concerns about the influence of unwanted information on affect and decision preferences were negatively associated with age ( $ps < .001$ ). This suggests that interventions to foster pre-decisional information seeking should be tailored to the target age group.

#### JOB STRAIN AND LATE-LIFE COGNITION: FINDINGS FROM THE PUERTO RICAN ELDERLY HEALTH CONDITIONS STUDY

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Chronic stress at work, represented by job strain, has been associated with adverse late-life cognitive outcomes in the United States and Western Europe. We examined the relationship between job strain and change in cognition in a less affluent, Hispanic sample of adults aged 60-100 from mainland Puerto Rico. Job strain indicators (i.e., job demands/job control/job strain) were quantified from (a) standardized occupation-based job strain scores from Karasek's Job Content Questionnaire (JCQ;  $n=1102$ ), and (b) O\*Net variables forming factors of job demands and job control ( $n=1639$ ). Occupation information, covariates, and cognition came from the Puerto Rican Elderly Health Conditions (PREHCO) Study conducted in 2002-2003, with cognition follow-up in 2006-2007. All analyses controlled for age, sex, baseline depressive symptoms, baseline financial problems, and childhood economic hardship. Across both operationalizations of job strain indicators, higher job control was associated with less decline in late-life cognition (JCQ:  $b=.18, p < .05$ ; O\*Net:  $b=.31, p < .001$ ) until controlling for education (JCQ:  $b=.09, p=.248$ ; O\*Net:  $b=.12, p=.097$ ). Job strain was associated with more decline in cognition (JCQ:  $b=-.75, p < .05$ ; O\*Net:  $b=-.87, p < .05$ ) until controlling for education (JCQ:  $b=-.49, p=.098$ ; O\*Net:  $b=-.46, p=.262$ ). For Karasek's measure, the relationships were driven by more educated participants. Job control was related to less cognitive decline whereas strain related to more decline among older Puerto Ricans over four years, whether assessed with JCQ-based or O\*Net-based scores. However, education emerged as more important for change in late-life cognition than job strain indicators overall, suggesting results that diverge from countries with higher average socioeconomic status.

#### MOVEMENT THERAPY AND COGNITIVE FUNCTION IN MIDDLE-AGED AND OLDER ADULTS: A 10-YEAR STUDY

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Cognitive function is an important component of healthy aging and physical activities have been shown to support

late life cognitive function. However, it is unclear whether non-traditional physical activities provide additional benefits for cognitive function above and beyond traditional leisure physical activities. This study examines the associations between movement therapy and cognitive function in the US population. We used data from the waves 1, 2 and 3 (1995-2014) of the Midlife in the United States (MIDUS) study. MIDUS included a national probability sample of community-living adults aged 25-75 years old in 1995 (wave 1) and added the wave 2 cognitive functioning tests of executive function and episodic memory. We applied multivariate linear regression models to estimate the effect of movement therapy (wave 2) on the cognitive episodic memory and executive function (wave 3) while controlling the covariates (wave 2 sociodemographic factors, health, and cognitive function). A total of 2097 individuals aged 42-92 years (mean 64.4, sd 10.9, 55.6% women) were included in the analysis. Movement therapy was independently associated with better episodic memory ( $\beta=0.117$ ,  $p=0.02$ ), but not with executive function ( $\beta=0.039$ ,  $p=0.14$ ), after including control variables. The results suggest that movement therapy may be an effective non-pharmacological intervention to attenuate age-related cognitive decline in middle-aged and older adults. Future research should test whether these findings can be replicated in similar populations and if confirmed, interventions should incorporate a wider range of physical activities in community-living older adults with the goal of maintaining and improving physical and cognitive health.

#### NEURAL INHIBITION TASK ELICITS AGE-ASSOCIATED CHANGES IN PREFRONTAL CEREBRAL OXYGENATION

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Certain cognitive tasks, such as those involving inhibition, can influence an older adult's dual-tasking ability more than others. This study aimed to manipulate cognitive task difficulty to evaluate age-associated differences in brain activity and behaviour during walking. Nineteen younger ( $M=21.3$ ,  $SD=3.9$ ) and 20 older ( $M=71.8$ ,  $SD=6.4$ ) adults completed four cognitive-auditory tasks: simple reaction time (SRT; processing speed), Go-no-Go (GNG; neural inhibition), N-back (NBK; working memory) and Double number sequence (DNS; working memory) with or without self-paced walking. Trials took place under single cognitive (SC), single motor (SM) and dual-task (walking with a cognitive task; DT) conditions. Throughout each condition, cerebral oxygenation changes ( $\Delta HbO_2$ ) in the prefrontal cortex were acquired using functional near-infrared spectroscopy (fNIRS). Behavioural measures including response time (ms), accuracy (%) and gait speed (m/s) were also calculated. Repeated measures ANOVAs revealed that OAs exhibited greater  $\Delta HbO_2$  than YAs in the left hemisphere during the GNG inhibition task ( $p = 0.04$ ). Activation in the right hemisphere also increased compared to the left during DNS DT ( $p = 0.05$ ). Response times increased with increasing task difficulty and YAs were faster than OAs during NBK SC ( $p = 0.09$ ). Neural

findings revealed age-associated changes in prefrontal activation at the GNG inhibition difficulty level. Behavioural results indicated poorer performance with increasing task difficulty including slower response times in OAs. Moreover, gait speed and accuracy only decreased within task and difficulty. Therefore, understanding the neural and behavioural changes across task difficulty may help monitor cognitive decline and distinguish normal aging from disease states.

#### NOW YOU SEE THEM, NOW YOU DON'T: AGE DIFFERENCES IN RISK AVERSION

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Older age has often, but not always, been associated with greater risk aversion. Some have suggested that age differences in risk may reflect age-related declines in cognitive abilities. This study investigated the robustness of age differences in risk aversion across three different risk-taking measures, after controlling for cognitive abilities. Community-dwelling younger ( $n = 75$ ; 25-36 years,  $M$  age = 29.01) and older ( $n = 74$ ; 60-90 years,  $M$  age = 69.11) adults completed self-report and behavioral measures of risk aversion and several measures of cognitive abilities. Results showed that older adults reported significantly greater risk aversion than young adults on the behavioral measure of risk (Balloon Analogue Risk Task, BART), but not on the self-report measures (Framing Task and Choice Dilemmas Questionnaire). Greater risk aversion on BART was significantly associated with lower analytic thinking, slower processing speed, and worse shifting of attention. Therefore, we tested the relation between age and risk aversion on the BART while controlling for these three cognitive abilities. Age differences in risk aversion remained significant even after accounting for cognitive abilities. Our results suggest that the lack of consistent age differences in risk aversion in the literature may at least partly be due to measurement differences, which raises concerns about the construct validity of these measures of risk aversion. Moreover, cognitive decline may not explain age differences in risk. Further research is needed to understand factors that dampen and heighten risk aversion in people of diverse ages.

#### PREDICTING AGE FROM LARGE-SCALE BRAIN NETWORKS: EVIDENCE FROM THE CAM-CAN DATASET ACROSS THE LIFESPAN

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Changes in cognition observed in aging (e.g. a shift from prioritization of fluid cognition in young adulthood toward an emphasis on crystallized knowledge and semantic cognition in older adulthood) are believed to reflect alterations in neural connectivity in aging. Recent work specifically highlights how increased connectivity between executive control (EC) regions and default mode network (DMN) may underlie characteristic shifts in cognitive abilities between younger and older adults. However, the contribution of the salience network, which plays a crucial role in